



AGENDA

City Council September 08, 2020

Rick Otto
City Manager

Gary A. Sheatz
City Attorney

Pamela Coleman
City Clerk

5:00 PM Closed Session
6:00 PM Regular Session

Various Teleconference Locations

MARK A. MURPHY
Mayor

MICHAEL ALVAREZ
Mayor pro tem

KIMBERLEE NICHOLS
Councilmember

CHIP MONACO
Councilmember

VACANT
Councilmember

SPECIAL NOTICE REGARDING CORONAVIRUS (COVID-19)

On March 4, 2020, Governor Newsom proclaimed a State of Emergency in California as a result of the threat of COVID-19. On March 17, 2020, Governor Newsom issued Executive Order N-29-20, which allows a local legislative body to hold public meetings via teleconferencing and to make public meetings accessible telephonically or otherwise electronically to all members of the public seeking to observe and to address the local legislative body. Please be advised that some, or all, of the City of Orange City Councilmembers and staff will participate in meetings via teleconference.

In response to the Governor's Executive Orders, and to ensure the health and safety of our residents by limiting contact that could spread the COVID-19 virus, there will be no members of the public in attendance at the City Council meetings.

Public Participation

In place of in-person attendance, members of the public are encouraged to watch from the safety of their homes in one of the following ways: Spectrum Cable Channel 3 and AT&T U-verse Channel 99, or streamed live and on-demand on the City's website at www.cityoforange.org.

Members of the public can submit their written comments electronically for City Council consideration by emailing them to CCpubliccomment@cityoforange.org with the subject line "Public Comment Item # (insert the item number relevant to the comment)" or "Public Comment Non-agenda Item" for general public comments. The public can also submit written comments on the City's eComment page. Please visit the City's website at www.cityoforange.org, click Watch Meetings Online, then click the eComment link for this meeting. Please submit all written comments before 11:00 a.m. prior to the commencement of the meeting. Written comments received by 11:00 a.m. may be read aloud by staff at the meeting during the appropriate agenda item. Comments shall be limited to 3 minutes per person; any portion of the comment that exceeds 3 minutes will not be read aloud. Off-agenda comments shall be limited to a cumulative 30 minutes for all comments unless changed at the discretion of the City Council. Written comments received after 11:00 a.m. and during the meeting prior to the call for public comment for each agenda item will be available to the City Council as part of the public record, but will not be read aloud during the meeting.

Finally, the public can also record their comments by calling (714) 744-2234 no later than 4:00 p.m. before the meeting. All public comments will be provided to the Council and compiled as part of the record. Contact the City Clerk's Office at (714) 744-5500 with any questions.

Agenda Information

This agenda contains a brief general description of each item to be considered. The Agenda and supporting documentation is available after 4:00 p.m. on the Thursday prior to the Council meeting on the City's website www.cityoforange.org. Any documents received after the agenda packet distribution will be made available at the City Clerk Office's office and posted on the City's website. Information may be obtained by calling the City Clerk's Office at (714) 744-5500.

In compliance with the Americans with Disabilities Act, if you need accommodations to participate in this meeting, contact the City Clerk's office at (714) 744-5500. Notification at least 48 hours prior to the meeting will enable the City to make arrangements to assure accessibility to this meeting.

5:00 PM CLOSED SESSION**1. ROLL CALL****2. PUBLIC COMMENTS**

At this time, members of the public may address the Council on any off-agenda items within the subject matter jurisdiction of the Council, provided that NO action may be taken on off-agenda items unless authorized by law. Members of the public can submit their comments in writing for City Council consideration by sending them to the City Clerk at CCpubliccomment@cityoforange.org or by calling (714) 744-2234.

3. RECESS TO CLOSED SESSION

- a. Public Employee Performance Evaluation pursuant to Government Code Section 54957:
Title: City Manager

4. ADJOURNMENT

The City Council will adjourn to the 6:00 p.m. Regular Session being held via teleconference.

6:00 PM REGULAR SESSION**1. OPENING****1.1 INVOCATION**

Pastor Brenton Fessler, Refuge OC

1.2 PLEDGE OF ALLEGIANCE TO THE FLAG

Mayor pro tem Michael Alvarez

1.3 ROLL CALL**1.4 PRESENTATIONS/ ANNOUNCEMENTS/ INTRODUCTIONS****2. PUBLIC COMMENTS**

At this time, members of the public may address the Council on any off-agenda items within the subject matter jurisdiction of the Council, provided that NO action may be taken on off-agenda items unless authorized by law. Members of the public can submit their comments in writing for City Council consideration by sending them to the City Clerk at CCpubliccomment@cityoforange.org or by calling (714) 744-2234.

3. CONSENT CALENDAR

All items on the Consent Calendar are considered routine and are enacted by one motion approving the recommended action listed on the Agenda. Any member of the City Council, staff or the public may request an item be removed from the Consent Calendar for discussion or separate action. Unless otherwise specified in the request to remove an item from the Consent Calendar, all items removed shall be considered immediately following action on the remaining items on the Consent Calendar.

3.1. Waive reading in full of all ordinances on the Agenda.**Recommended Action:**

Approve.

Attachments: [Staff Report](#)

3.2. Confirmation of warrant registers dated August 4, 6, 14, 20, and 28, 2020.**Recommended Action:**

Approve.

Attachments: [Staff Report](#)

3.3. Approval of meeting minutes of the City Council of the City of Orange for the July 28, 2020, Adjourned Regular Meeting.

Recommended Action:

Approve minutes as presented.

Attachments: [Staff Report](#)
[July 28, 2020, Adjourned Regular Meeting minutes](#)

3.4. Investment Oversight Committee report for the period ending August 31, 2020.

Recommended Action:

Receive and file.

Attachments: [Staff Report](#)
[Monthly Treasurer's Reports for April, May, and June 2020](#)

3.5. Second Amendment to Master Subscription Agreement No. 6858 with Granicus LLC, a Minnesota Limited Liability Company, for website redesign, development, conversion, and implementation services.

Recommended Action:

1. Approve and adopt the Second Amendment to Master Subscription Agreement No. 6858 with Granicus LLC for website redesign, development, conversion, and implementation services and authorize the Mayor and the City Clerk to execute the amendment to agreement on behalf of the City; and
2. Authorize the appropriation of \$109,000 from the Computer Replacement unreserved fund balance to expenditure account number 790.1601.56670.20274 Computer Replacement - Website Upgrade.

Attachments: [Staff Report](#)
[Second Amendment to the Master Subscription Agreement with Granicus LLC](#)

3.6. Agreement with West Coast Arborists, Inc. for creek maintenance along portions of the Santiago Creek.

Recommended Action:

1. Authorize the appropriation of \$75,000 from the General Fund unreserved fund balance to expenditure account 100.7022.51420.00000 (General Fund - Contractual Services);
2. Approve a four year agreement with West Coast Arborists, Inc. in the amount not to exceed \$300,000 for creek maintenance and Authorize the Mayor and City Clerk to execute on behalf of the City; and
3. Authorize City Staff to file a Notice of Exemption to the County of Orange for the California Environmental Quality Act due to the minor nature of the project.

Attachments: [Staff Report](#)
 [Location Zone Map](#)
 [Bid Abstract Summary](#)
 [Agreement with West Coast Arborists - Santiago Creek Tree and
Brush Maintenance Services](#)
 [Notice of Exemption](#)

3.7. Agreement with KOA Corporation for construction management and inspection services.

Recommended Action:

Approve the agreement with KOA Corporation in the amount of \$39,226, representing an original amount of \$35,660 plus a 10% contingency of \$3,566, for construction management and inspection services; and authorize the Mayor and the City Clerk to execute on behalf of the City.

Attachments: [Staff Report](#)
 [Location Map](#)
 [Professional Services Agreement with KOA Corporation](#)

3.8. Agreement with the County of Orange for Fiscal Year 2018-2019 Edward Byrne Memorial Justice Assistance Grant Program.

Recommended Action:

1. Approve the agreement with the County of Orange in the amount of \$18,081 for Fiscal Year 2018-2019 Edward Byrne Memorial Justice Assistance Grant Program and authorize the City Manager to execute on behalf of the City.
2. Accept into the City's revenue budget an \$18,081 grant from the County of Orange, into revenue account number 353.4011.45150.30129, Federal Grants-2019 JAG.
3. Authorize the appropriation of \$18,081 into expenditure account number 353.4011.55131.30129, Equipment - 2019 JAG.

Attachments: [Staff Report](#)
 [JAG MOU 2019-DJ-BX-0899](#)

3.9. Agreement with the City of Santa Ana for Fiscal Year 2018-2019 Urban Areas Security Initiative grant.

Recommended Action:

Approve the agreement with the City of Santa Ana for Fiscal Year 2018-2019 Urban Areas Security Initiative grant and authorize the City Manager to execute on behalf of the City.

Attachments: [Staff Report](#)
 [FY19 UASI Agreement](#)

3.10. Agreement with Sargent Town Planning for preparation of the North Tustin Street Specific Plan.

Recommended Action:

Approve the agreement with Sargent Town Planning in the total amount of \$500,000, representing an original contract amount of \$445,152, plus a contingency allowance of \$54,848, for the creation of the North Tustin Street Specific Plan; and authorize the Mayor and City Clerk to execute on behalf of the City.

Attachments: [Staff Report](#)
 [Proposed NTSP Area Map](#)
 [Request for Proposals](#)
 [Consultant Services Agreement including Scope and Deliverables,
Schedule, and Fee Proposal](#)

3.11. Agreement with AECOM Technical Services, Inc. for environmental, hydraulics, geotechnical and survey services for the Santiago Creek Multipurpose Trail Extension Project (SP-4118).

Recommended Action:

Approve the agreement with AECOM Technical Services, Inc. in the amount of \$381,801 for environmental, hydraulics, geotechnical and survey services; and authorize the Mayor and City Clerk to execute the agreement on behalf of the City.

Attachments: [Staff Report](#)
 [Consultant Services Agreement with AECOM Technical Services, Inc.](#)

3.12. First Amendment to Agreement with ESO Solutions, Inc. for Records Management System (RMS) software support and services.

Recommended Action:

Approve the amendment to agreement with ESO Solutions, Inc. for RMS software support and services; and authorize the Mayor and City Clerk to execute the amendment to agreement on behalf of the City.

Attachments: [Staff Report](#)
 [First Amendment to Application Hosting and Technology Support
Services Agreement](#)

3.13. 2020 Emergency Services Orange County Operational Area Agreement of the County of Orange and Political Subdivisions.

Recommended Action:

Approve the 2020 Orange County Operational Area Agreement of the County of Orange and Political Subdivisions and authorize the Mayor and the City Clerk to execute on behalf of the City.

Attachments: [Staff Report](#)
[Orange County Operational Area Agreement of the County of Orange and Political Subdivisions \(January 2020\)](#)

3.14. Appropriation of Senior Mobility Program funds in the amount of \$3,218.44.

Recommended Action:

Authorize the appropriation of \$3,218.44 from the Traffic Improvement Measure M2 unreserved fund balance to the following expenditure accounts:

\$ 754.13	263.7041.51780.20385	Senior Transportation Grant 18-19
\$2,464.31	263.7041.51780.20412	Senior Transportation Grant 19-20

Attachments: [Staff Report](#)

3.15. Appropriation of \$1,729,404 in Coronavirus Aid, Relief, and Economic Security Act funds.

Recommended Action:

1. Accept into the City's revenue budget a \$1,729,404 grant from the State of California for the Coronavirus Aid, Relief, and Economic Security Act, into revenue account number 100.0000.45150.30154 General Fund - CARES Grant State Reimbursement.
2. Authorize the appropriation of \$1,729,404 into the following expenditure account numbers for General Fund - CARES Grant State Reimbursement:

\$ 588,000	100.3021.50001.30154
\$1,141,404	100.4021.50001.30154

Attachments: [Staff Report](#)

3.16. Appropriation of \$24,681 in State of California Office of Emergency Services funding received.

Recommended Action:

1. Accept into the City's revenue budget \$24,681 in strike team reimbursement funds from State of California Office of Emergency Services, into revenue account number 100.3024.48212.40222 - Saddleridge Fire.
2. Authorize the appropriation of \$24,681 into expenditure account number 100.3024.50221.40222, General Fund - Overtime-Safety.

Attachments: [Staff Report](#)

3.17. Appropriation of \$24,950 in designated continuing education funding received from the Rancho Santiago Community College District.

Recommended Action:

1. Accept into the City's revenue budget \$24,950 in continuing education funds from Rancho Santiago Community College District into revenue account number 100.3023.48210.20234, General Fund - Santa Ana College Fire Training.
2. Authorize the appropriation of \$24,950 into expenditure account number 100.3023.51840.20234, General Fund - Santa Ana College Fire Training.

Attachments: [Staff Report](#)

3.18. Final Acceptance of Bid No. 189-40, Annual Pipeline Renewal Project; and authorization to file Notice of Completion.

Recommended Action:

Accept as complete Bid No. 189-40; Annual Pipeline Renewal Project; and authorize staff to file Notice of Completion with the County Recorder.

Attachments: [Staff Report](#)
[Notice of Completion and Acceptance](#)

3.19. Final Acceptance of Bid No. 190-29, Council Chambers Remodel Project, Phase 2; and authorization to file Notice of Completion.

Recommended Action:

Accept Bid No. 190-29; SP-4129, Council Chambers Remodel Project, Phase 2 as complete; and authorize staff to file Notice of Completion with the County Recorder.

Attachments: [Staff Report](#)
[Notice of Completion and Acceptance](#)

3.20. Approval of plans and specifications for Fire Station No. 1 and Headquarters; and authorization to advertise Bid No. 20-21.07.

Recommended Action:

Approve plans and specifications and authorize advertising for bids for Fire Station No. 1 and Headquarters SP-4071.

Attachments: [Staff Report](#)
[Location Map](#)

3.21. Final Acceptance of Bid No. 190-10, SP-4099, Plaza Parking Lot Improvements; and authorization to file Notice of Completion.

Recommended Action:

Accept Plaza Parking Lot Improvements project as complete; and authorize staff to file Notice of Completion with the County Recorder.

Attachments: [Staff Report](#)
[Notice of Completion and Acceptance](#)

3.22. Claim(s) for Damages.

Recommended Action:

Deny the following claim(s) and refer to City Attorney and Claims Adjuster:

1. C.M. (minor) by and through his father Guillermo Mendoza
2. Rochelle Lyon
3. Alfred Mendez
4. Sandra Mendez
5. AAA a/s/o Hirotooshi Yonezawa

Attachments: [Staff Report](#)

3.23. Historic Preservation Agreements (Mills Act Contracts) for fifteen qualified historic properties.

Recommended Action:

Approve fifteen Mills Act Contracts between the City of Orange and the identified property owners for the preservation and rehabilitation of qualified historic properties, and authorize the Mayor and City Clerk to execute on behalf of the City.

Attachments: [Staff Report](#)
[Table Summary of Fifteen Mills Act Applications](#)
[Mills Act Contract No. 333.0-20 Contract with Photograph](#)
[Mills Act Contract No. 334.0-20 Contract with Photograph](#)
[Mills Act Contract No. 335.0-20 Contract Draft Photograph](#)
[Mills Act Contract No. 336.0-20 Contract with Photograph](#)
[Mills Act Contract No. 337.0-20 Contract with Photograph](#)
[Mills Act Contract No. 338.0-20 Contract with Photograph](#)
[Mills Act Contract No. 339.0-20 Contract with Photograph](#)
[Mills Act Contract No. 340.0-20 Contract with Photograph](#)
[Mills Act Contract No. 341.0-20 Contract with Photograph](#)
[Mills Act Contract No. 342.0-20 Contract with Photograph](#)
[Mills Act Contract No. 343.0-20 Contract with Photograph](#)
[Mills Act Contract No. 344.0-20 Contract with Photograph](#)
[Mills Act Contract No. 345.0-20 Contract with Photograph](#)
[Mills Act Contract No. 346.0-20 Contract with Photograph](#)
[Mills Act Contract No. 347.0-20 Contract with Photograph](#)

3.24. Award of Contract to J.B. Bostick Company, Inc. for Parking Lot Pavement Rehabilitation at Olive and Grijalva Parks; Bid No. 20-21.10.

Recommended Action:

Approve contract with J.B. Bostick Company, Inc. in the amount not to exceed \$174,300 for parking lot pavement rehabilitation; and authorize the Mayor and City Clerk to execute on behalf of the City.

Attachments: [Staff Report](#)
 [Bid Abstract](#)
 [Contract with JB Bostick Inc. for Parking Lot Pavement Rehabilitation](#)

3.25. Award of Contract to Academy Electric, Inc. for the Electrical Panel Replacement for McPherson Athletic Facility and Killefer Park; Bid No. 190-60.

Recommended Action:

1. Authorize the appropriation of \$17,656 from the Park Acquisition (510) unreserved fund balance to expenditure account number 510.7021.56032.30054, Park Acquisition-Infill - Park Electrical Panel Replacement.
2. Approve the Contract with Academy Electric, Inc. in the amount of \$210,056 for electrical panel replacement; and authorize the Mayor and City Clerk to execute on behalf of the City.

Attachments: [Staff Report](#)
 [Electrical Panel Replacement - Bid Abstract](#)
 [Contract with Academy Electric for Electrical Panel Replacement](#)

3.26. Award of Contract to DBX, Inc. for Lemon Street at Palm Avenue Traffic Signal Installation; Bid No. 190-61 (SP-4133).

Recommended Action:

1. Award the contract to DBX, Inc. of Temecula, California, in the amount of \$343,418; and authorize the Mayor and City Clerk to execute on behalf of the City.
2. Authorize \$34,342 (10%) of the contract amount for contingency purposes.

Attachments: [Staff Report](#)
 [Bid Abstract for Bid No. 190-61](#)
 [Contract Agreement with DBX, Inc.](#)
 [Location Map](#)

- 3.27. Award of Contract to California Professional Engineering, Inc. for Glassell Street and Meats Avenue Left Turn Signal Improvements - HSIPL-5073(083); Bid No. 20-21.04.**

Recommended Action:

Award the contract to California Professional Engineering, Inc. of La Puente, CA in the total amount of \$261,503.55, representing an original amount of \$237,730.50, plus a 10% contingency of \$23,773.05, for Glassell Street and Meats Avenue Left Turn Signal Improvements - HSIPL-5073(083); and authorize the Mayor and the City Clerk to execute the agreement on behalf of the City.

Attachments: [Staff Report](#)
 [Bid Abstract](#)
 [Contract Agreement](#)

- 3.28. Award of Contract to Greencal Construction, Inc. for Roof Improvements of Fire Station 3; Bid No. 20-21.06; SP-4141.**

Recommended Action:

Approve the contract with Greencal Construction, Inc. in the total amount of \$120,725, representing an original amount of \$109,750, plus a 10% contingency of \$10,975, for Roof Improvements of Fire Station 3; and authorize the Mayor and the City Clerk to execute the agreement on behalf of the City.

Attachments: [Staff Report](#)
 [Bid Abstract](#)
 [Contract Agreement](#)

- 3.29. Purchase of material and supplies for water maintenance operation from various vendors.**

Recommended Action:

Approve purchase orders for miscellaneous material and supplies for the following vendors and amounts: Yo Fire - \$150,000; United Waterworks - \$100,000; C Wells Supply - \$75,000; Ferguson - \$75,000; S&J Supply - \$75,000; and Armorcast - \$50,000, for a total not to exceed of \$525,000.

Attachments: [Staff Report](#)

- 3.30. Purchase of equipment and labor needed to upgrade the Records Bureau filing system, from McMurray Stern, as a single source vendor, in the amount of \$59,204.**

Recommended Action:

Approve the purchase of equipment and labor from McMurray Stern in the total amount of \$59,204, representing equipment and labor of \$53,822, plus a contingency of \$5,382 (10%), for upgrades to the Records Bureau filing system.

Attachments: [Staff Report](#)
[Proposal from McMurray Stern](#)

3.31. Purchase heavy duty hydraulic hoist system using Cooperative Purchasing Agreement.

Recommended Action:

Approve the purchase of specialized lift for the lifting of heavy duty Fire Apparatus and heavy equipment from Steril Koni using Sourcewell Contract No. 061015-SKI in the amount of \$99,940.

Attachments: [Staff Report](#)
[Sourcewell Contract No. 061015-SKI CPA Bid](#)

3.32. Purchase order for major Fire Engine and Apparatus repairs from Southern California Fleet Services as a sole source vendor.

Recommended Action:

Approve the purchase order to repair major Fire Engine and Apparatus from Southern California Fleet Services in the amount not to exceed \$100,000 in FY 2020-2021.

Attachments: [Staff Report](#)

3.33. Update to the City of Orange Sewer System Management Plan.

Recommended Action:

1. Adopt the updated Sewer System Management Plan.
2. Authorize and direct the Public Works Director to do any and all things necessary to execute and deliver any and all documents (including amendments or modifications to the Sewer System Management Plan) deemed necessary or advisable in order to carry out, give effect to, and comply with the terms and intent of State Water Resources Control Board Order No. 2006-0003-DWQ.

Attachments: [Staff Report](#)
[Updated Sewer System Management Plan without appendices](#)
[Previously adopted Sewer System Management Plan without appendices](#)

END OF CONSENT CALENDAR

4. REPORTS FROM MAYOR MURPHY

5. REPORTS FROM COUNCILMEMBERS

5.1. Resolution Opposing Proposition 15 (Monaco).

Recommended Action:

Direction on Resolution opposing Proposition 15.

Attachments: [Staff Report](#)
 [OC Tax Prop 13 Factsheet](#)
 [OC Tax Letter](#)
 [Draft Resolution Opposing Prop 15](#)

6. REPORTS FROM BOARDS, COMMITTEES, AND COMMISSIONS

7. ADMINISTRATIVE REPORTS

7.1. A Resolution of the City Council of the City of Orange relating to the classification, compensation, and terms of employment of Executive Management and Senior Management employees. Resolution No. 11269.

Recommended Action:

Approve Resolution No. 11269. A Resolution of the City Council of the City of Orange relating to the classification, compensation, and terms of employment of Executive Management and Senior Management employees and repealing Resolution No. 11175 and all amendments thereto.

Attachments: [Staff Report](#)
 [Resolution No. 11269](#)

8. REPORTS FROM CITY MANAGER

8.1. Review of the Orange Plaza Paseo (Closure of the 100 blocks of north and south Glassell).

Recommended Action:

1. Continue the closure of the 100 blocks of north and south Glassell to at least Sunday, November 15, 2020.
2. Agendize a review of the closure at the November 10, 2020, Regular City Council meeting.

Attachments: [Staff Report](#)

9. LEGAL AFFAIRS

- 9.1. Introduction and first reading of an Ordinance of the City Council of the City of Orange Amending Title 2, Chapter 2.08 of the Orange Municipal Code Relating to City Council Compensation. Ordinance No. 14-20. (Continued from June 9, 2020)**

Recommended Action:

Introduce and approve Ordinance No. 14-20 for First Reading.

Attachments: [Staff Report](#)
 [Ordinance No. 14-20](#)

10. ITEMS RELATING TO THE SUCCESSOR AGENCY OF THE ORANGE REDEVELOPMENT AGENCY**11. PUBLIC HEARINGS**

- 11.1. Public Hearing to consider Fire Station No. 1 and Headquarters; Mitigated Negative Declaration No. 1862-18, Zone Change No. 1301-20, Design Review No. 5008-20, and Tentative Parcel Map No. 0016-20**

Recommended Action:

1. Approve Resolution No. 11264. A resolution of the City Council of the City of Orange adopting mitigated negative declaration No. 1862-18 for the Fire Station No. 1 and Headquarters project;
2. Introduce and approve Ordinance No. 16-20 for First Reading. An ordinance of the City Council of the City of Orange approving zone change No. 1301-20 to change the zoning of property located at 105 and 125 S. Water Street from Office Professional (O-P) and Single Family Residential, 6,000 Sq. Ft. (R-1-6) to public institution (P-1) to better reflect the existing nature of the land uses in the neighborhood and to ensure that the Fire Station No. 1 project is consistent with the General Plan, and;
3. Approve Resolution No. 11267. A resolution of the City Council of the City of Orange approving Design Review No. 5008-20 and Tentative Parcel Map No. 0016-20 for the construction of Fire Station No. 1 and Headquarters located at 105 S. Water Street and the associated parking lot located at 180 S. Water Street.

Attachments:[Staff Report](#)[City Council Resolution No. 11264 for Mitigated Negative Declaration No. 1862-18](#)[City Council Ordinance No. 16-20 for Zone Change No. 1301-20, Including Attached Existing and Proposed Zoning Exhibits](#)[Existing Zoning, Exhibit A to City Council Ordinance No. 16-20](#)[Proposed Zoning, Exhibit B to City Council Ordinance No. 16-20](#)[City Council Resolution No. 11277 for Design Review No. 5008-20 and Tentative Parcel Map No. 0016-20](#)[Vicinity Map](#)[Project Plans](#)[MND No. 1862-18, Including Response to Public Comments](#)[Appendix A of MND No. 1862-18, Air Quality, Energy, and Greenhouse Gas Emission Impact Analysis](#)[Appendix B of MND No. 1862-18, Geotechnical Investigation](#)[Appendix C of MND No. 1862-18, Priority Water Quality Management Plan](#)[Appendix D of MND No. 1862-18, Noise Impact Analysis](#)[Design Review Staff Report Dated April 15, 2020](#)[Community Development Director Design Review Recommendation Letter Dated April 22, 2020](#)[Planning Commission Staff Report Dated August 24, 2020](#)[Draft Planning Commission Meeting Minutes Dated August 24, 2020](#)[Planning Commission Resolution No. 20-20](#)

11.2. Public Hearing to consider modernizing the City's Transportation System Improvement Program (TSIP) fees.**Recommended Action:**

1. Introduce and approve Ordinance No. 17-20 for First Reading. An Ordinance of the City Council of the City of Orange amending Chapter 15.41 of the Orange Municipal Code to update the program areas subject to Transportation Systems Improvement Program fees and modify the yearly adjustment method for Transportation Systems Improvement Program fees.
2. Approve Resolution No. 11270. A Resolution of the City Council of the City of Orange repealing Resolution No. 10284 and revising the Transportation Systems Improvement Program fee categories and related fees.

Attachments:[Staff Report](#)[Expanded TSIP Fee Table](#)[TSIP Nexus Study Report](#)[Transportation Fee Comparison Memo](#)[Ordinance No. 17-20](#)[Resolution No. 11270](#)**11.3. Public Hearing to consider Introduction and First Reading of an Ordinance amending sections of Title 12 (Streets, Sidewalks and Public Places), Title 16 (Subdivisions) and Title 17 (Zoning) of the Orange Municipal Code related to the Design Review Committee. Ordinance No. 13-20.****Recommended Action:**

Introduce and approve Ordinance No. 13-20 for First Reading. An Ordinance of the City Council of the City of Orange Amending Title 12, Title 16 and Title 17 of the Orange Municipal Code to Update Duties and Responsibilities of the Design Review Committee Effect Other Minor Revisions.

Attachments:[Staff Report](#)[Ordinance No. 13-20 - CLEAN](#)[Ordinance No. 13-20 OMC - REDLINED](#)[Planning Commission Staff Report and Resolution](#)[Draft Planning Commission Minutes 8-17-20](#)[Public Comments from Planning Commission meeting 8-17-20](#)**12. ADJOURNMENT**

The next Regular City Council meeting will be held on Tuesday, October 13, 2020, at 6:00 p.m., via various teleconference locations, with Closed Session beginning at 5:00 p.m. if necessary.

I, Pamela Coleman, CMC, City Clerk for the City of Orange, do hereby declare, under penalty of perjury, that a full and correct copy of this agenda was posted pursuant to Government Code Section 54950 et. seq., at the following locations: Orange Civic Center kiosk and Orange City Clerk's Office at 300 E. Chapman Avenue, Police facility at 1107 North Batavia Street, and uploaded to the City's website www.cityoforange.org. Under the declaration of a local emergency, the City of Orange attempted to post at the following location, but due to their closure, was unable to: Orange Main Public Library, 407 E. Chapman Avenue.

Date posted: September 3, 2020



Agenda Item

City Council

Item #: 3.1.

9/8/2020

File #: 20-131

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Pamela Coleman, City Clerk

1. SUBJECT

Waive reading in full of all ordinances on the Agenda.

2. SUMMARY

This item asks the City Council to waive the reading in full of all ordinances on the agenda (if any) and approve their reading by title only.

State law requires that all ordinances be read in full either at the time of the introduction or at the time of passage, unless a motion waiving further reading is adopted by a majority of the City Council (Gov. Code § 36934).

3. RECOMMENDED ACTION

Approve.

4. ATTACHMENTS

- None



Agenda Item

City Council

Item #: 3.1.

9/8/2020

File #: 20-131

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Pamela Coleman, City Clerk

1. SUBJECT

Waive reading in full of all ordinances on the Agenda.

2. SUMMARY

This item asks the City Council to waive the reading in full of all ordinances on the agenda (if any) and approve their reading by title only.

State law requires that all ordinances be read in full either at the time of the introduction or at the time of passage, unless a motion waiving further reading is adopted by a majority of the City Council (Gov. Code § 36934).

3. RECOMMENDED ACTION

Approve.

4. ATTACHMENTS

- None



Agenda Item

City Council

Item #: 3.2.

9/8/2020

File #: 20-132

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Will Kolbow, Assistant City Manager/Administrative Services Director

1. SUBJECT

Confirmation of warrant registers dated August 4, 6, 14, 20, and 28, 2020.

2. SUMMARY

The warrant writings for the above listed dates are on file in the Office of the City Clerk for Council reference.

3. RECOMMENDED ACTION

Approve.

4. ATTACHMENTS

- None



Agenda Item

City Council

Item #: 3.2.

9/8/2020

File #: 20-132

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Will Kolbow, Assistant City Manager/Administrative Services Director

1. SUBJECT

Confirmation of warrant registers dated August 4, 6, 14, 20, and 28, 2020.

2. SUMMARY

The warrant writings for the above listed dates are on file in the Office of the City Clerk for Council reference.

3. RECOMMENDED ACTION

Approve.

4. ATTACHMENTS

- None



Agenda Item

City Council

Item #: 3.3.

9/8/2020

File #: 20-082

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Pamela Coleman, City Clerk

1. SUBJECT

Approval of meeting minutes of the City Council of the City of Orange for the July 28, 2020, Adjourned Regular Meeting.

2. SUMMARY

Submitted for your consideration and approval are the minutes of the above meeting(s).

3. RECOMMENDED ACTION

Approve minutes as presented.

4. ATTACHMENTS

- July 28, 2020, Adjourned Regular Meeting minutes



Agenda Item

City Council

Item #: 3.3.

9/8/2020

File #: 20-082

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Pamela Coleman, City Clerk

1. SUBJECT

Approval of meeting minutes of the City Council of the City of Orange for the July 28, 2020, Adjourned Regular Meeting.

2. SUMMARY

Submitted for your consideration and approval are the minutes of the above meeting(s).

3. RECOMMENDED ACTION

Approve minutes as presented.

4. ATTACHMENTS

- July 28, 2020, Adjourned Regular Meeting minutes

The City Council of the City of Orange, California convened on July 28, 2020, at 5:00 p.m. in an Adjourned Regular Meeting via various teleconference locations.

5:00 P.M. CLOSED SESSION

1. ROLL CALL

PRESENT – Alvarez, Murphy, Nichols, Monaco
ABSENT – None

Draft

2. PUBLIC COMMENTS – None

3. RECESS TO CLOSED SESSION – The City Council recessed to Closed Session at 5:00 p.m. with all Members present to discuss the following:

a. Conference with Legal Counsel – Existing litigation pursuant to Government Code Section 54956.9(a) & (d)(1).

*1) Case: Orange Park Association v. City of Orange
Orange County Superior Court*

b. Conference with Labor Negotiator pursuant to Government Code Section 54957.6:
City Negotiator: Rick Otto, City Manager

Employee Organizations: Orange Water Division Employees' Association, Orange Management Association, Orange Municipal Employees' Association, and Orange Maintenance and Crafts Employees' Association.

4. ADJOURNMENT – Closed Session was adjourned at 5:16 p.m.

6:00 P.M. REGULAR SESSION**1. OPENING**

Mayor Murphy called the meeting to order at 6:00 p.m.

1.1 PLEDGE OF ALLEGIANCE TO THE FLAG

Led by Councilmember Kimberlee Nichols.

1.2 ROLL CALL

PRESENT – Alvarez, Murphy, Nichols, Monaco

ABSENT – None

2. PUBLIC COMMENTS

The following email was received:

Janice Brownfield – emailed encouraging the City to study and pursue a community choice energy program in Orange.

3. REPORTS FROM MAYOR MURPHY – None**4. REPORTS FROM COUNCILMEMBERS – None****5. REPORTS FROM CITY MANAGER****5.1 Review of the Orange Plaza Paseo.**

City Manager Otto provided an update on the success of the Orange Plaza Paseo (outdoor dining area in Old Towne), which started on July 8.

Public Comments

Vern Ramos – submitted an eComment in support of the Orange Plaza Paseo.

Al Ricci, Chamber of Commerce – submitted a written comment in support of extending the Orange Plaza Paseo.

During discussion, staff answered Council’s questions regarding the traffic circulation and parking. The City has not received any complaints from neighbors that have been impacted by the diversion of traffic. Parking has not been an issue, and there has been an increase in use of the parking structure.

5. REPORTS FROM CITY MANAGER (Continued)

During further discussion, the following suggestions were made: moving the Farmers Market closer to the Paseo, permanent signage, adding a more permanent and attractive type of street closure, adding more boxed trees and greenery, adding live music when appropriate to do so, and creating a committee in the future to explore bringing back the Orange Plaza Paseo throughout different times of the year.

MOTION – Murphy

SECOND – Alvarez

AYES – Alvarez, Murphy, Nichols, Monaco

Moved to: 1) Continue the closure of the 100 blocks of north and south Glassell to at least Sunday, September 13, 2020; and 2) Agendize a review of the closure at the September 8, 2020, Regular City Council meeting.

6. PUBLIC HEARINGS**6.1 Proposed Fiscal Year 2020-21 City of Orange Budget.**

Time set for a public hearing to consider the Proposed Fiscal Year 2020-21 City of Orange Operating Budget.

City Manager Otto introduced the item; and Assistant City Manager/Administrative Services Director Will Kolbow presented a budget overview utilizing a PowerPoint presentation and summarized the proposed fee changes.

The Mayor opened the Public Hearing.

Public Comments

Vern Ramos – submitted an eComment requesting that the City reduce the police budget for Fiscal Year 2020-21.

Alison Prior – emailed requesting that the City redirect some of the police budget to Community Services and Community Development.

The Mayor closed the Public Hearing.

MOTION – Murphy

SECOND – Alvarez

AYES – Alvarez, Murphy, Nichols, Monaco

Moved to approve Resolution No. 11257. A Resolution of the City Council of the City of Orange adopting said City's budget for the Fiscal Year 2020-21 and relating to transfers of funds between and within appropriations, transfers between funds, and additional appropriations.

6. PUBLIC HEARINGS (Continued)

MOTION – Alvarez
SECOND – Monaco
AYES – Alvarez, Murphy, Nichols, Monaco

Moved to approve Resolution No. 11258. A Resolution of the City Council of the City of Orange adopting the appropriations limit for the Fiscal Year 2020-21.

MOTION – Nichols
SECOND – Murphy
AYES – Alvarez, Murphy, Nichols, Monaco

Moved to make the finding that the portion of the Fiscal Year 2020-21 Budget subject to the Gann Appropriations limit is \$193,008,124; and therefore within the limit.

MOTION – Nichols
SECOND – Murphy
AYES – Alvarez, Murphy, Nichols, Monaco

Moved to approve Resolution No. 11256. A Resolution of the City Council of the City of Orange amending the Master Schedule of Fees and Charges for various services and the rental of rooms and equipment.

MOTION – Monaco
SECOND – Nichols
AYES – Alvarez, Murphy, Nichols, Monaco

Moved to approve Resolution No. 11259. A Resolution of the City Council of the City of Orange amending the citywide pay schedule in accordance with the requirements of California Code of Regulations, Title 2, Section 570.5.

7. ADJOURNMENT – There being no further business, the meeting was adjourned at 7:02 p.m.

The next Regular City Council Meeting will be held on Tuesday, August 11, 2020, at 6:00 p.m., with Closed Session beginning at 5:00 p.m. if necessary, via various teleconference locations.

PAMELA COLEMAN
CITY CLERK

MARK A. MURPHY
MAYOR



Agenda Item

City Council

Item #: 3.4.

9/8/2020

File #: 20-125

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Richard A. Rohm, City Treasurer
Will Kolbow, Assistant City Manager/Admin. Services Director

1. SUBJECT

Investment Oversight Committee report for the period ending August 31, 2020.

2. SUMMARY

This report summarizes the activity of the Investment Oversight Committee.

3. RECOMMENDED ACTION

Receive and file.

4. FISCAL IMPACT

None.

5. STRATEGIC PLAN GOALS

Goal 2: Be a fiscally healthy community
d: Effectively manage and develop City assets.

6. DISCUSSION AND BACKGROUND

As required by the Orange Municipal Code Section 2.50.020, the Investment Oversight Committee reports to the City Council summarizing the Committee meetings and submitting any recommendations of the Investment Advisory Committee.

Since the last Investment Oversight Committee Report, the Investment Oversight Committee held a meeting on August 19, 2020. This meeting was combined with the Investment Advisory Committee meeting. The purpose of this meeting was to review current investment activity and to discuss related Treasury issues.

Following is a summary of the specific items discussed at this meeting:

- **Investment Rates and Portfolio Updates** - Rate reports were presented for the period June 2019 through June 2020. There were discussions regarding the interest rate environment. In addition, attention was given to the recent interest rate trends in both the U.S. Treasury market and in the Local Agency Investment Fund (LAIF). An update on the investment portfolio was also presented.
- **Treasurer's Investment Reports** - The investment activity for the months of April, May, and

June 2020, and the City's position in each category of investment that includes Treasuries, Agencies, and Pooled Investments was discussed. This report was also on the City Council agenda for the August 11 meeting as item 3.18.

- **Economic Updates** - There were discussions in regards to the California forecast on sales tax trends and economic drivers. It was noted that 3rd quarters sales tax revenue for FY 20 was down 1.8% and it is expected 4th quarter will be down 37%. There was discussion related to the fact that economists are split in calling for a "V" shaped recession or a more longer term one.
- **City Update** - An update was presented regarding what is happening at the city level. The City Manager indicated that the City Council was able to adopt a balanced budget with the use of \$8.5 million in reserves. The other balancing sources come from budget reductions and renegotiated labor agreements.

7. ATTACHMENT

- Monthly Treasurer's Reports for April, May, and June 2020



Agenda Item

City Council

Item #: 3.4.

9/8/2020

File #: 20-125

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Richard A. Rohm, City Treasurer
Will Kolbow, Assistant City Manager/Admin. Services Director

1. SUBJECT

Investment Oversight Committee report for the period ending August 31, 2020.

2. SUMMARY

This report summarizes the activity of the Investment Oversight Committee.

3. RECOMMENDED ACTION

Receive and file.

4. FISCAL IMPACT

None.

5. STRATEGIC PLAN GOALS

Goal 2: Be a fiscally healthy community
d: Effectively manage and develop City assets.

6. DISCUSSION AND BACKGROUND

As required by the Orange Municipal Code Section 2.50.020, the Investment Oversight Committee reports to the City Council summarizing the Committee meetings and submitting any recommendations of the Investment Advisory Committee.

Since the last Investment Oversight Committee Report, the Investment Oversight Committee held a meeting on August 19, 2020. This meeting was combined with the Investment Advisory Committee meeting. The purpose of this meeting was to review current investment activity and to discuss related Treasury issues.

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- **Investment Rates and Portfolio Updates** - Rate reports were presented for the period June 2019 through June 2020. There were discussions regarding the interest rate environment. In addition, attention was given to the recent interest rate trends in both the U.S. Treasury market and in the Local Agency Investment Fund (LAIF). An update on the investment portfolio was also presented.
- **Treasurer's Investment Reports** - The investment activity for the months of April, May, and

June 2020, and the City's position in each category of investment that includes Treasuries, Agencies, and Pooled Investments was discussed. This report was also on the City Council agenda for the August 11 meeting as item 3.18.

- **Economic Updates** - There were discussions in regards to the California forecast on sales tax trends and economic drivers. It was noted that 3rd quarters sales tax revenue for FY 20 was down 1.8% and it is expected 4th quarter will be down 37%. There was discussion related to the fact that economists are split in calling for a "V" shaped recession or a more longer term one.
- **City Update** - An update was presented regarding what is happening at the city level. The City Manager indicated that the City Council was able to adopt a balanced budget with the use of \$8.5 million in reserves. The other balancing sources come from budget reductions and renegotiated labor agreements.

7. ATTACHMENT

- Monthly Treasurer's Reports for April, May, and June 2020



Agenda Item

City Council

Item #: 3.18.

8/11/2020

File #: 20-034

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Richard A. Rohm, City Treasurer
Will Kolbow, Assistant City Manager/Admin. Services Director

1. SUBJECT

Monthly Treasurer's Reports for April, May, and June 2020

2. SUMMARY

Presentation of three monthly Treasurer's Reports to the City Council after the end of the quarter covered by the reports.

3. RECOMMENDED ACTION

Receive and file.

4. FISCAL IMPACT

None.

5. STRATEGIC PLAN GOALS

Goal 2: Be a fiscally healthy community
d: Effectively manage and develop City assets.

6. DISCUSSION AND BACKGROUND

The City's current Statement of Investment Policy has been adopted by the City Council of the City of Orange as Resolution 11163 and is in accordance with the California Government Code Sections 53600 et seq. Per the Investment Policy, three monthly investment reports are to be submitted to the City Council within 45 days following the end of the quarter.

As required by the City's present Investment Policy, the City Treasurer's report delineates all investments made by the City Treasurer for the City, its special funds, and the Successor Agency funds, by investment type and by broker.

The monthly Compliance Report certifying compliance of all investments with both the Government Code and the City's Investment Policy is included. On April 20, 2020, during the COVID-19 pandemic, the City Manager (as Director of Emergency Services) approved easing of the concentration limit in the one-year or less maturity sector as well as the maximum limit in the State of California Local Agency Investment Fund (LAIF).

The Investment Portfolio Statement accurately reflects all investments held by the City and its agents as of the end of the month. This investment data is also presented in other summary and graphic form. A reconciliation between total cash and investments and total cash per the General Ledger is also included.

Summary of changes in Treasurer's cash and investments:

	<u>Operating Cash & Investments</u> ⁽¹⁾
Balance @ 3/31/2020	\$134,126,907
Monthly Activity:	
Cash Received	57,995,583
Cash Disbursed	<u>(41,529,147)</u>
Balance @ 6/30/2020	\$150,593,343

⁽¹⁾Includes operating cash and investments (valued at cost). Does not include deposits with administrator, imprest cash, fiscal agent cash and investments, and deferred compensation.

For the month of April 2020

The April cash receipts exceeded cash disbursements by \$9,358,083. The City received \$9,948,695 in property tax revenue, \$2,696,701 in sales tax revenue, and \$1,121,836 in annual franchise fees for gas and electricity. During the month, large disbursements included payments totaling \$1,769,367 to PERS for employee benefits, \$1,320,963 to Orange County Transportation Authority for the Metrolink Parking Structure, \$512,634 to Atlantic Machinery for a CNG (Compressed Natural Gas) powered sewer cleaning truck, \$338,409 to Municipal Water District of Orange County for purchased water, and \$279,357 to CT & T Concrete Paving for the Hart Park deck repair project.

In the month of April, one Federal National Mortgage Association note matured and one Federal National Mortgage Association note was called. The City's balance in LAIF on April 30 was \$61,800,000 an increase of \$20,100,000 due to cash receipts exceeding cash disbursements, and the investment activity during the month.

For the month of May 2020

The May cash receipts exceeded cash disbursements by \$6,117,242. The City received \$7,162,506 in property tax in lieu of vehicle license fees, \$5,407,861 in property tax revenue (\$2,777,166 for the City and \$2,630,695 as property tax increment collected for the Successor Agency), and \$3,630,516 in sales tax revenue. Large disbursements included payments totaling \$2,362,255 to PERS for employee benefits, \$534,147 to T.E. Roberts for annual pipeline renewal, \$287,939 to Software One for renewal of Microsoft software licenses, and \$271,250 to Municipal Water District of Orange County for purchased water.

In the month of May, one Federal Home Loan Mortgage Corporation note and one Federal Farm Credit Bank note were called. The City's balance in LAIF on May 31 was \$76,800,000 or an increase of \$15,000,000 due to cash receipts exceeding cash disbursements and the investment activity during the month.

For the month of June 2020

The June cash receipts exceeded cash disbursements by \$991,112. The City received \$2,915,193 in sales tax revenue, \$1,228,794 from the County of Orange for CARES (Coronavirus Aid, Relief, and

Economic Security) Act relief funds, and \$186,867 in property tax revenue. Large disbursements included payments totaling \$1,236,728 to PERS for employee benefits, \$873,366 to Southcoast Fire Equipment for a fire engine, \$725,178 to All Star Fire for firefighter safety gear and equipment, \$460,780 to T.E. Roberts for annual pipeline renewal, and \$338,409 to Municipal Water District of Orange County for purchased water.

In the month of June, one medium term note matured. One Federal Home Loan Bank note and one Federal Farm Credit Bank note were called. The City's balance in LAIF on June 30 was \$104,000,000, or an increase of \$27,200,000 mainly because of the investment activity.

Credit rating on investments

During this period, there was no change to the credit rating on the investments in the investment portfolio.

Investment Advisory Committee (IAC)

The next Investment Advisory Committee meeting is scheduled for August 19, 2020.

7. ATTACHMENTS

- Investment Report for April 2020
- Investment Report for May 2020
- Investment Report for June 2020



Agenda Item

City Council

Item #: 3.5.

9/8/2020

File #: 20-045

TO: Honorable Mayor and Members of the City Council

FROM: Rick Otto, City Manager

1. SUBJECT

Second Amendment to Master Subscription Agreement No. 6858 with Granicus LLC, a Minnesota Limited Liability Company, for website redesign, development, conversion, and implementation services.

2. SUMMARY

The City is in need to redesign and update its website to adapt to customer needs and meet current technology trends. Staff is recommending the second amendment of the current Master Subscription Agreement with Granicus LLC to include the additional scope of work for a new city website.

3. RECOMMENDED ACTION

1. Approve and adopt the Second Amendment to Master Subscription Agreement No. 6858 with Granicus LLC for website redesign, development, conversion, and implementation services and authorize the Mayor and the City Clerk to execute the amendment to agreement on behalf of the City; and
2. Authorize the appropriation of \$109,000 from the Computer Replacement unreserved fund balance to expenditure account number 790.1601.56670.20274 Computer Replacement - Website Upgrade.

4. FISCAL IMPACT

The total expenditure for this agreement in Fiscal Year 2020-2021 is \$109,000 and will be funded in Website Upgrade (20274) through Computer Replacement (790).

5. STRATEGIC PLAN GOALS

Goal 4: Provide outstanding public service

- c: Enhance technology to improve public accessibility to information and services.

6. DISCUSSION AND BACKGROUND

The City website is an essential and effective tool in communicating the City's plans, policies, and procedures to the Orange community. With continued advancement of technology, it is imperative the City maintains a website that can meet consumer online needs as well as ensure flexible content management.

In 2016, the City entered into a four-year contract with CivicPlus, then the leader in producing and hosting websites throughout Orange County, to develop a new website, which had been in place since 2003. Due to the basic and outdated capabilities of the previous website, CivicPlus completely

overhauled the City’s website.

During the past four years, staff had an opportunity to evaluate the current website and establish standards for future website upgrades. CivicPlus provided the City with an improved website; however, as technology and city needs evolved, the contract with CivicPlus did not allow much flexibility to enhance or modify the site. Therefore, as the end of the contract approached earlier this year, staff developed the following criteria to meet current and future website demand:

- a) Ease of back-end management
- b) User-friendly content management
- c) Flexibility to make modifications (colors, photos, layout, style, etc.)
- d) Ease of content migration
- e) Compatibility with external platforms including social media and Laserfiche
- f) Responsive customer service and technical support

Staff met with representatives from CivicPlus and Granicus LLC (Granicus), two of the leading website providers in Southern California and particularly in Orange County, to learn what both could offer. While CivicPlus has enhanced their product, certain key features are still lacking such as: 1) incompatibility with external platforms, 2) complicated back-end management, 3) lack of options for site modifications, 4) complex content management, and 5) lack of solutions for customer inquiries.

Granicus’ proposal met all of staff’s criteria and included additional options not available through CivicPlus including social media integration, alternatives for content modifications, integration of Laserfiche document retrieval, a user-friendly content platform, compatibility with external platforms (i.e. GIS and parking management), and temporary alternate homepages that will highlight special events or critical public information. In addition, the City currently contracts with Granicus for its streaming of public meetings and, most recently, a new voting system and an online agenda management system. Granicus is the website provider for local cities such as Laguna Beach and Costa Mesa who are all satisfied with their performance. After reviewing both vendors, Granicus has the capability to design, develop, convert, and implement a new website that covers all of the City’s current and future needs. The total project cost over five years is \$200,125 broken down as follows:

	Annual Licensing				
Implementation and Year 1	Year 2	Year 3	Year 4	Year 5	Total
\$108,824	\$21,183	\$22,242	\$23,354	\$24,522	\$200,125

Future annual subscription costs will be included as part of the annual budget proposal. The Year One cost of \$108,824 includes the first year’s annual licensing subscription of \$5,174 and implementation costs which include:

- ✓ Design and branding of the main website
- ✓ Design and customization for department specific pages (i.e. Library)
- ✓ Content development and migration

- ✓ Training
- ✓ Configuration and integration with external platforms (i.e. Laserfiche)
- ✓ Accessibility training and initial structure

The project is estimated to be completed within 10-12 months. City staff representatives are currently assigned to manage their respective department's pages and will be assisting with the transition to the new website. However, staff believes to consistently implement and manage the website effectively, a new web content specialist position will need to be created. We are working to identify position specifications and options and will return to City Council with a recommendation at a later date. Staff is recommending City Council approve the second amendment to the Master Subscription Agreement with Granicus LLC for the upgrade of the City's website.

7. ATTACHMENTS

- Second Amendment to the Master Subscription Agreement with Granicus LLC with attached Granicus Proposal



Agenda Item

City Council

Item #: 3.5.

9/8/2020

File #: 20-045

TO: Honorable Mayor and Members of the City Council

FROM: Rick Otto, City Manager

1. SUBJECT

Second Amendment to Master Subscription Agreement No. 6858 with Granicus LLC, a Minnesota Limited Liability Company, for website redesign, development, conversion, and implementation services.

2. SUMMARY

The City is in need to redesign and update its website to adapt to customer needs and meet current technology trends. Staff is recommending the second amendment of the current Master Subscription Agreement with Granicus LLC to include the additional scope of work for a new city website.

3. RECOMMENDED ACTION

1. Approve and adopt the Second Amendment to Master Subscription Agreement No. 6858 with Granicus LLC for website redesign, development, conversion, and implementation services and authorize the Mayor and the City Clerk to execute the amendment to agreement on behalf of the City; and
2. Authorize the appropriation of \$109,000 from the Computer Replacement unreserved fund balance to expenditure account number 790.1601.56670.20274 Computer Replacement - Website Upgrade.

4. FISCAL IMPACT

The total expenditure for this agreement in Fiscal Year 2020-2021 is \$109,000 and will be funded in Website Upgrade (20274) through Computer Replacement (790).

5. STRATEGIC PLAN GOALS

Goal 4: Provide outstanding public service

- c: Enhance technology to improve public accessibility to information and services.

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The City website is an essential and effective tool in communicating the City's plans, policies, and procedures to the Orange community. With continued advancement of technology, it is imperative the City maintains a website that can meet consumer online needs as well as ensure flexible content management.

In 2016, the City entered into a four-year contract with CivicPlus, then the leader in producing and hosting websites throughout Orange County, to develop a new website, which had been in place since 2003. Due to the basic and outdated capabilities of the previous website, CivicPlus completely

overhauled the City’s website.

During the past four years, staff had an opportunity to evaluate the current website and establish standards for future website upgrades. CivicPlus provided the City with an improved website; however, as technology and city needs evolved, the contract with CivicPlus did not allow much flexibility to enhance or modify the site. Therefore, as the end of the contract approached earlier this year, staff developed the following criteria to meet current and future website demand:

- a) Ease of back-end management
- b) User-friendly content management
- c) Flexibility to make modifications (colors, photos, layout, style, etc.)
- d) Ease of content migration
- e) Compatibility with external platforms including social media and Laserfiche
- f) Responsive customer service and technical support

Staff met with representatives from CivicPlus and Granicus LLC (Granicus), two of the leading website providers in Southern California and particularly in Orange County, to learn what both could offer. While CivicPlus has enhanced their product, certain key features are still lacking such as: 1) incompatibility with external platforms, 2) complicated back-end management, 3) lack of options for site modifications, 4) complex content management, and 5) lack of solutions for customer inquiries.

Granicus’ proposal met all of staff’s criteria and included additional options not available through CivicPlus including social media integration, alternatives for content modifications, integration of Laserfiche document retrieval, a user-friendly content platform, compatibility with external platforms (i.e. GIS and parking management), and temporary alternate homepages that will highlight special events or critical public information. In addition, the City currently contracts with Granicus for its streaming of public meetings and, most recently, a new voting system and an online agenda management system. Granicus is the website provider for local cities such as Laguna Beach and Costa Mesa who are all satisfied with their performance. After reviewing both vendors, Granicus has the capability to design, develop, convert, and implement a new website that covers all of the City’s current and future needs. The total project cost over five years is \$200,125 broken down as follows:

	Annual Licensing				
Implementation and Year 1	Year 2	Year 3	Year 4	Year 5	Total
\$108,824	\$21,183	\$22,242	\$23,354	\$24,522	\$200,125

Future annual subscription costs will be included as part of the annual budget proposal. The Year One cost of \$108,824 includes the first year’s annual licensing subscription of \$5,174 and implementation costs which include:

- ✓ Design and branding of the main website
- ✓ Design and customization for department specific pages (i.e. Library)
- ✓ Content development and migration

- ✓ Training
- ✓ Configuration and integration with external platforms (i.e. Laserfiche)
- ✓ Accessibility training and initial structure

The project is estimated to be completed within 10-12 months. City staff representatives are currently assigned to manage their respective department's pages and will be assisting with the transition to the new website. However, staff believes to consistently implement and manage the website effectively, a new web content specialist position will need to be created. We are working to identify position specifications and options and will return to City Council with a recommendation at a later date. Staff is recommending City Council approve the second amendment to the Master Subscription Agreement with Granicus LLC for the upgrade of the City's website.

7. ATTACHMENTS

- Second Amendment to the Master Subscription Agreement with Granicus LLC with attached Granicus Proposal

**SECOND AMENDMENT
TO
MASTER SUBSCRIPTION AGREEMENT**

THIS SECOND AMENDMENT TO MASTER SUBSCRIPTION AGREEMENT (the “First Amendment”) is made and entered into as of _____, 2020, by and between the CITY OF ORANGE, a municipal corporation (“Customer”), and GRANICUS, LLC, a Minnesota Limited Liability Company (“Granicus”), with reference to the following:

A. Customer and Granicus entered into a Master Subscription Agreement (Agreement No. 6858) dated as of October 8, 2019, which is incorporated herein by this reference (the “Original Agreement”); and

B. Customer and Granicus amended the Original Agreement to revise the Scope of Services and increase the compensation by that certain First Amendment to Professional Services Agreement (Agreement No. 6858.1) dated as of July 13, 2020, which is incorporated herein by this reference (the “First Amendment”); and

C. Customer and Granicus desire to further amend the Original Agreement to modify, amend and supplement certain portions of the Original Agreement to add a Scope of Work, revise the Term and increase the compensation.

NOW, THEREFORE, the parties hereby agree as follows:

Section 1. **Defined Terms.** Except as otherwise defined herein, all capitalized terms used herein shall have the meanings set forth for such terms in the Original Agreement.

Section 2. **Cross-References.** Customer and Granicus agree that all references in this Second Amendment are deemed and construed to refer to the Original Agreement, as implemented by this Second Amendment.

Section 3. **Additional Scope of Work.** The Scope of Work (“SOW”), Section 2.1, is supplemented to include the services described in Exhibit A of this Second Amendment (Proposal dated July 31, 2020), which is attached hereto and incorporated herein by this reference.

Section 4. **Compensation.** The total not-to-exceed compensation for the SOW in Exhibit A shall not exceed TWO HUNDRED THOUSAND ONE HUNDRED TWENTY-FOUR DOLLARS and 09/100 (\$200,124.09).

Section 5. **Term.** The Term of the SOW in Exhibit A shall be as provided in Exhibit A.

Section 6. **Integration.** This Second Amendment amends, as set forth herein, the Original Agreement and, except as specifically amended hereby, the Original Agreement shall remain in full force and effect. To the extent that there is any conflict or inconsistency between

the terms and provisions of this Second Amendment and the terms and provisions of the Original Agreement, the terms and provisions of this Second Amendment shall control and govern the rights and obligations of the parties.

IN WITNESS of this Agreement, the parties enter into this Agreement on the year and day first above written.

“CONTRACTOR”

“CITY”

GRANICUS, LLC, a Minnesota Limited Liability Company

CITY OF ORANGE, a municipal corporation

*By: _____
Printed Name: _____
Title: _____

By: _____
Mark A. Murphy, Mayor

*By: _____
Printed Name: _____
Title: _____

ATTEST:

Pamela Coleman, City Clerk

APPROVED AS TO FORM:

Mary E. Binning
Senior Assistant City Attorney

***NOTE:**
-- If Contractor is a corporation, the City requires the following signature(s):
-- (1) the Chairman of the Board, the President or a Vice-President, AND (2) the Secretary, the Chief Financial Officer, the Treasurer, an Assistant Secretary or an Assistant Treasurer. If only one corporate officer exists or one corporate officer holds more than one corporate office, please so indicate. OR
-- The corporate officer named in a corporate resolution as authorized to enter into this Agreement. A copy of the corporate resolution, certified by the Secretary close in time to the execution of the Agreement, must be provided to the City.

EXHIBIT “A”

ADDITIONAL SCOPE OF WORK

[Behind this page.]

Granicus Proposal for Orange, CA

Granicus Contact

Name: John Redfern

Phone: +1 3102660243

Email: john.redfern@granicus.com

Proposal Details

Quote Number: Q-112659

Prepared On: 8/12/2020

Valid Through: 9/8/2020

Tier: Up to 25000 Subscribers

Pricing

Payment Terms: Net 30 (Payments for subscriptions are due at the beginning of the period of performance.)

Currency: USD

Period of Performance: The term of the Agreement will commence on the date this document is signed and will continue for 60 months.

One-Time Fees

Solution	Billing Frequency	Quantity/Unit	One-Time Fee
Dept Branding: Interior Page Customization Tier 2	Milestones - 40/20/20/20	2 Each	\$10,000.00
govAccess - Web Design and Implementation - Independent Sub	Milestones - 40/20/20/20	1 Each	\$11,300.00
govAccess Enterprise Search (Implementation)	Milestones - 40/20/20/20	1 Each	\$1,350.00
Dept Branding: Interior Page Customization Tier 3	Milestones - 40/20/20/20	3 Each	\$7,500.00
Accessibility (Web-only) Training and Consultation-Standard	Upon Delivery	1 Each	\$5,000.00
Content Strategy Package - Premium	Milestones - 40/20/20/20	1 Each	\$17,500.00
Customizations (Non-recurring) - govAccess	Milestones - 40/20/20/20	1 Each	\$4,500.00
SUBTOTAL:			\$103,650.00

One-Time Fees			
Solution	Billing Frequency	Quantity/Unit	One-Time Fee
govAccess – Website Design and Implementation - Trailblazer	Milestones - 40/20/20/20	1 Each	\$46,500.00
SUBTOTAL:			\$103,650.00

Annual Fees for New Subscriptions			
Solution	Billing Frequency	Quantity/Unit	Annual Fee
govAccess - Maint/Hosting/License Fee - Independent Sub	Annual	1 Each	\$0.00 <i>first year free</i>
govAccess Enterprise Search (Tier 2)	Annual	1 Each	\$4,499.00
Customizations (Recurring) - govAccess	Annual	1 Each	\$675.00
govAccess - Maintenance, Hosting, & Licensing Fee - Core	Annual	1 Each	\$0.00 <i>first year free</i>
SUBTOTAL:			\$5,174.00

Remaining Period(s)				
Solution(s)	Year 2	Year 3	Year 4	Year 5
govAccess - Maint/Hosting/License Fee - Independent Sub	\$2,520.00	\$2,646.00	\$2,778.30	\$2,917.22
govAccess Enterprise Search (Tier 2)	\$4,723.95	\$4,960.15	\$5,208.15	\$5,468.56
Customizations (Recurring) - govAccess	\$708.75	\$744.19	\$781.40	\$820.47
govAccess - Maintenance, Hosting, & Licensing Fee - Core	\$13,230.00	\$13,891.50	\$14,586.08	\$15,315.38
SUBTOTAL:	\$21,182.70	\$22,241.84	\$23,353.93	\$24,521.62

Product Descriptions	
Name	Description
govAccess - Maint/ Hosting/License Fee - Independent Sub	<p>Maintenance, Hosting and Licensing includes the following for the client's Independent Subsite:</p> <ul style="list-style-type: none"> • Monthly software updates • Unlimited technical support (6:00 AM – 6:00 PM PT, Monday – Friday) • Access to training webinars and on-demand video library • Access to best practice webinars and resources • Annual health check with research-based recommendations for website optimization • DDoS mitigation • Disaster recovery with 90-minute failover (RTO) and 15-minute data replication (RPO)
Dept Branding: Interior Page Customization Tier 2	govAccess will produce a custom, single column HTML layout using up to five (5) custom styled widgets. Each widget will contain its own unique set of configurable settings.
govAccess - Web Design and Implementation - Independent Sub	<p>Independent Subsite Package offers a mutually agreed upon wireframe based on department needs from Granicus' selection of templates. The package includes:</p> <ul style="list-style-type: none"> • Unique design theme, including color palette for landing page and interior pages • Unique header and footer • Unique navigation design • Individual URL and search capabilities • Optional custom mobile homepage (included)
govAccess Enterprise Search (Implementation)	Configure software to index/crawl public 3rd party applications and other non-govAccess websites.
govAccess Enterprise Search (Tier 2)	Index public 3rd party applications and other non-govAccess websites. Tier 2 solution includes up to 250,000 pages/documents, up to three (3) search engines, and an unlimited annual search volume.
Dept Branding: Interior Page Customization Tier 3	govAccess will produce up to five (5) custom widget displays on a single page based on existing default widget functionality. Each widget will contain its own unique set of configurable settings. Each custom widget will be built for re-use across all other interior pages.

Product Descriptions	
Name	Description
Accessibility (Web-only) Training and Consultation-Standard	<p>Granicus will provide a front-end website design, excluding third-party tools, compliant with WCAG 2.0 upon completion and only to the extent validated by Granicus' accessible content formatting and testing process. This service includes standard training and services to help the client get started creating and maintaining an accessible website.</p> <ul style="list-style-type: none"> • Design website in compliance with WCAG 2.0 standards • Test website to WCAG 2.0 standards using automated tool • Develop the client's accessibility statement • Training in accessibility-focused CMS functions • Reformat up to 25 of the client's pages to comply with WCAG 2.0 standards • Onsite Web Accessibility Training in accessibility-focused CMS functions, including what the standards are, why they are important and how to create compliant content
Content Strategy Package - Premium	<p>The Premium Content Strategy Package will introduce staff members to content strategy and writing for the Web and includes:</p> <ul style="list-style-type: none"> • On-site consultation and process meeting to create a custom content strategy process • Web analytics report detailing content strategy opportunities (Available only if Granicus is granted access to the client's analytics) • On-site content strategy and plain language writing for the Web • Training customized for the client, including group exercises updating the client's content • Content development and migration best practices guide • Website content best practices guide • Website persona exercise materials • Communicating with your audience exercise materials • Task process evaluation exercise materials • Writing for the Web textbook • Revise 100 web pages of the client's choosing to comply with content strategy best practices
Customizations (Recurring) - govAccess	<p>The following described service is a "Customization". A "Customization" is non-standard functional programming that is unique to a particular client and can potentially conflict with visionLive updates.</p>

Product Descriptions	
Name	Description
Customizations (Non-recurring) - govAccess	<p>The following described service is a "Customization". A "Customization" is non-standard functional programming that is unique to a particular client and can potentially conflict with visionLive updates.</p> <p>Parking Availability widget Granicus will build a Parking Availability widget that displays current (with a possible short delay depending on performance assessment) parking spot availability in garages and lots. Graphic design will be provided by Granicus design team. The data will be provided by the City's Signal-Tech server in an XML format. The City will be responsible for setting up access via a URL to the XML dataset.</p>
govAccess - Maintenance, Hosting, & Licensing Fee - Core	<p>The govAccess Maintenance, Hosting, and Licensing plan is designed to equip the client with the technology, expertise and training to keep the client's website relevant and effective over time.</p> <p>Services include the following:</p> <ul style="list-style-type: none"> • Ongoing software updates • Unlimited technical support (6:00 AM - 6:00 PM PT, Monday - Friday) • Access to training webinars and on-demand video library • Access to best practice webinars and resources • Annual health check with research-based recommendations for website optimization • DDoS mitigation • Disaster recovery with 90-minute failover (RTO) and 15-minute data replication (RPO)

Product Descriptions	
Name	Description
govAccess - Website Design and Implementation - Trailblazer	<p>Website Design and Implementation - Trailblazer provides a citizen focused website and includes:</p> <ul style="list-style-type: none"> • Advanced UX Consultation, which may include one (1) or more of the following: <ol style="list-style-type: none"> 1. One (1) site analytics report 2. One (1) heatmap analysis 3. One (1) internal stakeholder survey 4. One (1) community stakeholder survey 5. One (1) remote user testing of top tasks • Three (3) customer journeys (top tasks or heavily visited webpages) identified for optimization -Fully customized homepage wireframe • Fully responsive design • Custom mobile homepage or standard mobile responsive homepage • Video background or standard rotating image carousel (switchable at any time) • Three (3) specialty alternate homepages - Choose from Granicus' library including emergencies, election night, special events • Three (3) customer experience features - Choose from Granicus' library including service finder, geo finder, or data visualization banner • Programming/CMS implementation • Migrate up to 200 webpages • Ten (10) forms converted into the new CMS • Three (3) days of on-site consultation / training to be applied towards additional project management or training (two (2) of three (3) days must be consecutive)

Terms and Conditions

- Client will be eligible to request a basic redesign credit for one (1) govAccess main website after completing year four (4) of this uninterrupted five (5) year Agreement.
 - Client must request the basic redesign credit prior to the end of the initial term.
 - The redesign will be available after payment of the annual invoice for year four (4) of the Agreement.
 - The basic redesign credit will only be available if there are no outstanding govAccess invoices at the time the request is made.
 - Any termination of the Agreement prior to the end of the initial term renders the basic redesign credit offer null and void.
 - Granicus will not develop a sitemap or new content as an included part of any free redesign work, but will assist the Client in transferring existing content into the new design.
- The basic redesign credit will be equivalent to either:
 - A template selected from the then-current Granicus best practices library, or;
 - A dollar credit not to exceed \$8,000.00 applied towards a custom redesign of one (1) existing main website.
- Link to Terms: https://granicus.com/pdfs/Master_Subscription_Agreement.pdf
- This quote is exclusive of applicable state, local, and federal taxes, which, if any, will be included in the invoice. It is the responsibility of Orange, CA to provide applicable exemption certificate(s).
- Any lapse in payment may result in suspension of service and will require the payment of a setup fee to reinstate the subscription.
- If submitting a Purchase Order, please include the following language: All pricing, terms and conditions of quote Q-112659 dated 8/12/2020 are incorporated into this Purchase Order by reference.
- Billing Frequency Notes (Milestones - 40/20/20/20):
 - An initial payment equal to 40% of the total;
 - A payment equal to 20% of the total upon Granicus' delivery of the draft homepage design concepts to the Client;
 - A payment equal to 20% of the total upon implementation of the main website into the VCMS on a Granicus-hosted development server; and
 - A payment equal to 20% of the total upon completion; provided, however that the Client has completed training. If the Client has not completed training, then Granicus shall invoice the Client at the earlier of: completion of training or 21 days after completion.
- Granicus certifies that it will not sell, retain, use, or disclose any personal information provided by Client for any purpose other than the specific purpose of performing the services outlined within this Agreement.
- The initial subscription term includes all the subscription years noted in quote Q-112659 dated 8/12/2020 and must be awarded to receive the first year free promotion. The Agreement and subscription term begins upon date of document signature or award.

Agreement and Acceptance

By signing this document, the undersigned certifies they have authority to enter the agreement. The undersigned also understands the services and terms.

Billing Information

Name:

Phone:

Email:

Address:

Orange, CA

Signature:

Name:

Title:

Date:



Agenda Item

City Council

Item #: 3.6.

9/8/2020

File #: 20-055

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Bonnie Hagan, Assistant City Manager / Community Services Director

1. SUBJECT

Agreement with West Coast Arborists, Inc. for creek maintenance along portions of the Santiago Creek.

2. SUMMARY

A four year agreement in the amount not to exceed \$75,000 annually, for a total not to exceed amount of \$300,000, to perform maintenance in the Santiago Creek. The objective is to maintain visibility and access, provide better flood control and fire prevention, and continue to reduce the incidents of trespassing and unlawful encampments. The scope includes annual or as needed clearance pruning of trees and shrubs, and removal of trash and debris along designated zones of the Santiago Creek.

3. RECOMMENDED ACTION

1. Authorize the appropriation of \$75,000 from the General Fund unreserved fund balance to expenditure account 100.7022.51420.00000 (General Fund - Contractual Services);
2. Approve a four year agreement with West Coast Arborists, Inc. in the amount not to exceed \$300,000 for creek maintenance and Authorize the Mayor and City Clerk to execute on behalf of the City; and
3. Authorize City Staff to file a Notice of Exemption to the County of Orange for the California Environmental Quality Act due to the minor nature of the project.

4. FISCAL IMPACT

The total expenditure for this four year agreement is not to exceed \$300,000 and will be funded through General Fund (100).

5. STRATEGIC PLAN GOALS

Goal 1: Provide for a safe community

b: Provide and maintain infrastructure necessary to ensure the safety of the public.

Goal 3: Enhance and Promote Quality of Life in the Community.

a: Refurbish, maintain, develop and/or expand public use places and spaces.

6. DISCUSSION AND BACKGROUND

Over the last several of years, the area between Grijalva Park and the SR 22 freeway of Santiago Creek had overgrown with non-native plant material and large amounts of debris had collected making the area inaccessible. The Orange Police Department (OPD) noticed an increase in unlawful

encampments and requested an immediate clean up.

In October 2018, the City Council approved an agreement with Great Scott Tree Service to clean up four different zones (Zones 1-4) along the creek bed, specifically between Grijalva Park and SR 55 freeway. Location zone maps are provided for reference. The clean-up allowed easy access to the creek for fire prevention, for handling incidents of trespassing and unlawful encampments, and for maintenance work. The clean-up also helps preserve native habitat and prevent the proliferation of non-native trees and shrubs which force out native and other desirable plant life.

After the rainy season in the fall of 2019, the plant material quickly grew back and created concealed areas within the trees and shrubs in Zones 1-4. Based on the effectiveness of the initial maintenance, in November 2019, City Council approved an amendment to the agreement to allow for additional clearance pruning of trees and shrubs in the creek bed. The additional clean-up efforts proved again to be successful.

In addition to Zones 1-4, OPD identified the areas between Cambridge St. and Hart Park and the section of the creek bed east of Glassell St and SR 22 freeway as additional areas in need of maintenance, as they had become overgrown and provided areas of concealment for trespassers. These areas received clearance pruning in early 2020, and are identified as Zones 5 and 6 in the attached scope of work.

In a continued effort to maintain the creek, an annual maintenance program was developed. The scope of work includes removing low hanging tree limbs to allow for a 6-foot clearance from the ground and pruning of shrubs to ensure a clear line of site. Dead or damaged branches will be removed regardless of height and dead or non-native palm trees and other plants will be removed.

A request for bids (Bid No. 190-55) to complete all six zones annually, for four years, was advertised and four bids were received:

Rank	Vendor	Location	Bid Amount
1	West Coast Arborists, Inc.	Anaheim, CA	\$330,000
2	United Pacific Services, Inc.	Fullerton, CA	\$392,774
3	Great Scott Tree Service, Inc.	Stanton, CA	\$602,165
4	Natures Image	Lake Forest, CA	\$643,248

The lowest responsible bid is from West Coast Arborists, Inc. Staff verified the qualifications of the contractor with references provided. West Coast Arborists has also provided satisfactory tree service for the City for many years.

In an effort to best manage resources, while still accomplishing project objectives, a four year maintenance cycle was developed which identifies four zones per year to be serviced. The maintenance program has been set up to prioritize which zones will be maintained each year based on safety needs and concerns. Zones 1-4 are identified for year one. The year one bid amount to complete Zones 1-4 is \$74,375.

The proposed four year agreement includes an annual not to exceed amount of \$75,000. The contractor will be directed, based on the maintenance program, as to which zones to complete annually. The total not to exceed amount for all four years is \$300,000.

An appropriation of \$75,000 from General Fund unreserved fund balance is required to support year

one of the agreement. Funding for years two through four will be included in the annual budget process. If funds are unavailable or not budgeted, the contract can be terminated or reduced to meet that year's allocation.

The project is exempt from provisions of the California Environmental Quality Act under Section 15304, Class 4 (Minor Alterations to Land). The proposed project consists of performing crown raising or clearance pruning to trees and shrubs and will not involve the removal of healthy, mature, scenic trees and will not disturb the creek bed and slope grade. Staff is requesting authorization to file a Notice of Exemption, which is attached for reference.

7. ATTACHMENTS

- Location Zone Maps
- Bid Abstract Summary
- Agreement with West Coast Arborists - Santiago Creek Tree and Brush Maintenance Services
- Notice of Exemption



Agenda Item

City Council

Item #: 3.6.

9/8/2020

File #: 20-055

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THRU: Rick Otto, City Manager

FROM: Bonnie Hagan, Assistant City Manager / Community Services Director

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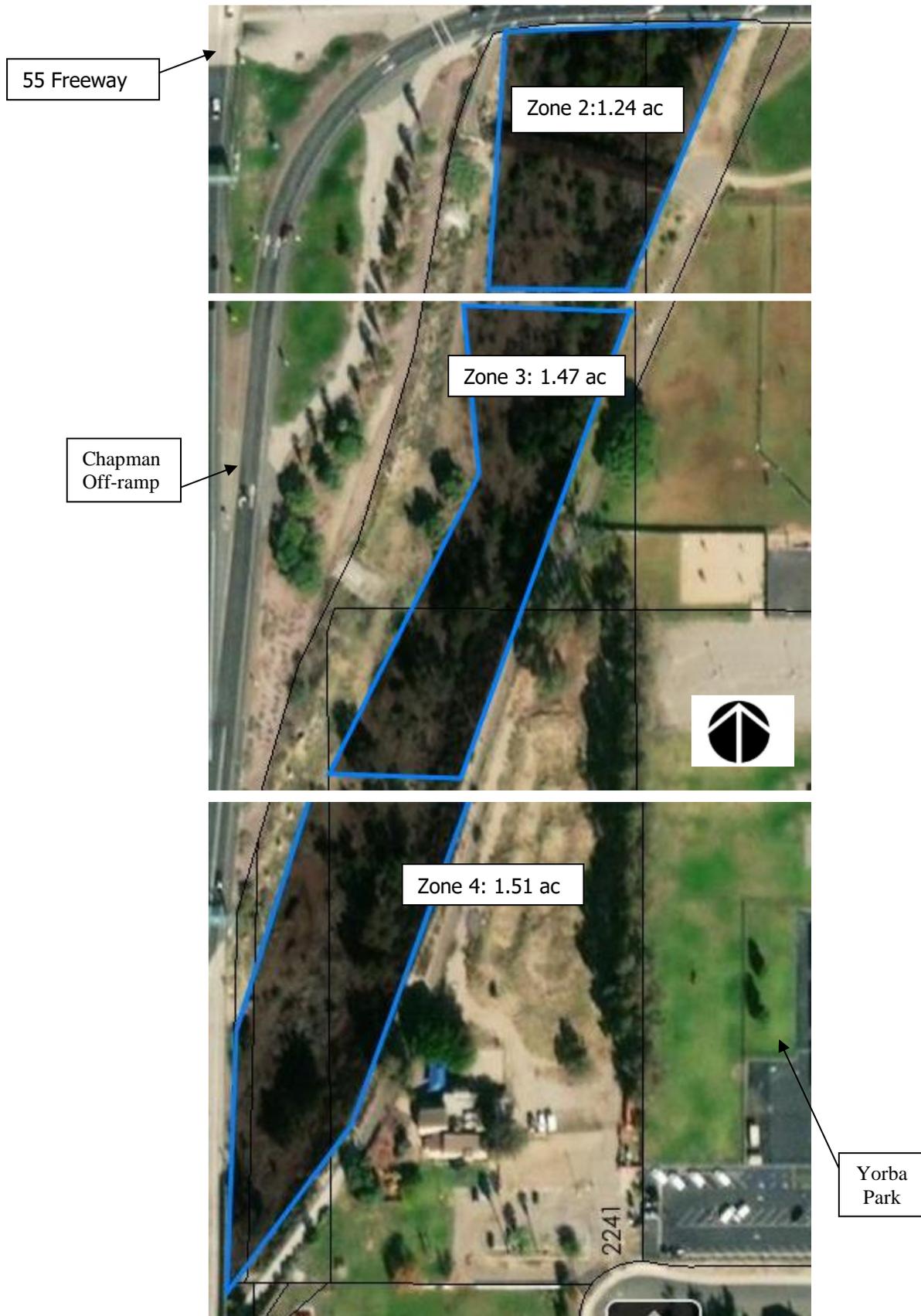
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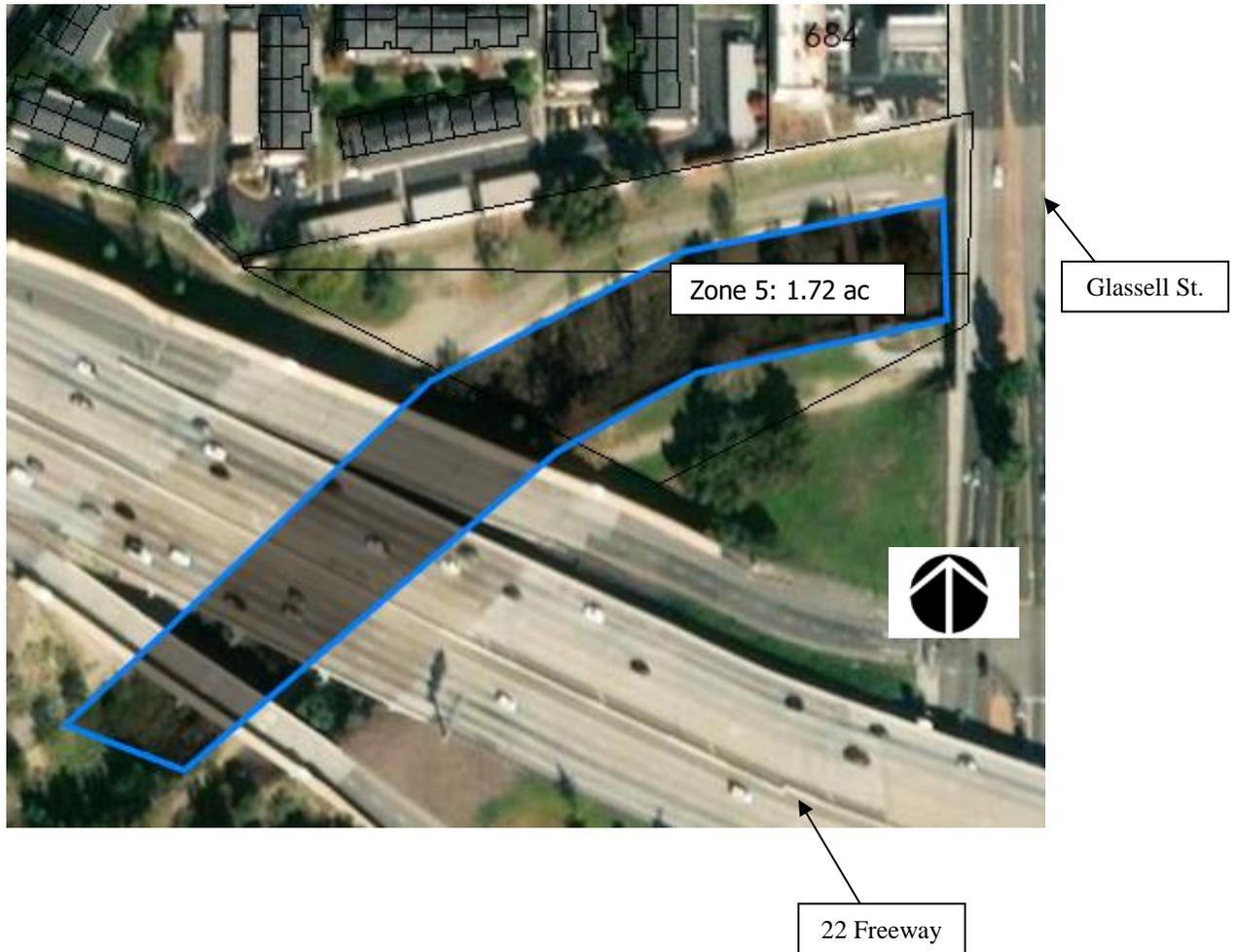
Santiago Creek Tree and Brush Clearance: Zone Map 1
Zone 1



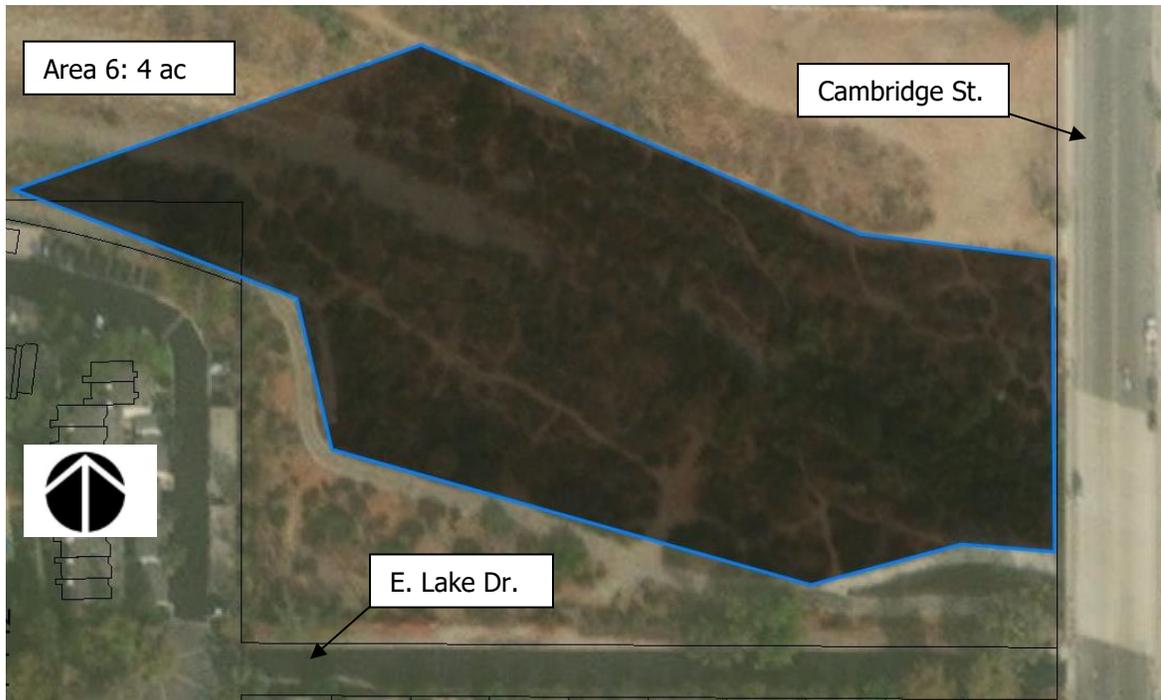
Santiago Creek Tree and Brush Clearance: Zone Map 2
Zones 2-4



Santiago Creek Tree and Brush Clearance: Zone Map 3
Zone 5



Santiago Creek Tree and Brush Clearance: Zone Map 4
Zone 6



Project: Santiago Creek Tree and Brush Maintenance

BID ABSTRACT SUMMARY

Bid No. 190-55

Date Advertised: 6/18/2020
Bid Due Date: 7/16/2020
Engineer's Cost Estimate: \$60,000

Company/Contractor	West Coast Arborist	United Pacific Services, Inc.	Great Scott Tree Service, Inc.	Natures Image, Inc.
City (Location of Company)	Anaheim, Ca.	Fullerton, Ca.	Stanton, Ca.	Lake Forest, CA
Year 1 (Zones 1-6)	\$82,500	\$102,163.48	\$136,400	\$153,398
Year 2 (Zones 1-6)	\$82,500	\$94,362.04	\$147,840	\$158,327
Year 3 (Zones 1-6)	\$82,500	\$96,827.16	\$155,075	\$163,298
Year 4 (Zones 1-6)	\$82,500	\$99,421.50	\$162,850	\$168,225
Four-year total (Zones 1-6)	\$330,000	\$392,774.18	\$602,165	\$643,248
	Recommended Award			

MAINTENANCE SERVICES AGREEMENT
[Maintenance Services for Santiago Creek Tree and Brush]

THIS MAINTENANCE SERVICES AGREEMENT (the “Agreement”) is made at Orange, California, on this ____ day of _____, 2020 by and between the CITY OF ORANGE, a municipal corporation (“City”) and WEST COAST ARBORISTS, INC., a California corporation (“Contractor”), who agree as follows.

1. Services. Subject to the terms and conditions set forth in this Agreement, Contractor shall provide to the reasonable satisfaction of City the services set forth in Exhibit “A,” which is attached hereto and incorporated herein by this reference. As a material inducement to City to enter into this Agreement, Contractor represents and warrants that it has thoroughly investigated and considered the scope of services and fully understands the difficulties and restrictions in performing the work. Contractor represents that it is experienced in performing the work and will follow the highest professional standards in performance of the work. All services provided shall conform to all federal, state and local laws, rules and regulations and to the best professional standards and practices. The terms and conditions set forth in this Agreement shall control over any terms and conditions in Exhibit "A" to the contrary.

David Nobbs, Park Supervisor (“City’s Project Manager”), shall be the person to whom Contractor will report for the performance of services hereunder. It is understood that Contractor’s performance hereunder shall be under the supervision of City’s Project Manager (or his/her designee), that Contractor shall coordinate its services hereunder with City’s Project Manager to the extent required by City’s Project Manager, and that all performances required hereunder by Contractor shall be performed to the satisfaction of City’s Project Manager and the City Manager.

2. Total Compensation, Annual Compensation and Fee Schedule.

a. Contractor’s total compensation for all services performed under this Agreement, shall not exceed THREE HUNDRED THOUSAND DOLLARS and 00/100 (\$300,000.00) without the prior written authorization of City.

b. The compensation for services performed under this Agreement shall be paid as specified in Exhibit “B.”

c. The above fee shall include all costs, including, but not limited to, all clerical, administrative, overhead, insurance, reproduction, telephone, travel, auto and equipment rental, and all related expenses.

3. Payment.

a. As scheduled services are completed, Contractor shall submit to City an invoice for the services completed, authorized expenses and authorized extra work actually performed or incurred.

b. All such invoices shall state the basis for the amount invoiced, including services completed, the number of hours spent and any extra work performed.

c. City will pay Contractor the amount invoiced within thirty (30) days after the approval of the invoice.

d. Payment shall constitute payment in full for all services, authorized costs and authorized extra work covered by that invoice.

4. **Change Orders.** No payment for extra services caused by a change in the scope or complexity of work, or for any other reason, shall be made unless and until such extra services and a price therefor have been previously authorized in writing and approved by City as an amendment to this Agreement. City's Project Manager is authorized to direct a reduction in the services to be performed and compensation therefor. All amendments shall set forth the changes of work, extension of time, and/or adjustment of the compensation to be paid by City to Contractor and shall be signed by the City's Project Manager, City Manager or City Council, as applicable.

5. **Licenses.** Contractor represents that it and any subcontractors it may engage, possess any and all licenses which are required under state or federal law to perform the work contemplated by this Agreement and that Contractor and its subcontractors shall maintain all appropriate licenses, including a City of Orange business license, at its cost, during the performance of this Agreement.

6. **Independent Contractor.** At all times during the term of this Agreement, Contractor shall be an independent contractor and not an employee of City. City shall have the right to control Contractor only insofar as the result of Contractor's services rendered pursuant to this Agreement. City shall not have the right to control the means by which Contractor accomplishes services rendered pursuant to this Agreement. Contractor shall, at its sole cost and expense, furnish all facilities, materials and equipment which may be required for furnishing services pursuant to this Agreement. Contractor shall be solely responsible for, and shall indemnify, defend and save City harmless from all matters relating to the payment of its subcontractors, agents and employees, including compliance with social security, withholding and all other wages, salaries, benefits, taxes, exactions, and regulations of any nature whatsoever. Contractor acknowledges that it and any subcontractors, agents or employees employed by Contractor shall not, under any circumstances, be considered employees of City, and that they shall not be entitled to any of the benefits or rights afforded employees of City, including, but not limited to, sick leave, vacation leave, holiday pay, Public Employees Retirement System benefits, or health, life, dental, long-term disability or workers' compensation insurance benefits.

7. **Contractor Not Agent.** Except as City may specify in writing, Contractor shall have no authority, express or implied, to act on behalf of City in any capacity whatsoever as an agent. Contractor shall have no authority, express or implied, to bind City to any obligation whatsoever.

8. **Designated Persons.** Except as otherwise authorized by City's Project Manager, only the employees of Contractor shall perform work provided for under this Agreement. It is understood by the parties that clerical and other nonprofessional work may be performed by persons other than those designated.

9. Assignment or Subcontracting. No assignment or subcontracting by Contractor of any part of this Agreement or of funds to be received under this Agreement shall be of any force or effect unless the assignment has had the prior written approval of City. City may terminate this Agreement rather than accept any proposed assignment or subcontracting. Such assignment or subcontracting may be approved by the City Manager or his/her designee.

10. Term. The term of this Agreement shall be for four (4) years, commencing on October 1, 2020, and ending on September 30, 2024.

11. Time Is of the Essence. Time is of the essence in this Agreement. Contractor shall do all things necessary and incidental to the prosecution of Contractor's work.

12. Reserved.

13. Delays and Extensions of Time. Contractor's sole remedy for delays outside its control, other than those delays caused by City, shall be an extension of time. No matter what the cause of the delay, Contractor must document any delay and request an extension of time in writing at the time of the delay to the satisfaction of City. Any extensions granted shall be limited to the length of the delay outside Contractor's control. If Contractor believes that delays caused by City will cause it to incur additional costs, it must specify, in writing, why the delay has caused additional costs to be incurred and the exact amount of such cost at the time the delay occurs. No additional costs can be paid that exceed the not to exceed amount stated in Section 2.a, above, absent a written amendment to this Agreement.

14. Products of Contractor. The documents, studies, evaluations, assessments, reports, plans, citations, materials, manuals, technical data, logs, files, designs and other products produced or provided by Contractor for this Agreement shall become the property of City upon receipt. Contractor shall deliver all such products to City prior to payment for same. City may use, reuse or otherwise utilize such products without restriction.

15. Equal Employment Opportunity. During the performance of this Agreement, Contractor agrees as follows:

a. Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law. Contractor shall ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law. Such actions shall include, but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation and selection for training, including apprenticeship. Contractor agrees to post in conspicuous places, available to employees and applicants for employment, a notice setting forth provisions of this non-discrimination clause.

b. Contractor shall, in all solicitations and advertisements for employees placed by, or on behalf of Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law.

c. Contractor shall cause the foregoing paragraphs (a) and (b) to be inserted in all subcontracts for any work covered by this Agreement, provided that the foregoing provisions shall not apply to subcontracts for standard commercial supplies or raw materials.

16. Conflicts of Interest. Contractor agrees that it shall not make, participate in the making, or in any way attempt to use its position as a contractor to influence any decision of City in which Contractor knows or has reason to know that Contractor, its officers, partners, or employees have a financial interest as defined in Section 87103 of the Government Code.

17. Indemnity.

a. To the fullest extent permitted by law, Contractor agrees to indemnify, defend and hold City, its City Council and each member thereof, and the officers, officials, agents and employees of City (collectively the “Indemnitees”) entirely harmless from all liability arising out of:

(1) Any and all claims under workers’ compensation acts and other employee benefit acts with respect to Contractor’s employees or subcontractor’s employees arising out of Contractor’s work under this Agreement, including any and all claims under any law pertaining to Contractor or its employees’ status as an independent contractor and any and all claims under Labor Code section 1720 related to the payment of prevailing wages for public works projects; and

(2) Any claim, loss, injury to or death of persons or damage to property caused by any act, neglect, default, or omission other than a professional act or omission of Contractor, or person, firm or corporation employed by Contractor, either directly or by independent contract, including all damages due to loss or theft sustained by any person, firm or corporation including the Indemnitees, or any of them, arising out of, or in any way connected with the work or services which are the subject of this Agreement, including injury or damage either on or off City’s property; but not for any loss, injury, death or damage caused by the active negligence or willful misconduct of City. Contractor, at its own expense, cost and risk, shall indemnify any and all claims, actions, suits or other proceedings that may be brought or instituted against the Indemnitees on any such claim or liability covered by this subparagraph, and shall pay or satisfy any judgment that may be rendered against the Indemnitees, or any of them, in any action, suit or other proceedings as a result of coverage under this subparagraph.

b. Reserved.

c. Except for the Indemnitees, the indemnifications provided in this Agreement shall not be construed to extend any third party indemnification rights of any kind to any person or entity which is not a signatory to this Agreement.

d. The indemnities set forth in this section shall survive any closing, rescission, or termination of this Agreement, and shall continue to be binding and in full force and effect in perpetuity with respect to Contractor and its successors.

18. Insurance.

a. Contractor shall carry workers' compensation insurance as required by law for the protection of its employees during the progress of the work. Contractor understands that it is an independent contractor and not entitled to any workers' compensation benefits under any City program.

b. Contractor shall maintain during the life of this Agreement the following minimum amount of comprehensive general liability insurance or commercial general liability insurance: the greater of (1) Ten Million Dollars (\$10,000,000) per occurrence; or (2) all the insurance coverage and/or limits carried by or available to Contractor. Said insurance shall cover bodily injury, death and property damage and be written on an occurrence basis.

c. Contractor shall maintain during the life of this Agreement, the following minimum amount of automotive liability insurance: the greater of (1) a combined single limit of Five Million Dollars (\$5,000,000); or (2) all the insurance coverage and/or limits carried by or available to Contractor. Said insurance shall cover bodily injury, death and property damage for all owned, non-owned and hired vehicles and be written on an occurrence basis.

d. Any insurance proceeds in excess of or broader than the minimum required coverage and/or minimum required limits which are applicable to a given loss shall be available to City. No representation is made that the minimum insurance requirements of this Agreement are sufficient to cover the obligations of Contractor under this Agreement.

e. Each policy of general liability and automotive liability shall provide that City, its officers, officials, agents, and employees are declared to be additional insureds under the terms of the policy, but only with respect to the work performed by Contractor under this Agreement. A policy endorsement to that effect shall be provided to City along with the certificate of insurance. In lieu of an endorsement, City will accept a copy of the policy(ies) which evidences that City is an additional insured as a contracting party. The minimum coverage required by Subsection 18.b and c, above, shall apply to City as an additional insured.

f. The insurance policies maintained by Contractor shall be primary insurance and no insurance held or owned by City shall be called upon to cover any loss under the policy. Contractor will determine its own needs in procurement of insurance to cover liabilities other than as stated above.

g. Before Contractor performs any work or prepares or delivers any materials, Contractor shall furnish certificates of insurance and endorsements, as required by City, evidencing the aforementioned minimum insurance coverages on forms acceptable to City, which shall provide that the insurance in force will not be canceled or allowed to lapse without at least ten (10) days' prior written notice to City.

h. All insurance maintained by Contractor shall be issued by companies admitted to conduct the pertinent line of insurance business in California and having a rating of Grade A or better and Class VII or better by the latest edition of Best Key Rating Guide.

i. Contractor shall immediately notify City if any required insurance lapses or is otherwise modified and cease performance of this Agreement unless otherwise directed by City. In such a case, City may procure insurance or self-insure the risk and charge Contractor for such costs and any and all damages resulting therefrom, by way of set-off from any sums owed Contractor.

j. Contractor agrees that in the event of loss due to any of the perils for which it has agreed to provide insurance, Contractor shall look solely to its insurance for recovery. Contractor hereby grants to City, on behalf of any insurer providing insurance to either Contractor or City with respect to the services of Contractor herein, a waiver of any right to subrogation which any such insurer may acquire against City by virtue of the payment of any loss under such insurance.

k. Contractor shall include all subcontractors, if any, as insureds under its policies or shall furnish separate certificates and endorsements for each subcontractor to City for review and approval. All coverages for subcontractors shall be subject to all of the requirements stated herein.

19. Termination. City may for any reason terminate this Agreement by giving Contractor not less than five (5) days' written notice of intent to terminate. Upon receipt of such notice, Contractor shall immediately cease work, unless the notice from City provides otherwise. Upon the termination of this Agreement, City shall pay Contractor for services satisfactorily provided and all allowable reimbursements incurred to the date of termination in compliance with this Agreement, unless termination by City shall be for cause, in which event City may withhold any disputed compensation. City shall not be liable for any claim of lost profits.

20. Maintenance and Inspection of Records. In accordance with generally accepted accounting principles, Contractor and its subcontractors shall maintain reasonably full and complete books, documents, papers, accounting records, and other information (collectively, the "records") pertaining to the costs of and completion of services performed under this Agreement. City and its authorized representatives shall have access to and the right to audit and reproduce any of Contractor's records regarding the services provided under this Agreement. Contractor shall maintain all such records for a period of at least three (3) years after termination or completion of this Agreement. Contractor agrees to make available all such records for inspection or audit at its offices during normal business hours and upon three (3) days' notice from City, and copies thereof shall be furnished if requested.

21. Compliance with Laws/Background.

a. Contractor shall be knowledgeable of and comply with all local, state and federal laws which may apply to the performance of this Agreement.

b. The work provided for in this Agreement constitutes a "public works," as that term is defined in Section 1720 of the California Labor Code, for which prevailing wages must be paid, to the extent Contractor's employees will perform any work that falls within any of the

classifications for which the Department of Labor Relations of the State of California promulgates prevailing wage determinations, Contractor hereby agrees that it, and any subcontractor under it, shall pay not less than the specified prevailing rates of wages to all such workers and shall comply with all statutory requirements thereunder. Statutory provisions for penalties for failure to comply with prevailing wage laws will be enforced. The general prevailing wage determinations for crafts can be located on the website of the Department of Industrial Relations (www.dir.ca.gov/DLSR). Additionally, to perform work under this Contract, Contractor must meet all State registration requirements and criteria, including project compliance monitoring.

c. Contractor represents and warrants that it:

(1) Has complied and shall at all times during the term of this Agreement comply, in all respects, with all immigration laws, regulations, statutes, rules, codes, and orders, including, without limitation, the Immigration Reform and Control Act of 1986 (IRCA); and

(2) Has not and will not knowingly employ any individual to perform services under this Agreement who is ineligible to work in the United States or under the terms of this Agreement; and

(3) Has properly maintained, and shall at all times during the term of this Agreement properly maintain, all related employment documentation records including, without limitation, the completion and maintenance of the Form I-9 for each of Contractor's employees; and

(4) Has responded, and shall at all times during the term of this Agreement respond, in a timely fashion to any government inspection requests relating to immigration law compliance and/or Form I-9 compliance and/or worksite enforcement by the Department of Homeland Security, the Department of Labor, or the Social Security Administration.

d. Contractor shall, upon request of City, provide a list of all employees working under this Agreement and shall provide, to the reasonable satisfaction of City, verification that all such employees are eligible to work in the United States. All costs associated with such verification shall be borne by Contractor. Once such request has been made, Contractor may not change employees working under this Agreement without written notice to City, accompanied by the verification required herein for such employees.

e. Contractor shall require all subcontractors to make the same representations and warranties as set forth herein.

f. If Contractor or subcontractor knowingly employs an employee providing work under this Agreement who is not authorized to work in the United States, and/or fails to follow federal laws to determine the status of such employee, that shall constitute a material breach of this Agreement and may be cause for immediate termination of this Agreement by City.

g. All personnel performing any services to City under this Contract shall possess sufficient experience and security records to perform the work at public facilities. Contractor shall conduct and complete, to City's satisfaction, sufficient background checks to ensure no personnel

performing services under this Contract is listed on the National Sex Offender Public Registry (“NSOPR”). Contractor shall monitor personnel security records to ensure no existing or new employees performing services under this Contract are added to the NSOPR or convicted of any crimes that would disqualify them from adhering to conduct conducive to public safety.

h. All costs associated with the documentation and verification required herein shall be borne by Contractor. Contractor shall require all subcontractors to provide the same documentation and verification when hired to perform services under this Contract. City has the right, in its sole and absolute discretion, to reject any employee of Contractor assigned to perform services for City, with or without cause, at the time of such assignment or at any time thereafter, and Contractor shall remove that employee from providing services to City to the extent permitted by law and any applicable collective bargaining agreement. City’s rights under this Article shall not be exercised in an arbitrary or capricious manner, or with the intent of forcing a termination of this Contract

i. Contractor agrees to indemnify and hold City, its officials, and employees harmless for, of and from any loss, including but not limited to fines, penalties and corrective measures, City may sustain by reason of Contractor's failure to comply with said laws, rules and regulations in connection with the performance of this Agreement.

22. Governing Law and Venue. This Agreement shall be construed in accordance with and governed by the laws of the State of California and Contractor agrees to submit to the jurisdiction of California courts. Venue for any dispute arising under this Agreement shall be in Orange County, California.

23. Integration. This Agreement constitutes the entire agreement of the parties. No other agreement, oral or written, pertaining to the work to be performed under this Agreement shall be of any force or effect unless it is in writing and signed by both parties. Any work performed which is inconsistent with or in violation of the provisions of this Agreement shall not be compensated.

24. Notice. Except as otherwise provided herein, all notices required under this Agreement shall be in writing and delivered personally, by e-mail, or by first class mail, postage prepaid, to each party at the address listed below. Either party may change the notice address by notifying the other party in writing. Notices shall be deemed received upon receipt of same or within 3 days of deposit in the U.S. Mail, whichever is earlier. Notices sent by e-mail shall be deemed received on the date of the e-mail transmission.

“CONTRACTOR”

“CITY”

West Coast Arborists, Inc.
2200 East Via Burton Street
Anaheim, CA 92806
Attn.: Victor Gonzalez

City of Orange
300 E. Chapman Avenue
Orange, CA 92866-1591
Attn.: David Nobbs

Telephone: 714-991-1900 ext. 153
E-Mail: vgonzalez@wcainc.com

Telephone: 714-744-6468
E-Mail: dnobbs@cityoforange.org

25. **Counterparts.** This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Signatures transmitted via facsimile and electronic mail shall have the same effect as original signatures.

IN WITNESS of this Agreement, the parties have entered into this Agreement as of the year and day first above written.

“CONTRACTOR”

“CITY”

WEST COAST ARBORISTS, INC.,
a California corporation

CITY OF ORANGE, a municipal corporation

*By: _____
Printed Name: _____
Title: _____

By: _____
Mark A. Murphy, Mayor

*By: _____
Printed Name: _____
Title: _____

ATTEST:

Pamela Coleman, City Clerk

APPROVED AS TO FORM:

Mary E. Binning
Senior Assistant City Attorney

***NOTE:** The City requires the following signature(s) on behalf of the Contractor:
-- (1) the Chairman of the Board, the President or a Vice-President, **AND** (2) the Secretary, the Chief Financial Officer, the Treasurer, an Assistant Secretary or an Assistant Treasurer. If only one corporate officer exists or one corporate officer holds more than one corporate office, please so indicate. **OR**
-- The corporate officer named in a corporate resolution as authorized to enter into this Agreement. A copy of the corporate resolution, certified by the Secretary close in time to the execution of the Agreement, must be provided to the City.

EXHIBIT "A"

SCOPE OF SERVICES & CONTRACTOR'S PROPOSAL

[Beneath this sheet.]



CITY OF ORANGE

COMMUNITY SERVICES DEPARTMENT www.cityoforange.org PHONE: (714) 744-7274 • FAX: (714) 744-7251

**REQUEST FOR BID (RFB)
SANTIAGO CREEK TREE AND BRUSH MAINTENANCE
Bid No. 190-55**

COMMUNITY SERVICES DEPARTMENT

230 E. Chapman Ave.
Orange, CA 92866
(714) 744-7274

Date: June 18, 2020

PROJECT NAME: Santiago Creek Tree and Brush Maintenance

Location Address: Santiago Creek (near intersection of Chapman Ave and Yorba St and west of Hart Park)

Contact Name: David Nobbs-Parks Maintenance Supervisor

Phone: 714-532-6468

E-Mail Address: dnobbs@cityoforange.org

PROJECT DESCRIPTION: The City of Orange, CA, a Municipal Corporation, is requesting qualified contractors to provide bids in accordance with plans and specifications prepared by City of Orange staff dated June 18, 2020 for a four (4) year contract to be awarded at or around September 8, 2020. All work shall conform to City of Orange codes, ordinances and standards. The work will generally include, but may not be limited to:

Performing crown raising or clearance prune to trees or shrubs along the Santiago Creek.

The purpose of this project is to maintain visibility and creek access to law enforcement and City staff in their efforts to reduce the incidents of trespassing and unlawful encampments, as well as the removal of trash and debris.

GENERAL PROVISIONS:

1. **A pre-bid job walk is scheduled for Tuesday, July 7, 2020 at 9:00 a.m. at Grijalva Park (368 N. Prospect Ave. Orange CA 92869). Social distancing will be observed during this job walk.**
2. NOTE: All demolition, construction, and installation work shall be performed in adherence to the landscape specifications as described within this RFB, the City of Orange *Landscape Standards and Specifications*, the City of Orange Park Development Standards and Specifications, both available on the City's website, and the current edition of the CalTrans "Green Book."
3. Contractor shall, at all times, carry valid insurance, which meets all City of Orange insurance requirements as outlined in Attachment 2.
4. All maintenance work shall conform to the specifications contained in the Request for Bids and any subsequent Agreements.
5. The contractor is responsible for carrying all pertinent licenses/permits for accomplishing this work.
6. Working hours will be per City of Orange ordinance. Weekend work will only take place with permission from the City of Orange.
7. The Contractor shall be registered with Department of Industrial Relations (DIR), the State of California per Labor Code Section 177.1(a) at the time of bid. This project is subject to compliance monitoring and enforcement by DIR. Contractor shall pay prevailing wages per the current Department of Industrial Relations wage rate (including all scheduled increases) and furnish Certified Payroll Reports for all workdays.
8. If applies, the contractor shall be required to provide a \$1,500.00 deposit for use of a City water meter on a City fire hydrant, if required. Contractor shall be charged \$2.75/day for water meter rental and shall be responsible for all water charges associated with project. Consumption charge of \$2.59 per hundred cubic feet of water.
9. All vehicles used by the contractor are to be identified with door signs (approx. 20" x 16", magnetic sign okay) or equivalent with the company name and phone number. These need to be visible from both sides of said vehicle.
10. Uniforms: All of contractor's employees shall wear appropriate uniforms at all times while on duty. Uniforms must have the contractor's name.
11. Background/Security: All personnel engaged in performance of this work shall be employees of the contractor and as such shall be warranted to possess sufficient experience and security records to perform this work.

SCOPE OF WORK AND PROJECT SPECIFICATIONS:

Special consideration: Bidder should consider that the vegetation growth, as well as the accumulation of trash and debris may vary from the time of bid submission to the time the notice to proceed is issued.

SITE PREPARATION:

1. The contractor is responsible to become familiar with all existing site conditions at the work site within the creek boundaries including, but not limited to existing amenities, soil, terrain, irrigation, and plant material to remain protected in place. See Attachment 1.
2. Supply all equipment and labor necessary for site cleanup.
3. Creek bed and slope grade shall not be disturbed. Any work causing disturbance of grades shall be only as necessary to conduct the stated scope of work and grade must be repaired and restored to its original condition prior to the completion of work.

4. The contractor shall at all times during construction maintain the job site in a safe and clean condition. Contractor shall remove all construction equipment/tools from the job site daily. If approved by the City, a staging area may be designated for construction equipment to be stored during the scheduled work period.

CROWN RAISING/ CLEARANCE PRUNE:

1. Crown Raising/Clearance Prune: A crown raising or clearance prune is performed when conditions within a tree or shrub are such that a certain condition needs attention. A crown raising or clearance prune does not involve the detail of work found in a full prune. Crown raising or clearance pruning may consist of one or more of the following types:
 - a. Crown raising consists of removing the lower branches of a tree or shrub to provide clearance for visibility.
 - b. Live crown ratio should be no less than 50%.
 - c. Trees and shrubs to be raised to a maximum of 6' from the ground to ensure a clear line of site under the canopy.
 - d. Alternately, clumping native shrubs may be reduced in diameter to 4', and raised from the ground up to a height of 3' off the ground level.
 - e. Alternately, non-native plant material may be cut off at ground level.
2. Dead or Hanging Branches
 - a. Any dead or hanging branches are to be removed regardless of height.
 - b. Alternately, non-native plant material may be cut off at ground level.
3. Dead or Non-Native Palms
 - a. Any dead or non-native palm to be removed regardless of height.
4. Manage Wildlife
 - a. Pruning activities may affect wildlife. Work procedures should be modified as appropriate to avoid disturbing, injuring or killing protected wildlife.
 - b. Work will be scheduled so as not to occur during nesting season.
5. Disposal
 - a. All debris generated by the contractor in the performance of the work shall become the property of the contractor from and after the time of clean-up. The contractor shall lawfully dispose of debris as is consistent with the requirements of AB 939.
 - b. All green waste produced as a result of the contractor's operations under this Agreement shall be reduced, reused, recycled, and/or transformed by Contractor. Weight slips shall be required as proof of final disposal and must be submitted by contractor with each demand for payment. All brush generated from trimming operations shall be recycled where practical.
6. Trash and Debris
 - a. As a separate bid item, remove all manmade trash and debris from each Zone.
 - b. Dispose of all manmade trash and debris in a legal manner.
7. Prevailing Wage Classification
 - a. The intent of this Request for Bid is for the contractor to utilize a combination of "Tree Trimmer" classifications as well as "Landscape Maintenance Laborer" classifications as allowed by the California Department of Industrial Relations.

8. Location of Work

- a. The location of the work to be done is outlined in Attachment 1 included in this bid package.
- b. Zone 1 is located in Santiago Creek generally north of Chapman Avenue and south of Walnut Avenue in the City of Orange.
- c. Zones 2 through 4 are located in Santiago Creek south of Chapman Avenue and north of the 55 Freeway in the City of Orange.
- d. Zone 5 is located in Santiago Creek just west of Hart Park.

9. Pruning Frequency

Bidder is to provide two quotes for annual pruning. One quote should be for a complete annual pruning service to be provided between the months of November and April. The second quote should be for the cost of completing the annual pruning service in two separate instances, one after November 1st and one prior to April 1st.

LEGAL NOTICE:

Formal sealed bids are being invited under our **Bid No. 190-55, Santiago Creek Tree and Brush Maintenance** in accordance with bid forms and specifications available at the office of the City Purchasing Officer, 300 East Chapman Avenue, Orange, California, 92866, at no cost. The publication, "City of Orange Standard Plans and Specifications", latest edition and addendum (a) shall govern the work under this contract and a copy of the City publication is available at the office of the City Engineer at no cost.

The bidder selected by the City for the award of a contract for this Project must be properly licensed in accordance with the laws of the State of California as a General Engineering Contractor (Class A), Landscape Contractor (C-27), or Tree Service Contractor (D-49), at the time of submitting its bid. The City will reject the bid of a bidder as being non-responsive if the bidder does not hold the requisite contractor's license at the time of submitting its bid; such a bidder shall be subject to all legal penalties imposed by law, including, but not limited to, any appropriate disciplinary action by the Contractors' State License Board. In addition, each subcontractor listed by the bidder shall possess, both at the time of the award of a contract to the bidder and at all times when work is performed, a valid contractor's license for the appropriate classification necessary to perform the work for which that subcontractor is listed. Failure of the bidder to deliver evidence to the City prior to the award of a contract for this project that each and every subcontractor listed by the bidder is properly licensed for the classification necessary to perform the work for which that subcontractor is listed, shall constitute a failure to execute the contract and may subject the bidder to all legal penalties imposed by law, including, but not limited to, forfeiture of the security of the bidder.

SPECIAL INSTRUCTIONS:

1. The Contractor shall **provide with this RFB a minimum of three (3) references of commensurate/equal** tree and brush maintenance work with cities and/or municipalities. References shall represent/include:
 - Work completed within the last five (5) years.
 - A description and location of said tree and brush maintenance work.
 - An approximate cost of said tree and brush maintenance work.
 - A contact person and phone number to verify tree and brush maintenance work.

2. The City reserves the right to reject any contractor who they feel does not meet a qualifying work experience or satisfying references.
3. The City reserves the right to reject at any time any or all bids, or parts thereof, and to waive any variances, technicalities and informalities which do not impair the quality, or performance of the project.
4. The City reserves the right to reject any or all bids, to reject any item in a bid unless an "all or none" basis is specified or to waive any informality or technicality in the bids received.
5. **The successful bidder will be awarded the contract to complete the work in any one zone or combination of zones based on available funding from the City.**

The services constituting the Scope of Work above, represent the maximum level of services to be provided. At any time following execution of a contract, the City reserves the right to decrease or eliminate services and associated compensation based on the needs of the City and amounts budgeted by the City Council. Work is only to be completed as directed in writing, by City Representative.

WHERE AND WHEN TO SUBMIT PROPOSALS

Provide response to the above REQUEST FOR BIDS on attached Bid Sheets and return all pages of the Request for Bids, addenda (if applicable), and references. Please provide three copies of bid packets.

Bids must be submitted to the City Clerk at 300 E. Chapman Ave., Orange, CA 92866 by 2:00 p.m. on Thursday, July 16, 2020. Responses may be sent via U.S. Mail or delivered in person to the above address.

The City reserves the right to reject any and all **Bids** and any item on items therein, and to waive any non-conformity of **Bids** with this Request for Bids, whether of a technical or substantive nature, as the interest of the City may require.

All questions regarding this bid are to be submitted by email to David Nobbs at dnobbs@cityoforange.org by Thursday, July 9, 2020 at 12:00 p.m.

TIME LINE (APPROXIMATE):

- | | |
|--|----------------------------|
| 1. Job walk: | July 7, 2020 at 9:00 a.m. |
| 2. Deadline for questions regarding Project/RFB: | July 9, 2020 at 12:00 p.m. |
| 3. Bids due: | July 16, 2020 by 2:00 p.m. |



Tree Care Professionals Serving Communities Who Care About Trees

www.WCAINC.com

July 15, 2020

City of Orange

Attn: City Clerk

300 E. Chapman Ave.

Orange, CA 92866

RE: RFB: Santiago Creek Tree and Brush Maintenance Bid No. 190-55

Due: Thursday, July 16, 2020 at 2:00PM

To whom it may concern;

Thank you for allowing West Coast Arborists, Inc. (WCA) with the opportunity to submit a proposal for tree maintenance services for the City of Orange. WCA is a family-owned and operated company employing over 950 full-time employees providing various tasks to achieve one goal: serving communities who care about trees and landscape. We have reviewed, understand, and agree to the terms and conditions described in this RFP. We also hereby acknowledge that we meet the minimum requirements and responded to each of these requirements to the best of our ability.

WCA's corporate values include listening to customers and employees that will help to improve services offered. By establishing clear goals and expectations for the organization, supporting diverse teams, and exchanging frequent feedback from customers and employees. WCA's top management team has created a culture where employees become accountable for actions and results.

WCA has a 48-year track record of working for more than 300 California and Arizona municipalities as well as other various agencies. Our company has been in business since 1972 and is licensed by the California State Contractors License Boards under license #366764. We have held this license in good standing since 1978. The license specializes in Class C61 (Tree Service) as well as Class C27 (Landscaping). We currently employ over 80 Certified Arborists and over 140 Certified Tree workers, as recognized by the Western Chapter of the International Society of Arboriculture. WCA is also registered with the Department of Industrial Relations (DIR) for Public Works projects, our registration number is 1000000956. Should we be awarded this project, we shall use full-time, in-house employees; no subcontractors will be used. Federal ID: #95-3250682.

Our employees will operate from one of our seven California Offices: Stockton Office, 3625 E. Stevenson Avenue, Stockton, CA 95205. For questions related to this proposal and who has the authority to negotiate/present please contact Victor Gonzalez, V.P. Business Development, at (714) 991-1900 or at vgonzalez@wcainc.com. Kris Burbidge, Area Manager, will be assigned to this project should WCA be awarded a contract. He can be reached at (714) 920-0567 or kburbidge@wcainc.com.

Sincerely,

Patrick Mahoney,
President

RFB 190-55 Santiago Creek Tree and Brush Maintenance
BID SHEET

Date: 07/15/2020

Bid Submitted by: Victor Gonzalez

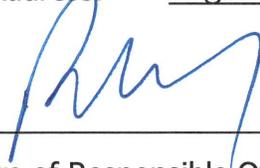
Company Name: West Coast Arborists, Inc.

Contact Name: Victor Gonzalez

Address: 2200 East Via Burton
Anaheim, CA 92806

Phone #: (714) 991-1900

E-mail Address: vgonzalez@wcainc.com



Signature of Responsible Officer or Employee

Patrick Mahoney, President

Print Name

The stated bid amount below constitutes the total dollar amount to perform the work described in the above scope of services to include all that is required to provide the work product and/or install all materials required to complete the work to a professional workmanship standard, and to install and apply all materials per all manufacturer's specifications and recommendations.

Contractor represents and warrants that it has thoroughly investigated and considered the scope of services and fully understands the difficulties and restrictions in performing the work. Contractor represents that it is experienced in performing the work and will follow professional standards in performance of the work. All services provided shall conform to all federal, state and local laws, rules and regulations and to the best professional standards and practices.

YEAR 1: Santiago Creek Tree and Brush Maintenance

Contractor will provide tree and brush clearance per Scope of Work and Specifications for the amount listed below.

Lump sum bid amount if project area is completed in its entirety (Zones 1-6).

Zones 1-6. BID AMOUNT Eighty Two Thousand, Five Hundred \$ 82,500.00
WRITTEN FORM

Bid amounts below should reflect the cost of performing work in any one zone or combination of zones, assuming award is based on City funding and not inclusive of all zones.

Zone 1. BID AMOUNT Twenty Thousand, Six Hundred Twenty Five \$ 20,625.00
WRITTEN FORM

Zone 2. BID AMOUNT Twelve Thousand, Three Hundred Seventy Five \$ 12,375.00
WRITTEN FORM

Zone 3. BID AMOUNT Twelve Thousand, Three Hundred Seventy Five \$ 12,375.00
WRITTEN FORM

Zone 4. BID AMOUNT Sixteen Thousand, Five Hundred \$ 16,500.00
WRITTEN FORM

Zone 5. BID AMOUNT Eight Thousand, Two Hundred Fifty \$ 8,250.00
WRITTEN FORM

Zone 6. BID AMOUNT Twelve Thousand, Three Hundred Seventy Five \$ 12,375.00
WRITTEN FORM

Hourly crew rate (in the event that additional work is needed): \$90 Per Man Hour

List crew positions and equipment utilized by crew to complete work: Crew positions (number of each type of position): 1.) Groundperson (x2) 2.) Tree Trimmer (x2)

3.) Senior Tree Trimmer(Foreman) (x1) 4.) Area Manaer(x1) 5.) Area Supervisor (x2)

Equipment: Aerial Tower (x2), Dump Truck(x1), Brush Chipper(x1) Pickup Truck(x1) Hand Tools

Removal of All Manmade Trash and Debris

Lump sum bid amount if project area is completed in its entirety (Zones 1-6).

Zones 1-6. BID AMOUNT Twelve Thousand, Five Hundred \$ 12,500.00
WRITTEN FORM

Bid amounts below should reflect the cost of performing work in any one zone or combination of zones, assuming award is based on City funding and not inclusive of all zones.

Zone 1. BID AMOUNT Three Thousand, One Hundred Twenty Five \$ 3,125.00
WRITTEN FORM

Zone 2. BID AMOUNT One Thousand, Eight Hundred Seventy Five \$ 1,875.00
WRITTEN FORM

Zone 3. BID AMOUNT One Thousand, Eight Hundred Seventy Five \$ 1,875.00
WRITTEN FORM

Zone 4. BID AMOUNT Two Thousand, Five Hundred \$ 2,500.00
WRITTEN FORM

Zone 5. BID AMOUNT One Thousand, Two Hundred Fifty \$ 1,250.00
WRITTEN FORM

Zone 6. BID AMOUNT One Thousand, Eight Hundred Seventy Five \$ 1,875.00
WRITTEN FORM

Hourly crew rate (in the event that additional work is needed): \$90 Per Man Hour

List crew positions and equipment utilized by crew to complete work: Crew positions (number of each type of position): 1.) Groundperson (x2) 2.) Tree Trimmer (x2)

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Equipment: Aerial Tower (x2), Dump Truck(x1), Brush Chipper(x1) Pickup Truck(x1) Hand Tools

YEAR 2: Santiago Creek Tree and Brush Maintenance

Contractor will provide tree and brush clearance per Scope of Work and Specifications for the amount listed below.

Lump sum bid amount if project area is completed in its entirety (Zones 1-6).

Zones 1-6. BID AMOUNT Eighty Two Thousand, Five Hundred \$ 82,500.00
WRITTEN FORM

Bid amounts below should reflect the cost of performing work in any one zone or combination of zones, assuming award is based on City funding and not inclusive of all zones.

Zone 1. BID AMOUNT Twenty Thousand, Six Hundred Twenty Five \$ 20,625.00
WRITTEN FORM

Zone 2. BID AMOUNT Twelve Thousand, Three Hundred Seventy Five \$ 12,375.00
WRITTEN FORM

Zone 3. BID AMOUNT Twelve Thousand, Three Hundred Seventy Five \$ 12,375.00
WRITTEN FORM

Zone 4. BID AMOUNT Sixteen Thousand, Five Hundred \$ 16,500.00
WRITTEN FORM

Zone 5. BID AMOUNT Eight Thousand, Two Hundred Fifty \$ 8,250.00
WRITTEN FORM

Zone 6. BID AMOUNT Twelve Thousand, Three Hundred Seventy Five \$ 12,375.00
WRITTEN FORM

Hourly crew rate (in the event that additional work is needed): \$90 Per Man Hour

List crew positions and equipment utilized by crew to complete work: Crew positions (number of each type of position): 1.) Groundperson (x2) 2.) Tree Trimmer (x2)

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Removal of All Manmade Trash and Debris

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Equipment: Aerial Tower (x2), Dump Truck(x1), Brush Chipper(x1) Pickup Truck(x1) Hand Tools

YEAR 3: Santiago Creek Tree and Brush Maintenance

Contractor will provide tree and brush clearance per Scope of Work and Specifications for the amount listed below.

Lump sum bid amount if project area is completed in its entirety (Zones 1-6).

Zones 1-6. BID AMOUNT Eighty Two Thousand, Five Hundred \$ 82,500.00
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Equipment: Aerial Tower (x2), Dump Truck(x1), Brush Chipper(x1) Pickup Truck(x1) Hand Tools

Removal of All Manmade Trash and Debris

Lump sum bid amount if project area is completed in its entirety (Zones 1-6).

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Equipment: Aerial Tower (x2), Dump Truck(x1), Brush Chipper(x1) Pickup Truck(x1) Hand Tools

YEAR 4: Santiago Creek Tree and Brush Maintenance

Contractor will provide tree and brush clearance per Scope of Work and Specifications for the amount listed below.

Lump sum bid amount if project area is completed in its entirety (Zones 1-6).

Zones 1-6. BID AMOUNT Eighty Two Thousand, Five Hundred \$ 82,500.00
WRITTEN FORM

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Equipment: Aerial Tower (x2), Dump Truck(x1), Brush Chipper(x1) Pickup Truck(x1) Hand Tools

LIST OF SUBCONTRACTS

A. The undersigned intends to subcontract a portion of this project to the following subcontracts (Note: Refer to Section 2.3 of the Standard Specifications and Section 4100 through 4113 of the California Contract Code for SUBCONTRACT DISCLOSURE REQUIREMENTS).

NAME OF SUBCONTRACTOR AND ADDRESS	LICENSE NO.	BID ITEM NUMBER(S)	PERCENT OF BID ITEM SUBBED	CHECK IF SPECIALITY	DESCRIBE WORK WHEN LESS THAN 100% OF WORK IS SUBBED	\$ AMOUNT BASED ON BID AMOUNT
NONE TO BE USED	N/A	N/A	N/A		N/A	\$

B. The undersigned DOES NOT INTEND to subcontract any portion of this project.

NOTE: The bidder shall check Box A or B as applicable. If the bidder does not check either box, it will be deemed that he has checked Box B.



 Signature of the Bidder
 Patrick Mahoe, President

PUBLIC CONTRACT CODE

Public Contract Code Section 10285.1 Statement

In conformance with Public Contract Code Section 10285.1 (Chapter 376, Stats. 1985), the bidder hereby declares under penalty of perjury under the laws of the State of California that the bidder has ____, has not been convicted

within the preceding three years of any offenses referred to in that section, including any charge of fraud, bribery, collusion, conspiracy, or any other act in violation of any state or Federal antitrust law in connection with the bidding upon, award of, or performance of, any public works contract, as defined in Public Contract Code Section 1101, with any public entity, as defined in Public Contract Code Section 1100, including the Regents of the University of California or the Trustees of the California State University. The term "bidder" is understood to include any partner, member, officer, director, responsible managing officer, or responsible managing employee thereof, as referred to in Section 10285.1.

Note: The bidder must place a check mark after "has" or "has not" in one of the blank spaces provided. The above Statement is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Statement. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

Public Contract Code Section 10162 Questionnaire

In conformance with Public Contract Code Section 10162, the Bidder shall complete, under penalty of perjury, the following questionnaire:

Has the bidder, any officer of the bidder, or any employee of the bidder who has a proprietary interest in the bidder, ever been disqualified, removed, or otherwise prevented from bidding on, or completing a federal, state, or local government project because of a violation of law or a safety regulation?

Yes ____ No

If the answer is yes, explain the circumstances in the following space.

Public Contract Code 10232 Statement

In conformance with Public Contract Code Section 10232, the Contractor, hereby states under penalty of perjury, that no more than one final unappealable finding of contempt of court by a federal court has been issued against the Contractor within the immediately preceding two year period because of the Contractor's failure to comply with an order of a federal court which orders the Contractor to comply with an order of the National Labor Relations Board.

Note: The above Statement and Questionnaire are part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Statement and Questionnaire. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

Non-collusion Affidavit

(Title 23 United States Code Section 112 and
Public Contract Code Section 7106)

To the CITY OF ORANGE – DEPARTMENT OF COMMUNITY SERVICES

In conformance with Title 23 United States Code Section 112 and Public Contract Code 7106 the bidder declares that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

Note: The above Non-collusion Affidavit is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Non-collusion Affidavit.

Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

DEBARMENT AND SUSPENSION CERTIFICATION

TITLE 49, CODE OF FEDERAL REGULATIONS, PART 29

The bidder, under penalty of perjury, certifies that, except as noted below, he/she or any other person associated therewith in the capacity of owner, partner, director, officer, manager:

- is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal agency;
- has not been suspended, debarred, voluntarily excluded or determined ineligible by any Federal agency within the past 3 years;
- does not have a proposed debarment pending; and
- has not been indicted, convicted, or had a civil judgement rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

If there are any exceptions to this certification, insert the exceptions in the following space.

Exceptions will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any exception noted above, indicate below to whom it applies, initiating agency, and dates of action.

Notes: Providing false information may result in criminal prosecution or administrative sanctions. The above certification is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Certification.

The undersigned bidder hereby represents as follows:

That no Councilman, officer, agent, or employee of the City of Orange, is personally interested, directly or indirectly, in the Contract, or the compensation to be paid hereunder:

That this bid is made without connection with any person, firm or corporation making a bid for the same work, and is in all respects fair, and without collusion or fraud.

By my signature on this proposal I certify, under penalty of perjury under the laws of the State of California, that the foregoing questionnaire and statements of Public Contract Code Sections 10162, 10232 and 10285.1 are true and correct and that the bidder has complied with the requirements of Section 8103 of the Fair Employment and Housing Commission Regulations (Chapter 5, Title 2 of the California Administrative Code). By my signature on this proposal I further certify, under penalty of perjury under the laws of the State of California and the United States of America, that the Noncollusion Affidavit required by Title 23 United States Code, Section 112 and Public Contract Code Section 7106; and the Title 49 Code of Federal Regulations, Part 29 Debarment and Suspension Certification are true and correct.

Date: 07/15/2020



[Signature] Patrick Mahoney, President
[Signature] Richard Mahoney, Secretary
[Signature] Rose Epperson, Treasurer
 Signature and Title of Bidder

(If an individual, so state. If a firm or co-partnership, state the firm name and give the names of all individual co-partners composing the firm. If a corporation, state legal name of corporation, also names of President, Secretary, Treasurer and Manager thereof).

NAME OF BIDDER West Coast Arborists, Inc.

BUSINESS P.O. BOX N/A

CITY, STATE, ZIP N/A

BUSINESS STREET ADDRESS 2200 East Via Burton

(Please include even if P.O. Box is used)

CITY, STATE, ZIP Anaheim, CA 92806

PLACE OF BUSINESS (Include City & State) Anaheim, California

PLACE OF RESIDENCE (Include City & State) Anaheim, California

Telephone No. (714) 991-1900 Fax No. (714) 956-3745

Licensed in accordance with an Act providing for the registration of Contractors.

LICENSE NUMBER 366764

LICENSE CLASS C61/D47, C27

INFORMATION REQUIRED OF BIDDER

The bidder is required to supply the following information. Additional sheets may be attached if necessary.

1. State the number of consecutive years of experience as a licensed general building contractor holding a Class A, Landscape Contractor (C-27), or Tree Service Contractor (D-49), license in the State of California: 48 Years
2. List at least three (3) projects you have completed as the prime contractor that are similar to the project that is the subject of this invitation to bid in terms of construction type and/or method, size of project with respect to area or volume, and contract dollar amount. Such experience shall have been acquired within the past five (5) years prior to the date of submittal of this bid:

CONTRACT AMOUNT	CLASS OF WORK	DATE COMPLETED	NAME, ADDRESS and PHONE
1. <u>\$400,000.00</u>	<u>Tree Maintenance Services</u>	<u>Current</u>	<u>NUMBER OF OWNER</u> <u>Jerry Sollom 30111 Crown Valley Pkwy., Laguna Niguel,</u> <u>CA 92677 (949) 362-4349</u>
2. <u>\$4,300,000.00</u>	<u>Tree Maintenance Services</u>	<u>Current</u>	<u>Nathan Birdwell 38126 N. Sierra Highway, Palmdale,</u> <u>CA 93550 (661) 974-7173 x. 257</u>
3. <u>\$985,000.00</u>	<u>Tree Maintenance Services</u>	<u>Current</u>	<u>Randy Menzel P.O. Box 190, Huntington Beach, CA</u> <u>92648 (714) 596-4316</u>
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____

3. For the projects you have described in Item No. 2, above, please give a description of the scope of work performed by you as the prime contractor:

1. WCA provides complete tree maintenance services for the City. Maintaining nearly 6,000 of the City-owned trees. Providing services including but not limited to removals, planting and emergency urban forestry services
2. WCA trims nearly 25,000 trees of LA county's 500,000 tree population annually. We also perform tree removals and tree planting on an as-needed basis, palm tree inspection & bird nesting inspections.
3. WCA provides complete urban forestry management for more than 60,000 trees, including but not limited to tree pruning, removals, planting and emergency services.
4. _____
5. _____

4. If requested by the City of Orange, the Bidder shall furnish a notarized financial statement, financial data, or other information and references sufficiently comprehensive to permit an appraisal of his current financial conditions.
5. Bidder shall signify receipt of all Addenda here, if any. (NOTE: Any verbal instructions given to bidder inquiries in the form of addenda will be acknowledged by the bidders on written addenda available at the place of the bid opening 30 minutes prior to the bid opening.)

ADDENDUM	DATE RECEIVED	BIDDER'S SIGNATURE
<u>#1</u>	<u>06/22/2020</u>	 <u>Patrick Mahoney, President</u>
<u>#2</u>	<u>07/13/2020</u>	<u>Patrick Mahoney, President</u>
_____	_____	_____



Tree Care Professionals Serving Communities Who Care About Trees

www.WCAINC.com

STATE OF CALIFORNIA
dca
 DEPARTMENT OF CONSUMER AFFAIRS

**CONTRACTORS
 STATE LICENSE BOARD
 ACTIVE LICENSE**



License Number **366764** Entity **CORP**

Business Name **WEST COAST ARBORISTS INC**

Classification(s) **C61/D49 C27**

Expiration Date **12/31/2020**

www.cslb.ca.gov



West Coast Arborists, Inc.

2200 E. Via Burton Street • Anaheim, CA 92806 • 714.991.1900 • 800.521.3714 • Fax 714.956.3745



State of California
Department of Industrial Relations

Contractor Information

Legal Entity Name
 WEST COAST ARBORISTS, INC
 Legal Entity Type
 Corporation
 Status
 Active
 Registration Number
 1000000956
 Registration effective date
 07/01/19
 Registration expiration date
 06/30/22
 Mailing Address
 2200 E VIA BURTON ANAHEIM 92806 CA United States of America
 Physical Address
 2200 E VIA BURTON ANAHEIM 92806 CA United States of America
 Email Address
 vgonzalez@wcalinc.com
 Trade Name/DBA
 License Number (s)
 CSLB 366764

Registration History

Effective Date	Expiration Date
05/29/18	06/30/19
06/07/17	06/30/18
06/09/16	06/30/17
06/26/15	06/30/16
08/19/14	06/30/15
07/01/19	06/30/22

EXHIBIT “B”

COMPENSATION FOR SERVICES

[Beneath this sheet.]

Compensation for WEST COAST ARBORISTS, INC.

Santiago Creek Tree and Brush Maintenance Bid No. 190-55

Four-Year Term

October 1, 2020 to September 30, 2024

Year 1: 10/2020 through 9/2021	Up to \$75,000
Year 2: 10/2021 through 9/2022	Up to \$75,000
Year 3: 10/2022 through 9/2023	Up to \$75,000
Year 4: 10/2023 through 9/2024	Up to \$75,000

At any time following execution of a contract, the City reserves the right to decrease or eliminate services and associated compensation based on the needs of the City and amounts budgeted by the City Council. Work is only to be completed as directed in writing, by City Representative.

Through a prioritization approach, the City's Project Manager will coordinate with the contractor the creek zones that constitute the scope of work to be performed annually by the contractor.

NOTICE OF EXEMPTION

Filing Fee Exempt Per Gov. Code § 6103

TO: County Clerk-Recorder
County of Orange
601 N. Ross Street
Santa Ana, CA 92701

FROM: City of Orange
Community Development Department
300 E. Chapman Ave.
Orange, CA 92866

Project Title: Santiago Creek Tree and Brush Maintenance

Project Location: The area of Santiago Creek generally north of Chapman Avenue

Description, Nature, Purpose and Beneficiaries of Project: The proposed project includes site preparation and performing crown raising or clearance pruning of trees and shrubs along Santiago Creek. The purpose of the project is to provide better visibility and creek access to law enforcement and City staff, as well as the removal of trash and debris.

Name of Public Agency Approving Project: City of Orange

Applicant or Agency Carrying Out Project: City of Orange – Community Services Department, Parks Division

Name, Address, and Phone Number of Applicant or Agency Carrying Out the Project:
City of Orange, Community Services Department, Parks Division, 230 E. Chapman Ave.,
Orange, CA 92866, (714) 532-6468

Exempt Status:

- Ministerial (Sec. 15268)
- Declared Emergency (Sec. 15269)
- Emergency Project (Sec. 15269)
- General Rule (Sec. 15061)
- Statutory Exemption:
- Categorical Exemption: Section 15304, Class 4 (Minor Alterations to Land)

Date of Decision: 08/20/2020

Reasons why project is exempt: CEQA Guidelines Section 15303 categorically exempts projects “of minor public or private alterations in the condition of the land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees.” The proposed project consists of performing crown raising or clearance pruning to trees and shrubs and would not involve the

removal of healthy, mature, scenic trees and would not disturb the creek bed and slope grade. Therefore, the project is exempt from CEQA.

Lead Agency Contact Person: Dana Roberston, Park and Facilities Manager

Phone: (714) 744-7283

CEQA Contact Person: Ashley Brodtkin, Associate Planner

Phone: 714-744-7238

Lead Agency Signature: _____ **Date:** _____
Dana Roberston, Park and Facilities Manager

Fish & Game Fees: Pursuant to Section 711.4(c)(2)(A) of the California Fish and Game Code and 14 CCR § 753.5, this project is exempt from the required fees, as it is exempt from CEQA.



Agenda Item

City Council

Item #: 3.7.

9/8/2020

File #: 20-074

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Cash, Director of Public Works

1. SUBJECT

Agreement with KOA Corporation for construction management and inspection services.

2. SUMMARY

The Professional Services Agreement authorizes KOA Corporation to provide construction management and inspection services for the Lemon Street at Palm Avenue Traffic Signal Installation project.

3. RECOMMENDED ACTION

Approve the agreement with KOA Corporation in the amount of \$39,226, representing an original amount of \$35,660 plus a 10% contingency of \$3,566, for construction management and inspection services; and authorize the Mayor and the City Clerk to execute on behalf of the City.

4. FISCAL IMPACT

The total expenditure for this agreement is \$39,226 and will be funded in Lemon Palm Signal Installation (30132) through Reimbursable Capital Projects (550).

5. STRATEGIC PLAN GOALS

Goal 1: Provide for a safe community

b: Provide and maintain infrastructure necessary to ensure the safety of the public.

Goal 4: Provide outstanding public service

b: Provide facilities and services to meet customer expectations.

6. DISCUSSION AND BACKGROUND

Under the terms of a City Council-approved Traffic Signal Payment Agreement with Chapman University, city staff is administering the construction of a new traffic signal at the intersection of Lemon Street and Palm Avenue. Since its inception, all phases of this important project have been expedited at the request of the University. In order to meet the accelerated timeline, it is necessary to utilize outside resources for construction management and inspection services. In accordance with said agreement, Chapman University will fully reimburse the City for these services.

The City issued a Request for Proposal (RFP) to six on-call traffic engineering consultants that had

already pre-qualified to perform such work. On August 20, 2020, the following four firms submitted proposals for consideration:

1. KOA Corporation
2. Interwest Consulting Group, Inc.
3. Willdan Engineering
4. Wolfe Engineering and Design, Inc.

The Traffic Division staff evaluated the consultant proposals based on responsiveness to the RFP, understanding of the project and its unique challenges, past experience with similar projects, and staff availability to provide the required construction management and inspection assistance. Staff found KOA Corporation to be the most qualified consultant for the Lemon Street at Palm Avenue Traffic Signal Installation project. KOA Corporation has assisted numerous cities with delivering similar projects and administering construction contracts. They demonstrated in their proposal a clear understanding of the project challenges and sensitive timeline. KOA Corporation submitted a cost proposal to provide construction management and inspection services for the Lemon Street at Palm Avenue Traffic Signal Installation project, which staff reviewed and subsequently negotiated.

The not-to-exceed fee of \$39,226 will cover construction management and inspection services for the Lemon Street at Palm Avenue Traffic Signal Installation construction project and allow the City to deliver the project without any scheduling delays and as agreed upon in the construction contract documents. The \$39,226 fee represents the original amount of \$35,660 plus a 10% contingency of \$3,566. At this time, the proposed project schedule anticipates the completion of construction in January 2020.

The award of the corresponding construction contract for this project is being recommended and discussed in a separate staff report.

7. ATTACHMENTS

- Location Map
- Professional Services Agreement with KOA Corporation



Agenda Item

City Council

Item #: 3.7.

9/8/2020

File #: 20-074

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Cash, Director of Public Works

1. SUBJECT

Agreement with KOA Corporation for construction management and inspection services.

2. SUMMARY

The Professional Services Agreement authorizes KOA Corporation to provide construction management and inspection services for the Lemon Street at Palm Avenue Traffic Signal Installation project.

3. RECOMMENDED ACTION

Approve the agreement with KOA Corporation in the amount of \$39,226, representing an original amount of \$35,660 plus a 10% contingency of \$3,566, for construction management and inspection services; and authorize the Mayor and the City Clerk to execute on behalf of the City.

4. FISCAL IMPACT

The total expenditure for this agreement is \$39,226 and will be funded in Lemon Palm Signal Installation (30132) through Reimbursable Capital Projects (550).

5. STRATEGIC PLAN GOALS

Goal 1: Provide for a safe community

b: Provide and maintain infrastructure necessary to ensure the safety of the public.

Goal 4: Provide outstanding public service

b: Provide facilities and services to meet customer expectations.

6. DISCUSSION AND BACKGROUND

Under the terms of a City Council-approved Traffic Signal Payment Agreement with Chapman University, city staff is administering the construction of a new traffic signal at the intersection of Lemon Street and Palm Avenue. Since its inception, all phases of this important project have been expedited at the request of the University. In order to meet the accelerated timeline, it is necessary to utilize outside resources for construction management and inspection services. In accordance with said agreement, Chapman University will fully reimburse the City for these services.

The City issued a Request for Proposal (RFP) to six on-call traffic engineering consultants that had

already pre-qualified to perform such work. On August 20, 2020, the following four firms submitted proposals for consideration:

1. KOA Corporation
2. Interwest Consulting Group, Inc.
3. Willdan Engineering
4. Wolfe Engineering and Design, Inc.

The Traffic Division staff evaluated the consultant proposals based on responsiveness to the RFP, understanding of the project and its unique challenges, past experience with similar projects, and staff availability to provide the required construction management and inspection assistance. Staff found KOA Corporation to be the most qualified consultant for the Lemon Street at Palm Avenue Traffic Signal Installation project. KOA Corporation has assisted numerous cities with delivering similar projects and administering construction contracts. They demonstrated in their proposal a clear understanding of the project challenges and sensitive timeline. KOA Corporation submitted a cost proposal to provide construction management and inspection services for the Lemon Street at Palm Avenue Traffic Signal Installation project, which staff reviewed and subsequently negotiated.

The not-to-exceed fee of \$39,226 will cover construction management and inspection services for the Lemon Street at Palm Avenue Traffic Signal Installation construction project and allow the City to deliver the project without any scheduling delays and as agreed upon in the construction contract documents. The \$39,226 fee represents the original amount of \$35,660 plus a 10% contingency of \$3,566. At this time, the proposed project schedule anticipates the completion of construction in January 2020.

The award of the corresponding construction contract for this project is being recommended and discussed in a separate staff report.

7. ATTACHMENTS

- Location Map
- Professional Services Agreement with KOA Corporation



Location Map

Lemon Street at Palm Avenue Traffic Signal Installation; SP-4133; Bid No. 190-61 & RFP-20-21.09

PROFESSIONAL SERVICES AGREEMENT
[Construction Management and Inspection Services]

THIS PROFESSIONAL SERVICES AGREEMENT (the "Agreement") is made at Orange, California, on this ____ day of _____, 2020 (the "Effective Date") by and between the CITY OF ORANGE, a municipal corporation ("City"), and KOA CORPORATION, a California corporation ("Contractor"), who agree as follows:

1. Services. Subject to the terms and conditions set forth in this Agreement, Contractor shall provide to the reasonable satisfaction of City the services set forth in Exhibit "A," which is attached hereto and incorporated herein by reference. As a material inducement to City to enter into this Agreement, Contractor represents and warrants that it has thoroughly investigated and considered the scope of services and fully understands the difficulties and restrictions in performing the work. The services which are the subject of this Agreement are not in the usual course of City's business and City relies on Contractor's representation that it is independently engaged in the business of providing such services and is experienced in performing the work. Contractor shall perform all services in a manner reasonably satisfactory to City and in a manner in conformance with the standards of quality normally observed by an entity provided such services to a municipal agency. All services provided shall conform to all federal, state and local laws, rules and regulations and to the best professional standards and practices. The terms and conditions set forth in this Agreement shall control over any terms and conditions in Exhibit "A" to the contrary.

Larry Tay, City Traffic Engineer ("City's Project Manager"), shall be the person to whom Contractor will report for the performance of services hereunder. It is understood that Contractor's performance hereunder shall be under the supervision of City's Project Manager (or his/her designee), that Contractor shall coordinate its services hereunder with City's Project Manager to the extent required by City's Project Manager, and that all performances required hereunder by Contractor shall be performed to the satisfaction of City's Project Manager and the City Manager.

2. Compensation and Fees.

a. Contractor's total compensation for all services performed under this Agreement, shall not exceed THIRTY-FIVE THOUSAND SIX HUNDRED SIXTY DOLLARS and 00/100 (\$35,660.00) without the prior written authorization of City.

b. The above compensation shall include all costs, including, but not limited to, all clerical, administrative, overhead, insurance, reproduction, telephone, travel, auto rental, subsistence and all related expenses.

c. In addition to the scheduled services to be performed by the Contractor, the parties recognize that additional, unforeseen work and services may be required by City's Project Manager. In anticipation of such contingencies, the sum of THREE THOUSAND FIVE HUNDRED SIXTY-SIX DOLLARS and 00/100 (\$3,566.00) has been added to the total compensation of this Agreement. City's Project Manager may approve the additional work and

the actual costs incurred by the Contractor in performance of additional work or services in accordance with such amount as City's Project Manager and the Contractor may agree upon in advance. Said additional work or services and the amount of compensation therefor, up to the amount of the authorized contingency, shall be memorialized in the form of an Amendment to Agreement approved by the City Manager on a form acceptable to the City Attorney. The Contractor agrees to perform only that work or those services that are specifically requested by the City's Project Manager. Any and all additional work and services performed under this Agreement shall be completed in such sequence as to assure their completion as expeditiously as is consistent with professional skill and care in accordance with a cost estimate or proposal submitted to and approved by City's Project Manager prior to the commencement of such services.

d. The total amount of compensation under this Agreement, including contingencies, shall not exceed THIRTY-NINE THOUSAND TWO HUNDRED TWENTY-SIX DOLLARS and 00/100 (\$39,226.00).

3. Payment.

a. As scheduled services are completed, Contractor shall submit to City an invoice for the services completed, authorized expenses and authorized extra work actually performed or incurred.

b. All such invoices shall state the basis for the amount invoiced, including services completed, the number of hours spent and any extra work performed.

c. City will pay Contractor the amount invoiced within thirty (30) days after the approval of the invoice.

d. Payment shall constitute payment in full for all services, authorized costs and authorized extra work covered by that invoice.

4. Change Orders. No payment for extra services caused by a change in the scope or complexity of work, or for any other reason, shall be made unless and until such extra services and a price therefor have been previously authorized in writing and approved by City as an amendment to this Agreement. City's Project Manager is authorized to approve a reduction in the services to be performed and compensation therefor. All amendments shall set forth the changes of work, extension of time, and/or adjustment of the compensation to be paid by City to Contractor and shall be signed by the City's Project Manager, City Manager or City Council, as applicable.

5. Licenses. Contractor represents that it and any subcontractors it may engage, possess any and all licenses which are required under state or federal law to perform the work contemplated by this Agreement and that Contractor and its subcontractors shall maintain all appropriate licenses, including a City of Orange business license, at its cost, during the performance of this Agreement.

6. Independent Contractor. At all times during the term of this Agreement, Contractor shall be an independent contractor and not an employee of City. City shall have the

right to control Contractor only insofar as the result of Contractor's services rendered pursuant to this Agreement. City shall not have the right to control the means by which Contractor accomplishes services rendered pursuant to this Agreement. Contractor shall, at its sole cost and expense, furnish all facilities, materials and equipment which may be required for furnishing services pursuant to this Agreement. Contractor shall be solely responsible for, and shall indemnify, defend and save City harmless from all matters relating to the payment of its subcontractors, agents and employees, including compliance with social security withholding and all other wages, salaries, benefits, taxes, exactions, and regulations of any nature whatsoever. Contractor acknowledges that it and any subcontractors, agents or employees employed by Contractor shall not, under any circumstances, be considered employees of City, and that they shall not be entitled to any of the benefits or rights afforded employees of City, including, but not limited to, sick leave, vacation leave, holiday pay, Public Employees Retirement System benefits, or health, life, dental, long-term disability or workers' compensation insurance benefits.

7. **Contractor Not Agent.** Except as City may specify in writing, Contractor shall have no authority, express or implied, to act on behalf of City in any capacity whatsoever as an agent. Contractor shall have no authority, express or implied, to bind City to any obligation whatsoever.

8. **Designated Persons.** Only those qualified persons authorized by City's Project Manager, or as designated in Exhibit "A," shall perform work provided for under this Agreement. It is understood by the parties that clerical and other nonprofessional work may be performed by persons other than those designated.

9. **Assignment or Subcontracting.** No assignment or subcontracting by Contractor of any part of this Agreement or of funds to be received under this Agreement shall be of any force or effect unless the assignment has the prior written approval of City. City may terminate this Agreement rather than accept any proposed assignment or subcontracting. Such assignment or subcontracting may be approved by the City Manager or his/her designee.

10. **Time of Completion.** Except as otherwise specified in Exhibit "A," Contractor shall commence the work provided for in this Agreement within five (5) days of the Effective Date of this Agreement and diligently prosecute completion of the work in accordance with the time period set forth in Exhibit "A" hereto or as otherwise agreed to by and between the representatives of the parties.

11. **Time Is of the Essence.** Time is of the essence in this Agreement. Contractor shall do all things necessary and incidental to the prosecution of Contractor's work.

12. **Reserved.**

13. **Delays and Extensions of Time.** Contractor's sole remedy for delays outside its control, other than those delays caused by City, shall be an extension of time. No matter what the cause of the delay, Contractor must document any delay and request an extension of time in writing at the time of the delay to the satisfaction of City. Any extensions granted shall be limited to the length of the delay outside Contractor's control. If Contractor believes that delays caused by City

will cause it to incur additional costs, it must specify, in writing, why the delay has caused additional costs to be incurred and the exact amount of such cost at the time the delay occurs. No additional costs can be paid that exceed the not to exceed amount stated in Section 2.a, above, absent a written amendment to this Agreement.

14. Products of Contractor. The documents, studies, evaluations, assessments, reports, plans, citations, materials, manuals, technical data, logs, files, designs and other products produced or provided by Contractor for this Agreement shall become the property of City upon receipt. Contractor shall deliver all such products to City prior to payment for same. City may use, reuse or otherwise utilize such products without restriction.

15. Equal Employment Opportunity. During the performance of this Agreement, Contractor agrees as follows:

a. Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law. Contractor shall ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law. Such actions shall include, but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation and selection for training, including apprenticeship. Contractor agrees to post in conspicuous places, available to employees and applicants for employment, a notice setting forth provisions of this non-discrimination clause.

b. Contractor shall, in all solicitations and advertisements for employees placed by, or on behalf of Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law.

c. Contractor shall cause the foregoing paragraphs (a) and (b) to be inserted in all subcontracts for any work covered by this Agreement, provided that the foregoing provisions shall not apply to subcontracts for standard commercial supplies or raw materials.

16. Conflicts of Interest. Contractor agrees that it shall not make, participate in the making, or in any way attempt to use its position as a consultant to influence any decision of City in which Contractor knows or has reason to know that Contractor, its officers, partners, or employees have a financial interest as defined in Section 87103 of the Government Code. Contractor further agrees that it shall not be eligible to work as the design/build firm for the project that is the subject of this Agreement.

17. Indemnity.

a. To the fullest extent permitted by law, Contractor agrees to indemnify, defend and hold City, its City Council and each member thereof, and the officers, officials, agents

and employees of City (collectively the “Indemnitees”) entirely harmless from all liability arising out of:

(1) Any and all claims under workers’ compensation acts and other employee benefit acts with respect to Contractor’s employees or Contractor’s subcontractor’s employees arising out of Contractor’s work under this Agreement, including any and all claims under any law pertaining to Contractor or its employees’ status as an independent contractor and any and all claims under Labor Code section 1720 related to the payment of prevailing wages for public works projects; and

(2) Any claim, loss, injury to or death of persons or damage to property caused by any act, neglect, default, or omission other than a professional act or omission of Contractor, or person, firm or corporation employed by Contractor, either directly or by independent contract, including all damages due to loss or theft sustained by any person, firm or corporation including the Indemnitees, or any of them, arising out of, or in any way connected with the work or services which are the subject of this Agreement, including injury or damage either on or off City’s property; but not for any loss, injury, death or damage caused by the active negligence or willful misconduct of City. Contractor, at its own expense, cost and risk, shall indemnify any and all claims, actions, suits or other proceedings that may be brought or instituted against the Indemnitees on any such claim or liability covered by this subparagraph, and shall pay or satisfy any judgment that may be rendered against the Indemnitees, or any of them, in any action, suit or other proceedings as a result of coverage under this subparagraph.

b. To the fullest extent permitted by law, Contractor agrees to indemnify and hold Indemnitees entirely harmless from all liability arising out of any claim, loss, injury to or death of persons or damage to property caused by its negligent professional act or omission in the performance of professional services pursuant to this Agreement.

c. Except for the Indemnitees, the indemnifications provided in this Agreement shall not be construed to extend any third party indemnification rights of any kind to any person or entity which is not a signatory to this Agreement.

d. The indemnities set forth in this section shall survive any closing, rescission, or termination of this Agreement, and shall continue to be binding and in full force and effect in perpetuity with respect to Contractor and its successors.

18. Insurance.

a. Contractor shall carry workers’ compensation insurance as required by law for the protection of its employees during the progress of the work. Contractor understands that it is an independent contractor and not entitled to any workers’ compensation benefits under any City program.

b. Contractor shall maintain during the life of this Agreement the following minimum amount of comprehensive general liability insurance or commercial general liability insurance: the greater of (1) One Million Dollars (\$1,000,000) per occurrence; or (2) all the

insurance coverage and/or limits carried by or available to Contractor. Said insurance shall cover bodily injury, death and property damage and be written on an occurrence basis.

c. Contractor shall maintain during the life of this Agreement, the following minimum amount of automotive liability insurance: the greater of (1) a combined single limit of One Million Dollars (\$1,000,000); or (2) all the insurance coverage and/or limits carried by or available to Contractor. Said insurance shall cover bodily injury, death and property damage for all owned, non-owned and hired vehicles and be written on an occurrence basis.

d. Any insurance proceeds in excess of or broader than the minimum required coverage and/or minimum required limits which are applicable to a given loss shall be available to City. No representation is made that the minimum insurance requirements of this Agreement are sufficient to cover the obligations of Contractor under this Agreement.

e. Each policy of general liability and automotive liability shall provide that City, its officers, officials, agents, and employees are declared to be additional insureds under the terms of the policy, but only with respect to the work performed by Contractor under this Agreement. A policy endorsement to that effect shall be provided to City along with the certificate of insurance. In lieu of an endorsement, City will accept a copy of the policy(ies) which evidences that City is an additional insured as a contracting party. The minimum coverage required by Subsection 18.b and c, above, shall apply to City as an additional insured.

f. Contractor shall maintain during the life of this Agreement professional liability insurance covering errors and omissions arising out of the performance of this Agreement with a minimum limit of One Million Dollars (\$1,000,000) per claim. Contractor agrees to keep such policy in force and effect for at least five (5) years from the date of completion of this Agreement.

g. The insurance policies maintained by Contractor shall be primary insurance and no insurance held or owned by City shall be called upon to cover any loss under the policy. Contractor will determine its own needs in procurement of insurance to cover liabilities other than as stated above.

h. Before Contractor performs any work or prepares or delivers any materials, Contractor shall furnish certificates of insurance and endorsements, as required by City, evidencing the aforementioned minimum insurance coverages on forms acceptable to City, which shall provide that the insurance in force will not be canceled or allowed to lapse without at least ten (10) days' prior written notice to City.

i. Except for professional liability insurance coverage that may be required by this Agreement, all insurance maintained by Contractor shall be issued by companies admitted to conduct the pertinent line of insurance business in California and having a rating of Grade A or better and Class VII or better by the latest edition of Best Key Rating Guide. In the case of professional liability insurance coverage, such coverage shall be issued by companies either licensed or admitted to conduct business in California so long as such insurer possesses the aforementioned Best rating.

j. Contractor shall immediately notify City if any required insurance lapses or is otherwise modified and cease performance of this Agreement unless otherwise directed by City. In such a case, City may procure insurance or self-insure the risk and charge Contractor for such costs and any and all damages resulting therefrom, by way of set-off from any sums owed Contractor.

k. Contractor agrees that in the event of loss due to any of the perils for which it has agreed to provide insurance, Contractor shall look solely to its insurance for recovery. Contractor hereby grants to City, on behalf of any insurer providing insurance to either Contractor or City with respect to the services of Contractor herein, a waiver of any right to subrogation which any such insurer may acquire against City by virtue of the payment of any loss under such insurance.

l. Contractor shall include all subcontractors, if any, as insureds under its policies or shall furnish separate certificates and endorsements for each subcontractor to City for review and approval. All coverages for subcontractors shall be subject to all of the requirements stated herein.

19. Termination. City may for any reason terminate this Agreement by giving Contractor not less than five (5) days' written notice of intent to terminate. Upon receipt of such notice, Contractor shall immediately cease work, unless the notice from City provides otherwise. Upon the termination of this Agreement, City shall pay Contractor for services satisfactorily provided and all allowable reimbursements incurred to the date of termination in compliance with this Agreement, unless termination by City shall be for cause, in which event City may withhold any disputed compensation. City shall not be liable for any claim of lost profits.

20. Maintenance and Inspection of Records. In accordance with generally accepted accounting principles, Contractor and its subcontractors shall maintain reasonably full and complete books, documents, papers, accounting records, and other information (collectively, the "records") pertaining to the costs of and completion of services performed under this Agreement. City and its authorized representatives shall have access to and the right to audit and reproduce any of Contractor's records regarding the services provided under this Agreement. Contractor shall maintain all such records for a period of at least three (3) years after termination or completion of this Agreement. Contractor agrees to make available all such records for inspection or audit at its offices during normal business hours and upon three (3) days' notice from City, and copies thereof shall be furnished if requested.

21. Compliance with all Laws/Immigration Laws.

a. Contractor shall be knowledgeable of and comply with all local, state and federal laws which may apply to the performance of this Agreement.

b. If the work provided for in this Agreement constitutes a "public works," as that term is defined in Section 1720 of the California Labor Code, for which prevailing wages must be paid, to the extent Contractor's employees will perform any work that falls within any of the

classifications for which the Department of Labor Relations of the State of California promulgates prevailing wage determinations, Contractor hereby agrees that it, and any subcontractor under it, shall pay not less than the specified prevailing rates of wages to all such workers. The general prevailing wage determinations for crafts can be located on the website of the Department of Industrial Relations (www.dir.ca.gov/DLSR). Additionally, to perform work under this Contract, Contractor must meet all State registration requirements and criteria, including project compliance monitoring.

c. Contractor represents and warrants that Contractor:

(1) Has complied and shall at all times during the term of this Agreement comply, in all respects, with all immigration laws, regulations, statutes, rules, codes, and orders, including, without limitation, the Immigration Reform and Control Act of 1986 (IRCA); and

(2) Has not and will not knowingly employ any individual to perform services under this Agreement who is ineligible to work in the United States or under the terms of this Agreement; and

(3) Has properly maintained, and shall at all times during the term of this Agreement properly maintain, all related employment documentation records including, without limitation, the completion and maintenance of the Form I-9 for each of Contractor's employees; and

(4) Has responded, and shall at all times during the term of this Agreement respond, in a timely fashion to any government inspection requests relating to immigration law compliance and/or Form I-9 compliance and/or worksite enforcement by the Department of Homeland Security, the Department of Labor, or the Social Security Administration.

d. Contractor shall require all subcontractors or subconsultants to make the same representations and warranties as set forth in Subsection 21.c.

e. Contractor shall, upon request of City, provide a list of all employees working under this Agreement and shall provide, to the reasonable satisfaction of City, verification that all such employees are eligible to work in the United States. All costs associated with such verification shall be borne by Contractor. Once such request has been made, Contractor may not change employees working under this Agreement without written notice to City, accompanied by the verification required herein for such employees.

f. Contractor shall require all subcontractors or sub-consultants to make the same verification as set forth in Subsection 21.e.

g. If Contractor or subcontractor knowingly employs an employee providing work under this Agreement who is not authorized to work in the United States, and/or fails to

follow federal laws to determine the status of such employee, that shall constitute a material breach of this Agreement and may be cause for immediate termination of this Agreement by City.

h. Contractor agrees to indemnify and hold City, its officers, officials, agents and employees harmless for, of and from any loss, including but not limited to fines, penalties and corrective measures City may sustain by reason of Contractor's failure to comply with said laws, rules and regulations in connection with the performance of this Agreement.

22. Governing Law and Venue. This Agreement shall be construed in accordance with and governed by the laws of the State of California and Contractor agrees to submit to the jurisdiction of California courts. Venue for any dispute arising under this Agreement shall be in Orange County, California.

23. Integration. This Agreement constitutes the entire agreement of the parties. No other agreement, oral or written, pertaining to the work to be performed under this Agreement shall be of any force or effect unless it is in writing and signed by both parties. Any work performed which is inconsistent with or in violation of the provisions of this Agreement shall not be compensated.

24. Notice. Except as otherwise provided herein, all notices required under this Agreement shall be in writing and delivered personally, by e-mail, or by first class U.S. mail, postage prepaid, to each party at the address listed below. Either party may change the notice address by notifying the other party in writing. Notices shall be deemed received upon receipt of same or within three (3) days of deposit in the U.S. Mail, whichever is earlier. Notices sent by e-mail shall be deemed received on the date of the e-mail transmission.

“CONTRACTOR”

“CITY”

KOA Corporation
2141 W. Orangewood Avenue
Orange, CA 92868
Attn.: Chuck Stephan, Vice President

City of Orange
300 E. Chapman Avenue
Orange, CA 92866-1591
Attn.: Gabrielle Hayes

Telephone: 310-525-0678
E-Mail: cstephan@koacorp.com

Telephone: 714-744-5561
E-Mail: ghayes@cityoforange.org

25. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Signatures transmitted via facsimile and electronic mail shall have the same effect as original signatures.

[Remainder of page intentionally left blank; signatures on next page]

IN WITNESS of this Agreement, the parties have entered into this Agreement as of the year and day first above written.

“CONTRACTOR”

“CITY”

KOA CORPORATION, a California corporation

CITY OF ORANGE, a municipal corporation

*By: _____
Printed Name: _____
Title: _____

By: _____
Mark A. Murphy, Mayor

*By: _____
Printed Name: _____
Title: _____

ATTEST:

Pamela Coleman, City Clerk

APPROVED AS TO FORM:

Mary E. Binning
Senior Assistant City Attorney

***NOTE:** City requires the following signature(s) on behalf of the Contractor:
-- (1) the Chairman of the Board, the President or a Vice-President, **AND** (2) the Secretary, the Chief Financial Officer, the Treasurer, an Assistant Secretary or an Assistant Treasurer. If only one corporate officer exists or one corporate officer holds more than one corporate office, please so indicate. **OR**
-- The corporate officer named in a corporate resolution as authorized to enter into this Agreement. A copy of the corporate resolution, certified by the Secretary close in time to the execution of the Agreement, must be provided to City.

EXHIBIT “A”

SCOPE OF SERVICES

[Beneath this sheet.]



PROPOSAL FOR
Construction Management and Inspection Services for
Lemon Street at Palm Avenue Traffic Signal Installation
(SP-4133) RFP 20-21.09

CITY OF ORANGE



August 20, 2020

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SECTION 1. COVER LETTER

TO

City of Orange
Gabrielle Hayes

Submitted via email to:

ghayes@cityoforange.org

FROM

KOA Corporation
Mr. Chuck Stephan, PE
Vice President
2141 W. Orangewood Avenue
Orange CA 92868
cstephan@koacorp.com
T: 310.525.0678
F: 323.260.4705

RFP

**Construction Management and
Inspection Services for
Lemon Street at Palm Avenue
Traffic Signal Installation
(SP-4133) RFP 20-21.09**

DATE

August 20, 2020

KOA Corporation hereby offers our proposal to provide Construction Management and Inspection Services for Lemon Street at Palm Avenue Traffic Signal Installation (SP-4133) RFP 20-21.09. Our experienced traffic signal installation team will provide the City of Orange with the professionals needed to successfully complete this project.

KOA is a 120+ person professional Planning and Engineering services firm working from six offices in the counties of Orange, Los Angeles, San Diego, Riverside and San Bernardino. KOA provides project management, construction management, and inspection services for public works agencies in Southern California. With 30 years of specialization in CM and inspection for public agencies, KOA is more than capable of meeting your project needs. KOA can meet your goals of completing the project on time, within budget, while minimizing the impact to residents and businesses.

KOA Corporation is a multi-capable engineering firm that includes professional traffic engineers specializing in traffic signal design, planners with outreach expertise, local personnel with public agency experience, Construction Managers and Inspectors, and Civil/Resident Engineers with public highway design and construction experience.

The required insurance coverage will be obtained by KOA, and we understand said coverage is a prerequisite for entering into an agreement with the City. KOA will provide insurance documents for the project per the required check list and sample contract agreement prior to contract award. I will be the designated Principal in Charge for this project. This proposal is valid for 90 days after submittal.

Sincerely,
KOA Corporation



Chuck Stephan, PE, LEED AP
Vice President | Director of CM Division

SECTION 2: BACKGROUND AND UNDERSTANDING OF THE SCOPE OF SERVICES

Founded in 1987, KOA is a leading provider in construction management, traffic engineering, and transportation planning services for public agencies and private sector clients. We offer our clients technical knowledge, innovative solutions and responsive services. The hallmark of our success is our dedication to each and every project and our desire to leave a legacy of extraordinary contributions to our communities. Our staff includes project/construction managers, construction inspectors, certified transportation planners and registered civil and traffic engineers. With six offices located in Southern California, KOA has provided engineering services for some of the largest public works and transportation planning projects throughout California, including many traffic signal construction and federal-aid projects.



KEY PERSONNEL

Key personnel qualifications are briefly summarized below. Detailed resumes are included in Section 5 of this proposal. KOA specializes in traffic planning, traffic engineering, civil engineering, and construction management of public works project in southern California. All of our personnel are local to southern California. KOA routinely provides traffic signal engineering design, timing, and studies for state and federal-aid projects, and we have previously worked with the City of Orange. We have recently completed several projects involving traffic signal improvements, including federal-aid projects.

Chuck Stephan will be the Project Manager and the prime point of contact for this assignment. Chuck has been with KOA since 2001.

Our Inspectors have decades of experience on traffic signal and public improvement projects with similar improvements and are available to support the team for this project. More information for each team member can be found on the following brief resumes that list some of the recent related experience of each team member.

SCOPE OF SERVICES

The City of Orange plans to construct new traffic signal improvements at the intersection of Lemon Street and Palm Avenue. The existing intersection is 4-way STOP control, with crosswalks on all sides and ramps at each corner. There are nearby decorative street lights, with overhead utilities on the east side of the intersection. Pavement is Portland Cement Concrete (PCC), with Asphalt Concrete (AC) pavement on Lemon Street to the east. Chapman University lies to the west, and residential properties to the east. The

intersection experiences significant traffic, especially during school commuting hours with vehicles, bicycles, skateboards, and pedestrians.

The project will install a new fully controlled traffic signal system including poles, signal hardware, footings, conduit, controller, electrical service, video detection, lighting. Associated work will include improving ramps to current ADA requirements, striping, signing, and utility adjustments. The entire northeast corner will be reconstructed including a new ADA curb ramp. In addition, the work will comply with the City of Orange Old Towne Historic District design standards.

The City is soliciting proposals from professional services firms to provide Construction Management and Inspection services for the construction work.

SAMPLE PRIOR EXPERIENCE

City of S. El Monte On-Call - Thienes Avenue and Tyler Avenue Traffic signal and Lighting Project

Improvements. 2018 Federal Project No. HSIPL 5352 (014), City Project 67-900-9020-291 - KOA provided Construction Management, Inspections and Labor Compliance on this Federal project. The project consists of the contractor providing all required equipment and labor personnel for two (2) phases. Phase 1 – to pothole all utilities prior to construction and install all required conduits and Phase 2 - contractor to provide all equipment and labor to install all poles, cabinets, signal heads, camera, pull conductors and turn on signal at the completion of the project. The total project duration was forty five (45) working days. KOA provided CM and construction inspection services for *pre-construction, construction, and post-construction* activities. *Reference: Okan Demirci, PE, City Engineer, City of S. El Monte. 411 Santa Anita Ave., S. El Monte, CA (714) 319-6137 okan.demirci@transtems.org KOA Staff: Kevin Higgins, CM, Cris Cole, Construction Inspector. Project Cost: \$640,000.00*

City of Azusa – Professional Engineering Services for Traffic Management System, Azusa, CA: KOA is currently providing Construction Management and Inspections on this project that includes traffic signal improvements and modifications at 43 signalized intersections within the City. The Design and Construction support scope focuses on installation of a centralized traffic control and monitoring system, signal coordination, signal timing and intersection signal equipment. The project will also replace antiquated controllers and cabinets, install network switches and routers enabling communication between local field elements and the Traffic Management Center (TMC), and provide a new TMC work station. *KOA Staff: Eric Yang, Design, Ram Mohseni, CM, Doug Ramos, Construction Inspection*

Foothill Boulevard Master Plan Improvement Project, City of Claremont – KOA provided *Construction Management, Inspections and Materials testing* on this current project consisting of 2.8 miles to construct numerous improvements that include traffic control, clearing and grubbing, roadway excavation, removal and replacement of curb and gutter, sidewalks, and driveways, *Class 1, 2 and Class 4 bicycle lanes, 10 concrete bus pads and shelters, concrete cross gutters, alley way driveways, local depressions, parkway drains, pavement improvements, walls, storm drain work that includes various RCP, catch basins, manholes, cobble bio-retention basins, drywell underground storage, 6 new traffic signalized intersections, street lighting, landscaping and irrigation, and the installation of bus shelters and furniture and amenities, trellis structures, monuments signage, and full landscaping.* KOA oversaw the construction management and inspections on the entire project for the City and provided construction inspections, daily reports, labor compliance, contractor compliance, utility coordination, conducted / attended weekly project meetings, negotiated, approved, quantities, and extra work, maintained project photos and records, met with City officials and town residents, verified quantities, coordinated any soils testing, provided daily inspections, managed 7 funding sources, and coordinated with the contractor while assisting in re-design of numerous survey errors on the plans for this \$15 Million project. *Reference: Vince Ramos, City Project Manager, City of Claremont, 207 Harvard Ave. N, Claremont, Ca 91711, (909) 319-6137, VRamos@ci.claremont.ca.us KOA Staff: Kevin Higgins, CM, Chuck Stephen, PM, Gordon Roberts, Construction Inspector.*

SECTION 3: WORK PLAN

WORK TASKS

We acknowledge the Scope of Services as listed in the Request for Proposals. Due to space limitations, we will not relist every item from the RFP here, but will elaborate on the important aspects of the work. We do not plan to utilize any subconsultant firms for this project.

PS&E REVIEW AND PROJECT PLANNING

Prior to proceeding with work, KOA will thoroughly review the project site, plans, and specifications, and bid tabulation to familiarize our staff with the work, and to note any potential problems that need to be addressed. We will affirm with the Contractor that all work anticipated for the project is included completely in the bid items. In our preliminary short review of the project plans and specifications, we note the following items that we would discuss further with the City, and for follow-up with the contractor:

- Has SCE determined a point of connection for the electrical services?
- Will the overhead utilities be clear of the new signal equipment?
- Pole order and delivery time—we note that there are 45 calendar days allotted for construction, and that work is anticipated to begin in October, 2020. On our current traffic signal projects, we are experiencing pole delivery schedules of 6 months to a year. We will want to affirm that the poles can be ordered and delivered in time to meet the project schedule. We also want to avoid lengthy periods where the work is partially completed while waiting for pole and equipment deliveries.
- Traffic control (including pedestrians)—due to the high traffic volume, including the Chapman students, we will want to make sure that detailed and adequate planning is made to ensure the safety of the public and the construction work. In addition, we will stress to the Contractor that he is responsible for protection of the work, and that absolutely no graffiti or other damage to the work will be accepted.
- Chapman University Coordination—we will want to make sure that Chapman University, in addition to the neighboring properties and businesses, are apprised of the work and continually updated on project progress.
- Concrete installation—We will want to make sure that the concrete work is placed and opened to traffic to minimize inconvenience. We recommend using high-early strength concrete in the traffic areas.
- We will want to make sure that all utilities are located and potholed before and/or during installation of signal conduit. Any pothole work will need to ensure that the pavement is adequately repaired per City requirements. During our field visit we noted a number of utilities that may be in conflict and will need to be investigated to ensure that construction is clear to proceed. There are existing street lighting conduits in conflict, and the existing street lights will need to be removed. Will temporary lighting be provided? There are telecom conduit that may be affected. Note that the signal pole foundations are very large, and we will need to ensure that there is sufficient clearance from utilities and right of way for installation.
- We will need to ensure that the Pedestrian push buttons have a level pad in front and are ADA compliant.
- The R-1 sign at the NE corner will be removed, but the “NO CONSTRUCTION TRAFFIC” sign will be left in place on the existing pole. This sign should be raised, or could be relocated to the other side of the street. All of the R-1 signs need to be removed. Will the street name signs be left on site or will the new signal have name signs? The signal detail notes “IISNS BY OTHERS”. The tree at the NE corner will need to be trimmed to

provide for sight distance to the newly relocated sign, and the tree roots will need to be trimmed for the sidewalk replacement. The School Crossing Ahead signs at the SE corner should be replaced due to fading.

- There is an existing utility pole on the SE corner. We will want to verify that this pole will not provide any line of sight issues with the new traffic signal heads.
- The City may want to include replacement of a short section of the cross gutter at the NE corner.

CONSTRUCTION MANAGEMENT AND INSPECTION

KOA will provide part-time Construction Management services throughout the construction effort (Full-time CM services are available if needed). We envision that CM services will be more involved during startup efforts, and lessen as the project progresses towards completion. KOA will provide full-time Construction Inspection services with our seasoned and experienced inspection staff. KOA has adequate alternate resources to provide additional and backup support services as needed. The Construction Manager will provide for the following efforts:

- Attend all project related meetings. Arrange and conduct preconstruction meeting.
- Provide a constructability review of the project plans, specifications, and engineer's estimate
- Develop a project phasing plan and recommendations
- Maintain project files
- Supervise construction observation/inspection. Assist with coordination of other consultants
- Coordinate Material Testing services (KOA can provide material testing as a separate subconsultant service if needed)
- Monitor stormwater protection compliance
- Review and file construction inspector's daily reports utilizing KOA's electronic reporting system
- Review and track the contractor's construction schedule
- Assure contractor adheres to labor compliance requirements
- Issue a Weekly Statement of Working Day report
- Coordinate with the City's design engineer, utility companies, and other agencies including utilizing Procure Application or other approved file and information management system. Assist in acquiring all necessary permits with respective agencies
- Review and track material submittal approvals
- Review contractor traffic control plans
- Provide public outreach
- Review and make recommendation for contractor progress payments
- Review and make recommendation regarding claims and contractor's request for change order. Track T&M costs
- Assist the City with preparing and processing reimbursements and project payments
- Address issues affecting property owners, residents, businesses, stakeholders, and contractor
- Ensure that Contractor adheres to safety requirements such as OSHA, and that they implement COVID-19 standard procedures including the use of PPE, distancing, and cleanup
- Maintain a set of "as-built" plans
- Provide for project outreach to stakeholders, resident, schools, businesses, utilities, etc.
- Verify compliance with survey monument perpetuation requirements
- Arrange for a final walk through inspection and prepare a "punch-list"

KOA will provide full-time inspection coverage of Contractor operations. We will provide a Primary Inspector for regular full time inspection (40 hours per week); a Secondary Inspector intended for night-time and weekend work if needed (up to 8 hour shifts); and a Back-Up Inspector intended for back-up, weekends, or graveyard shift hours. We may recommend different inspectors for specialty trades if needed—e.g. for pavement repairs, PCC installation, and traffic signal equipment. Our construction management and office engineering staff are able to provide additional inspection support roles if necessary. The Inspector will prepare daily inspection reports that include at least the

following items. KOA can develop custom reports in collaboration with the City for this particular project. Reports will be filed on a daily basis, and transmitted to the City weekly, including:

- Labor (Trade and Classification)
- Hours worked
- Materials delivered and/or incorporated into the work
- Equipment used
- Description of activities
- Quantities constructed
- Problems, issues, accidents, disputes, claims
- Directives and Field Orders
- Resolution of issues
- Recommendations to the Construction Manager for non-performance or other issues
- Stormwater protection
- Safety measures and issues
- Traffic Control measures
- Weather

- Conduct work in a community sensitive manner
- Communicate daily with Public Works staff
- Take photographs daily, including before and after project video and photos
- Attend meetings
- Advise on corrective actions. Address safety issues immediately. Report to City
- Review and track progress schedule
- Verify approved material submittals and certifications
- Review traffic control and safety measures
- Verify NPDES compliance
- Verify change order and T&M claims
- Other tasks as required by the City

POST-CONSTRUCTION CLOSEOUT

KOA will assist the City in completely closing out the project, including:

- Development of the construction "punchlist" of remaining work
- Conduct final walkthrough with City staff. Verify that all required manuals for the traffic signal are transmitted to the City. Verify correct operation of signal system
- Verification that all work is complete
- Final project photographs
- Completion of required project documentation
- Support for audits
- Verification of ADA compliance
- Verification of material testing compliance and remedial measures
- Verification of survey monumentation compliance
- Submittal of As-Built plans and all files to City
- Final payment recommendation

SCHEDULE REVIEW

KOA staff are very familiar with the entire mainstream scheduling software utilized by the public works contracting industry, including, but not limited to Primavera and Microsoft Project®. KOA will review the baseline construction schedule, including activity sequences and duration, schedule of submittals and schedule of delivery for products with long lead times. We will provide critical assessment and recommendations to the schedule and sequence of events.



We will have the Contractor pothole well ahead of time to ensure that the new signal pole locations are clear of existing utilities



We will want to verify that poles are clear of the overhead utility lines



The City may want to change out this manhole cover for one without the raised pattern for better ADA compliance



This utility pole may create some signal pole placement and line of sight issues. We will verify signal pole location and clearance with the City

SECTION 4: PROJECT ORGANIZATION AND STAFFING

City of Orange

PROJECT MANAGER

Chuck Stephan
Manager of CM Division

CONSTRUCTION MANAGER

Davina Buenavista
Sr. Construction Manager

CONSTRUCTION INSPECTOR

Doug Ramos
Gordon Roberts
Dan Chapman

RESUMES

DAVINA BUENAVISTA

CONSTRUCTION / PROJECT MANAGER

Ms. Buenavista has over 25 years of experience in public works and has managed a variety of capital improvement projects and maintenance programs from inception to completion, including planning, development, design, and construction. She has successfully completed numerous projects that involved roadway construction, traffic signal installations and upgrades, median and parkway landscape installations and maintenance, recreational park construction, utility (storm drain, water, and sewer) improvements, and facility upgrades and maintenance.

City of Redondo Beach – Citywide Slurry Seal Project, Phase I, Redondo Beach, CA (2/2020-4/2020): Construction Manager. KOA provided construction management and inspection services. The project provided general street preservation work including minor dig-outs, crack seal, slurry seal, and pavement striping and marking on residential and collector streets. Construction Cost: \$700,000. **Reference:** City of Redondo Beach, Javier Urista, 415 Diamond Street, Redondo Beach, CA 90277, Email Javier.Urista@Redondo.org, Phone (310) 318-0661. Contractor: American Asphalt South, Inc.

City of Redondo Beach – Palos Verdes Boulevard Median Renovation, Redondo Beach, CA (1/2020-3/2020): Construction Manager. KOA provided construction management and inspection services. The project upgraded the raised median island on Palos Verdes Blvd, located at the eastern City limit. Improvements included a new irrigation system, construction of decorative mortared cobble stone, and installation of trees and plants. Ms. Buenavista’s responsibilities included project coordination with the City, Contractor and Inspector; monitoring the Contractor’s schedule; review of submittals, RFIs, and change orders; document control; preparing Weekly Statement of Working Days; providing weekly project status reports; tracking contract pay quantities and reviewing Contractor invoices; and project close out. Construction Cost: \$105,000. **Reference:** City of Redondo Beach, Saila Potukuchi, Associate Civil Engineer, 415 Diamond Street, Redondo Beach, CA 90277, Email Saila.Potukuchi@Redondo.org, Phone (310) 318-0661. Landscape Architect: Kobata Associates, Inc. Contractor: FS Contractors, Inc.

City of Laguna Beach – Staff Support for Public Works Department, Laguna Beach, CA (4/2019-11/2019): Project Manager. Under the direction of the City Engineer and Project Director, Ms. Buenavista provided full-time, in-house project management services. Ms. Buenavista’s responsibilities included managing capital improvement projects involving storm drains designs, creek and slope stabilization, stairs replacement for beach access, and facilities improvement for the City Police, Fire, and Marine Safety Departments. Her tasks included construction drawings and traffic control plans review; preparing project specifications and engineer cost estimates; reviewing environmental and geotechnical reports; contract administration and budget oversight; conducting project meetings with designers and contractors; project coordination with City departments and stakeholders; bidding projects and preparing city council staff reports for contract award; reviewing invoices for payments; reviewing submittals and RFIs; providing document control and electronic filings; and attending department staff meetings and utility coordination meetings. Project involvement included:

EDUCATION

BS, Civil Engineering
Loyola Marymount University
Los Angeles, CA

REGISTRATIONS

Engineer-in-Training (CA)
Certificate #XE096552

PROFESSIONAL AFFILIATIONS

American Public Works
Association (APWA)

Project Management Institute
(PMI)

YEAR STARTED WITH FIRM:
2017

GENERAL EXPERIENCE:

- Civil Engineering
- Project Management
- Construction Management
- Capital Improvement Projects
- Staff Augmentation
- Roadway/Traffic Signal
- Street Median/Parkway
- Recreation Park/Facilities
- Building/Facilities
- Former Public Agency Employee, Public Works

City of Irvine – Culver Avenue Intersection Improvements at Alton Parkway and Main Street, City of Irvine, CA (4/2016-6/2017): Senior Project Manager – City of Irvine Public Works Department. Ms. Buenavista managed the project construction of this \$900,000 traffic improvement at two major intersections in the City of Irvine. Improvements at both intersections included the extension of existing left-turn lanes for increased storage capacity; traffic signal equipment upgrades for video detection and enhance signal synchronization; modifications to raised roadway median, including complete landscape restoration; and the reconstruction of intersection curb ramps for compliance with ADA standards.

City of Irvine – Harvard Avenue Roadway and Streetscape Rehabilitation, City of Irvine, CA (4/2016-6/2017): Senior Project Manager – City of Irvine Public Works Department. Ms. Buenavista managed this \$1,500,000 project that provided roadway and streetscape improvements along a 1-mile stretch of Harvard Avenue, near the University of Irvine campus. Her responsibilities included organizing public meetings and conducting community outreach, and project design including the preparation of construction specification in accordance with the City's landscape maintenance standards and practices. Improvements to existing parkways required the removal of over 140 mature trees that impacted adjacent sidewalk and roadway, replanting a variety of replacement trees, extensive parkway landscape restoration, irrigation system modifications, repairs to roadway, curbs, gutters, and sidewalk, and the installation of ADA compliant curb ramps at various intersections.

City of Irvine – Michelson Drive Rehabilitation, Irvine, CA (2016-2017): Senior Project Manager – City of Irvine Public Works Department. Ms. Buenavista managed this \$1,800,000 project that rehabilitated roadway pavement on a 1.7-mile segment of Michelson Drive from Culver Drive to University Drive. Her responsibilities included the design of cost-effective roadway replacement sections to restore pavement structural stability and extend its useful life, reconstruction of numerous landscaped median islands, and development of project phasing to minimize the impacts of construction to surrounding residential and commercial areas.

City of Irvine – Paseo Westpark/Warner Avenue Traffic Signal Improvements, Irvine, CA (2016-2017): Senior Project Manager – City of Irvine Public Works Department. This \$500,000 project included the construction of left-turn pockets for improved vehicular movement through the intersection, replacement of traffic signal poles, controller, and mast arms, and upgrades to existing traffic signals for enhance system synchronization and communication. Ms. Buenavista managed the bid and award of the project, including preparing required bid documents, advertising project for bids, reviewing bid proposals, verifying contractor information and references, writing the City council staff report for contract award, and contracts administration.

City of Torrance – Residential Street Rehabilitation, Area A, Torrance, CA (2015-2016): Associate Engineer – City of Torrance Public Works Department. This \$2M project involved residential street improvement within the WALTERIA neighborhoods, located off Pacific Coast Highway and Hawthorne Boulevard. Improvements included asphalt concrete pavement reconstruction, surface drainage improvements, and repairs to damaged concrete sidewalks, curbs, and gutters. Ms. Buenavista's responsibilities included project management, overseeing work of design consultants, supervising public works support staff, and project coordination with other City departments and utility agencies.

City of Torrance – 190th Street Rehabilitation from Prairie Avenue to Hawthorne Boulevard, Torrance, CA (1/2013-6/2015): Associate Engineer – City of Torrance Public Works Department. Ms. Buenavista successfully managed the design and construction of this \$770,000 project that included the reconstruction of deteriorated asphalt concrete roadway pavement; repairs to damaged concrete sidewalk, curbs, and gutters; upgrades to intersection corner curb ramps for compliance with ADA; construction of new bike lanes; modification to the existing traffic signal including equipment upgrades, and updating and replacing all roadway signage.

City of Torrance – Crenshaw Boulevard Rehabilitation from Maricopa Street to Sepulveda Boulevard, Torrance, CA (3/2007-2/2012): Associate Engineer – City of Torrance Public Works Department. Ms. Buenavista successfully managed the design and construction of this \$3,000,000 project that provided improvements to 1.25 miles of this

major arterial roadway, primarily funded by American Recovery and Reinvestment Act of American 2009 (ARRA) funds. Improvements included extensive roadway pavement rehabilitation, including sections of full-depth reconstruction, variable pavement grinding to correct grades and improve drainage, and complete roadway overlay with rubberized asphalt concrete; repairs to damaged concrete driveway, sidewalk, curbs, and gutters; installation of ADA compliant curb ramps; and upgrades to all roadway signage.

City of Torrance – Rolling Hills Road Traffic Signal and Median Landscape Installation, Torrance, CA (2007-2009): Associate Engineer – City of Torrance Public Works Department. This \$700,000 improvement project installed traffic signals at two busy intersections of Rolling Hills Road, including roadway pavement striping modifications and signage upgrades, construction of ADA curb ramp, and installation of raised medians and landscape. Ms. Buenavista’s responsibilities included managing the work of consultant design engineers, contractors, and inspection staff; contract administration and budget controls; conducting field meetings; public notification and outreach; and processing change orders and invoices.

City of Torrance – 190th Street Rehabilitation, West City Limit to Hawthorne Boulevard, Torrance, CA (3/2007-12/2007): Associate Engineer – City of Torrance Public Works Department. Ms. Buenavista successfully managed the design and construction of this \$2M project to the south half of 190th Street. Improvements included roadway resurfacing, construction of multiple dedicated turn lanes to optimize vehicular movements at intersections, traffic signal upgrades to streamline synchronization through the 190th Street corridor, and repairs to damaged concrete sidewalk, curbs, and gutters. Her responsibilities included managing the work of design consultants, contractors and inspection staff, project coordination with the City of Redondo Beach, Caltrans, and various utility agencies, and organizing public outreach.

DOUGLAS RAMOS

SENIOR CONSTRUCTION INSPECTOR (TRAFFIC SIGNAL – FIBER OPTIC)

Mr. Ramos has over 30 years of experience in public works construction, traffic systems communications, inspection and oversight on various traffic signals, CCTV, CMS, Fiber Optic, and all communications and pertinent devices. He worked for the City of Anaheim as an IMSA Level III as a systems technician and inspector for nearly his whole career. He has overseen small to large City Traffic Signal Improvement projects, inspections, maintenance and oversight of closed circuit camera systems, fiber optic cable installations, and various other signal synchronization and electrical projects throughout the City in his career. He has also worked with various entities and stakeholders such as Disneyland and Disney California Adventures as a supervisor overseeing the traffic signals and fiber optic installations.

RELEVANT EXPERIENCE

City of Azusa – Citywide Traffic Management Systems Project

Construction Inspector: Mr. Ramos will provide construction inspection on this new project that focuses on installation of a centralized traffic control and monitoring system, signal coordination, signal timing and intersection signal equipment. The project will also replace antiquated controllers and cabinets, install network switches and routers enabling communication between local field elements and the Traffic Management Center (TMC), and provide a new TMC work station.

City of S. Pasadena Traffic Signal Improvement Project

Construction Inspector: Mr. Ramos is providing inspections for new traffic signal installations and traffic signal rehabilitation projects at 13 various intersections. These projects include new galvanized poles, new controller cabinets, updated controllers, new conduits for interconnects, boring at existing intersections, LED signal heads, pedestrian push buttons, camera systems, police and fire advance warning systems, wiring, fiber optic lines, hand-hole boxes, new signal loop systems, handicap ramps, sidewalk, and all related improvements.

City of Coachella ST-68 Traffic Signal Synchronization Project

Construction Inspector: KOA provided ITS and signal design services and construction inspection for the Traffic Signal Synchronization and ITS Infrastructure Phase I Deployment of the City's ITS Master Plan. Mr. Ramos provided construction field inspection of the signal controller, fiber optic cable installation, and the construction of the new traffic management center of the project. The scope included complete construction documents (PS&E) for controller upgrades, ITS hardware & software upgrades, new 72 single mode fiber optic interconnect of all City intersections, redundant wireless interconnect and the PS&E to construct a new Traffic Management Center (TMC). The project migrated the City from Type 170 controllers with BI Tran 233 to the new McCain 2070ATC controllers running the Omni Ex program and Transparency TMC central system software.

City of Anaheim IMSA Level III, Anaheim, CA (1986 - 2014):

Construction Inspector / Systems Technician: Douglas Ramos has implemented and performed traffic signal preventive maintenance programs as a Systems Technician and In-house Inspector for 30 years in the City of Anaheim. Included in these duties were inspections and oversight, 24 hour stand by on-call, troubleshooting and repair of all city traffic signals, CCTV, CMS and communications of all pertinent devices. He performed shop burn in and cabinet testing of new controller cabinets and fiber optic systems for contractor and city installations. He assisted in new and existing conflict monitor testing program. He provided inspections, over site and supervision of field and cabinet modifications by contractors.

Traffic Systems Communications, City of Anaheim, CA

Doug assisted with citywide implementation of communications network first with cable and then fiber, including a

EDUCATION

Cypress Junior College

REGISTRATIONS

Level I, II and III, IMSA Traffic Signal Technician.

Level I IMSA Traffic Signal Inspector.

Corning fiber optic certification training.

Iteus and Econolite video detection training

NICET Level III (Soil, Concrete, Asphalt

YEAR STARTED WITH FIRM:

2017

traffic management center, all traffic signals, CCTV, and CMS. He assisted with the traffic management center including cable routing and terminations etc. He performed fiber optic cable inspections and installations including routing cable in conduit runs, installing connectors, fusion splices, light meter testing and OTDR testing. Supervised and inspected fiber installations city wide. Installed fiber for two Anaheim Fire Stations including connectors, interface equipment and establishing communications to city network. He also, Installed CCTV in various locations within the city including fiber and inspected and established communications to the TMC.

Other City Projects, City of Anaheim, CA

Supervised, Inspected, and assisted with work to update surrounding traffic systems infrastructure when the Disneyland California Adventure was built. This work included traffic signal, CCTV, CMS and fiber optic communications installations. Supervised and assisted with the Katella street widening project in the city's Platinum Triangle area. This included installing fiber, CCTV, CMS and traffic signal modifications. He supervised new city wide LED Illuminate Street Name Sign project. He supervised and assisted with new LED CMS and lane directional arrow signs for new ARTIC transit station and Douglass street entrance to Anaheim Stadium. This included routing fiber and establishing communications to TMC.

GORDON D. ROBERTS

SENIOR CONSTRUCTION INSPECTOR

Mr. Roberts has over 40 years of energetic, reliable strong commitment to professional work ethic, and diverse experience in progressively responsible positions from heavy equipment operator to superintendent to general engineering & building contractor including multiple trades contractor to project designer and inspector. Years of experience working with a paving and slurry contractor. Mr. Roberts interacts cooperatively at top management levels with input into planning, safety, goal setting, operations, policy decisions, and building code implementations. Mr. Roberts possesses authoritative knowledge of building codes and regulations, plan reading and interpretation, multiple trades and overall respected construction practices. Mr. Roberts interacts cooperatively with architects, engineers, general contractors, inspectors, other supervisors and the public. Mr. Roberts conveys excellent communication and interpersonal skills; interacts well with widely diverse groups; easily gains confidence and cooperation; additionally, bi-lingual utilization of his construction / conversational Spanish proves a strong field communication asset. Mr. Roberts has managed crews of 30+; stressing quality work and safety. Hired, trained, and developed crews to work independently with continued priority to safety situational awareness. He also speaks Spanish well.

RELEVANT EXPERIENCE

Foothill Boulevard Improvement Project, Claremont, Ca

The project constructed 3.1 miles of major arterial improvements for the Foothill Boulevard Master Plan. The work included traffic control, clearing and grubbing, roadway excavation, removal and replacement of curb and gutter, sidewalks, and driveways, Class 1, 2 and 4 bicycle lanes, 10 concrete bus pads and shelters, concrete cross gutters, alley way driveways, local depressions, parkway drains, pavement improvements, walls, storm drain work that includes various RCP, catch basins, manholes, cobble bio retention basins, drywell underground storage, 6 traffic signals, street lighting, landscaping and irrigation, and the installation of bus shelters and furniture and amenities, trellis structures, monuments signage, and full landscaping. KOA oversaw the entire project for the City, conducted weekly project meetings, managed staff and budgets; negotiated, approved, and processed change orders, maintained project files, labor compliance, Caltrans, Edison, and multi-agency coordination balanced 7 funding sources, met with City officials and town residents, reviewed all submittals and RFI's, coordinated with City project manager and City Management from various departments, completed weekly and monthly reports, verified quantities, coordinated any soils testing, attended City meetings, and coordinated with the contractor while assisting in re-design of numerous survey errors on the plans for this \$14 Million project.

City of Rancho Mirage On-Call Inspections Contract – Land Development and Public Works Projects, City of Rancho Mirage

Construction Inspector: Mr. Roberts oversaw the rough grading operation, installation of VCP Sewer Main, storm drain with storm drain and sewer manholes, wyes and laterals, 8" – 12" ductile iron water line, curb and gutter, cross gutters, sidewalk, paving grading and base paving on two land development projects. Mr. Roberts maintained Daily reports, attended meetings, kept photo documentation, coordinated with the City, design engineer, and materials testing staff to ensure that the project was built in accordance with the project plans and specifications.

2016-17 CDBG Sidewalk Improvement Project, Corona, CA: Construction Inspector

Mr. Roberts provided construction inspections on this CDBG Sidewalk rehabilitation project in various areas.

EDUCATION

California State Contractor Trade School & Licensing –

General (A)/Engineering (B)/ plus Specialty Trades & Certifications

Operating Engineers, Local 12-

Journeyman Training- Certified HAZ-MAT Handling, Safety Management, Equipment Operator for Infrastructure Earthwork, Grade Checking & Plan Take-off, Heavy Equipment Mechanical Repair, Maintenance & Safety Practices.

Trade & College Courses –

Drafting & Plan Design, Metallurgy Safety, Welding, Cutting & Compressed Gas Practices, Basic Spanish

Computer Software- Structure Studios: *Vip3D Pool Studio & VizTerra, AutoCad, MS Office Suites, Corridor:Asset Maintenance & Repair Tracking Management.*

YEAR STARTED WITH FIRM:
2017

DANIEL H. CHAPMAN, JR.
 SENIOR CONSTRUCTION INPSECTOR

Mr. Chapman has over 25 years of experience in the civil engineering field as a construction inspector, pavement engineer and construction materials manager. He has worked on a variety of projects that has included, Federal Highway Administration, Federal Aviation Administration, California Department of Transportation, Various Counties, City, and Special Districts. He has extensive knowledge of the State and Federal Highway procedures including site management, pay estimates, documentation and project specifications. His past inspection and office engineering projects includes various roadways, bridges, airport runways and taxiways, asphalt and concrete pavements, asphalt overlay, review of shop drawings, and observation. His experience includes construction management, contract administration, staff augmentation, plan checking, design constructability and bid ability review.

City of La Habra – Annual Residential Street Rehabilitation and Water Main Replacement, La Habra, CA: Construction Inspector. Dan provided construction inspection services for the construction of pavement repairs and rehabilitation work on various streets across the City, and the repair and replacement of various water pipelines. Project Cost \$5.4M.

Town of Apple Valley – Construction Inspection Yucca Loma Bridge, Apple Valley, CA: Construction Inspector. Dan was responsible for periodic inspections and construction reports for asphalt, concrete and steel; coordination with materials testing and reports to the Project Manager and the Town.

County of San Bernardino – Baseline Road at I-15 Interchange, Rancho Cucamonga, CA: Construction Inspector/Office Engineer. Mr. Chapman set up project files, provided construction inspections and construction contract administration support, photo documentation and reports, prepared quantity sheets, updated project files, reviewed and submittals, weekly status reports, prepared monthly pay estimates, process change orders, jobsite safety reviews, coordinated for field testing, material testing, prepared project files for project closeouts and other related tasks as assigned. Project involved infrastructure improvements, curbs, gutters, sidewalks, ADA ramps, storm drain pipe, water line relocations, roadway excavation, observation of subgrade and making grade, slope paving, roadway signs, traffic stripes and markings.

Caltrans District 5, State Route 46, Lost Hills, CA: Quality Assurance/Inspector. This State project consisted of constructing two additional lanes to increase traffic volume. Dan coordinated inspection and testing of roadway improvements which included sub grade preparation and placement, asphalt production and placement, and storm drains. Dan prepared photo documentation, ensured adherence to Fish & Game permits, coordinated with Caltrans Resident Engineer on field and design discrepancies and made paving recommendations, prepared daily reports from inspection and testing, and reviewed monthly invoices.

Caltrans District 6, State Route 99, Bakersfield, Chowchilla, and Madera, CA: Quality Assurance/Inspector. Work included ensuring contractor compliance with the contract special provisions and plans, Caltrans Structures Manual, and Caltrans Standard Plans and Specifications. Improvement included roadway subgrade preparations, construction of asphalt and concrete pavement, concrete barriers, storm drains, water line relocations, and bridge components. Mr. Chapman prepared daily inspection and testing reports, attended pre-construction and construction meetings, and conducted cost estimating and analysis on inspection and quality control for each phase of each project.

EDUCATION
 BA, Pacific Coast Baptist Bible College, 1995

REGISTRATIONS/ CERTIFICATONS
 NICET Level III (Soil, Concrete, Asphalt)
 Caltrans Certifications for Soil, Concrete, and Asphalt
 ACI Strength Testing Technician Lab 1& 2

YEAR STARTED WITH FIRM:
 2019

Caltrans District 7, State Route 5, Sun Valley, Sylmar, Burbank, Norwalk, Santa Fe Springs, La Mirada, and Gorman, CA: Quality Assurance/Inspector. Work included ensuring contractor compliance with the contract special provisions and plans, Caltrans Structures Manual, and Caltrans Standard Plans and Specifications. Mr. Chapman provided construction inspections and construction contract administration support; performed document control and project file updates; prepared photo documentation and inspection reports; prepared quantity sheets; reviewed submittals and weekly status reports; prepared monthly pay estimates; processed change orders; conducted jobsite safety reviews; coordinated for field and material testing; prepared project files for project closeouts; and other related tasks as assigned.

Caltrans District 7, State Route 101, Camarillo, Thousand Oaks, and Ventura, CA: Quality Assurance / Inspector. Work included ensuring contractor compliance with the contract special provisions and plans, Caltrans Structures Manual, and Caltrans Standard Plans and Specifications. Mr. Chapman provided construction inspections and construction contract administration support; performed document control and project file updates; prepared photo documentation and inspection reports; prepared quantity sheets; reviewed submittals and weekly status reports; prepared monthly pay estimates; processed change orders; conducted jobsite safety reviews; coordinated for field and material testing; prepared project files for project closeouts; and other related tasks as assigned.

Caltrans District 7, State Route 118, Simi Valley and Sylmar, CA: Quality Assurance / Inspector. Work included ensuring contractor compliance with the contract special provisions and plans, Caltrans Structures Manual, and Caltrans Standard Plans and Specifications. Mr. Chapman provided construction inspections and construction contract administration support; performed document control and project file updates; prepared photo documentation and inspection reports; prepared quantity sheets; reviewed submittals and weekly status reports; prepared monthly pay estimates; processed change orders; conducted jobsite safety reviews; coordinated for field and material testing; prepared project files for project closeouts; and other related tasks as assigned.

Caltrans District 8, State Route 15 Ontario, Hesperia, and Victorville, CA: Quality Assurance / Inspector. Work included ensuring contractor compliance with the contract special provisions and plans, Caltrans Structures Manual, and Caltrans Standard Plans and Specifications. Mr. Chapman provided construction inspections and construction contract administration support; performed document control and project file updates; prepared photo documentation and inspection reports; prepared quantity sheets; reviewed submittals and weekly status reports; prepared monthly pay estimates; processed change orders; conducted jobsite safety reviews; coordinated for field and material testing; prepared project files for project closeouts; and other related tasks as assigned.

Caltrans District 8, State Route 40, Newberry Springs, CA: Quality Assurance/Inspector. Work included ensuring contractor compliance with the contract special provisions and plans, Caltrans Structures Manual, and Caltrans Standard Plans and Specifications. Mr. Chapman provided construction inspections and construction contract administration support; performed document control and project file updates; prepared photo documentation and inspection reports; prepared quantity sheets; reviewed submittals and weekly status reports; prepared monthly pay estimates; processed change orders; conducted jobsite safety reviews; coordinated for field and material testing; prepared project files for project closeouts; and other related tasks as assigned.

City of Bakersfield / TRIP – Westside Parkway Phases 2, 2B, 3 and 4, Truxtun Interchange, Bakersfield, CA: Inspector/Office Engineer. Work included ensuring contractor compliance with the contract special provisions and plans, Caltrans Structures Manual, and Caltrans Standard Plans and Specifications. Mr. Chapman provided construction inspections and construction contract administration support; performed document control and project file updates; prepared photo documentation and inspection reports; prepared quantity sheets; reviewed submittals and weekly status reports; prepared monthly pay estimates; processed change orders; conducted jobsite safety reviews; coordinated for field and material testing; prepared project files for project closeouts; and other related tasks as assigned.

County of San Diego – County Overlay Projects – Various, San Diego County, CA: Inspector/Office Engineer. Work included ensuring contractor compliance with the contract special provisions and plans, Caltrans Structures Manual, and Caltrans Standard Plans and Specifications. Mr. Chapman provided construction inspections and construction contract administration support; performed document control and project file updates; prepared photo documentation and inspection reports; prepared quantity sheets; reviewed submittals and weekly status reports; prepared monthly pay estimates; processed change orders; conducted jobsite safety reviews; coordinated for field and material testing; prepared project files for project closeouts; and other related tasks as assigned.

Federal Aviation Administration – Runway and Taxiway Rehabilitation Projects for Van Nuys Airport, Long Beach Airport, Burbank Airport, and John Wayne Santa Ana Airport, CA: Inspector/Office Engineer. The project involved full structural replacement of existing runway and taxiways at four major Southern California airports. Inspection was required for subgrade, concrete improvements for electrical cans and aprons, asphalt and concrete pavement, striping, and field and material testing. Mr. Chapman provided construction inspections and construction contract administration support; performed document control and project file updates; prepared photo documentation and inspection reports; prepared quantity sheets; reviewed submittals and weekly status reports; prepared monthly pay estimates; processed change orders; conducted jobsite safety reviews; coordinated field and material testing; prepared project files for project closeouts; and ensured contractor complied with FAA guidelines, Army Corps of Engineers requirement and all related project specifications.

SECTION 5: AGREEMENT TO INSURANCE REQUIREMENTS

The required insurance coverage will be obtained by KOA, and we understand said coverage is a prerequisite for entering into an agreement with the City. KOA will provide insurance documents for the project per the required check list and sample contract agreement prior to contract award.

Corporate / Los Angeles Office

1100 Corporate Center Dr., Suite 201

Monterey Park, California 91754

P 323.260.4703

F 323.260.4705

West Los Angeles Office

300 Corporate Pointe, Suite 470

Culver City CA 90230

P 310.473.6508

F 323.260.4705

Coachella Valley

78-405 Via Caliente

La Quinta CA 92254

P 760.694.1716

F 909.890.9694

Inland Empire Office

3190 C Shelby Street

Ontario, California 91764

P 909.890.9693

F 909.890.9694

Orange County Office

2141 W. Orangewood Avenue, Suite A

Orange, California 92868

P 714.573.0317

F 714.573.9534

San Diego County Office

5095 Murphy Canyon Road, Suite 330

San Diego, California 92123

P 619.683.2933

F 619.683.7982



Rev. 20200820

FEE PROPOSAL

City of Orange
Construction Management and Inspection Services for
Lemon Street at Palm Avenue Traffic Signal Installation
(SP-4133) RFP 20-21.09

	Project Manager \$150	Construction Manager \$150.00	Construction Inspector \$130	TOTAL COST
PROJECT SP-4133 (45 calendar days)				
1. PRE-CONSTRUCTION CM				
1.0 Preconstruction services	4	12	4	\$2,920.00
Subtotal	4	12	4	\$2,920.00
	\$600.00	\$1,800.00	\$520.00	\$2,920.00
2. CONSTRUCTION PHASE CM				
2.0 Construction Phase Services	4	70	140	\$29,300.00
Subtotal	4	70	140	\$29,300.00
	\$600.00	\$10,500.00	\$18,200.00	\$29,300.00
3. POST-CONSTRUCTION CM				
3.0 Post Construction Documentation and Reporting	4	12	8	\$3,440.00
Subtotal	4	12	8	\$3,440.00
	\$600.00	\$1,800.00	\$1,040.00	\$3,440.00
1) Reports, Printing				\$0.00
2) Mileage				\$0.00
THIS PHASE TOTAL HOURS	12	94	152	
THIS PHASE TOTAL COST	\$1,800.00	\$14,100.00	\$19,760.00	\$35,660.00

ASSUMPTIONS:

45 Calendar days = 7 weeks = 35 working days @ 4 hours regular time for inspection and 2 hours for CM on average
 No material testing services included



REQUEST FOR PROPOSAL
for
CONSTRUCTION MANAGEMENT AND
INSPECTION SERVICES
for
LEMON STREET AT PALM AVENUE
TRAFFIC SIGNAL INSTALLATION (SP-4133)



RFP 20-21.09

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REQUEST FOR PROPOSAL FOR CONSTRUCTION MANAGEMENT AND INSPECTION

The City of Orange, Public Works Department – Traffic Division (the City) requests a proposal from qualified contractors to provide construction management and inspection services for the Lemon Street at Palm Avenue Traffic Signal Installation (SP-4133). The engineering and construction of the project is locally funded.

PROPOSAL SUBMITTAL

Contractor’s proposal and a separate fee proposal must be submitted by **2:00 pm, August 20, 2020** by email in the following format:

- Proposals shall be submitted by email to Gabrielle Hayes at ghayes@cityoforange.org.
- The RFP No. shall be: 20-21.09. Project Name/Title shall be: RFP 20-21.09 SP-4133 CM-Inspection Lemon-Palm TS.
- There shall be two separate attachments to your email, in PDF format only:
 - Attachment 1 labelled **RFP 20-21.09 CM-Insp_LemonPalmTS - Your Company Name – Attachment 1.pdf**: consisting of all pages of the proposal, except the Cost Proposal.
 - Attachment 2 labelled **RFP 20-21.09 CM-Insp_LemonPalmTS – 2020 - Your Company Name – Attachment 2.pdf**: consisting of the Cost Proposal, only.

Tentative Schedule of Events:

August 6, 2020Public Works issues Request for Proposal
August 13, 2020Deadline for submitting questions
August 20, 2020Proposal due by 2:00 pm
August 27, 2020City Staff selection of contractor
September 8, 2020Award Contract

PROJECT BACKGROUND

The success of Chapman University has contributed to increased intersection activity at the N Lemon Street at W Palm Avenue intersection, especially during peak periods. In fact, the combined volume of vehicle and pedestrian traffic has risen to a level that warrants the installation of a new traffic signal. The proposed traffic signal is expected to reduce the potential for vehicle-pedestrian conflicts while better organizing the intersection for its various users. The project will include new traffic signal poles, controller and cabinet, video detection, safety lighting, Americans with Disabilities Act of 1990 (ADA) compliant curb ramps, enhanced traffic signs, pavement markings, spandrel construction and pavement repair. Due to the project’s location in Old Towne Orange, the improvements will comply with the Old Towne Historic District design standards.

Engineering design has been completed and the project has been advertised for bid. Construction activities are scheduled to begin in October 2020, with completion of the project anticipated before February 2021. The construction contract is a 45 calendar day contract, starting from the Notice to Proceed. This project is locally

funded and shall adhere to the City of Orange’s practices and requirements for construction management activities, project document control and close-out.

Generally, but not limited to, inspection services requirements are as follows:

- Traffic signal inspection
- Street improvement construction inspection

THE CONTRACTOR’S PROPOSAL

In order to maintain uniformity of the proposals, the contractor shall discuss and organize topics outlined in the following order:

- Cover Letter
 - Background and understanding of the Scope of Services
 - Work Plan
 - Project organization and staffing
 - Agreement to insurance requirements
- 1) The main proposal discussing the topics above shall contain no more than ten (10) pages on 8½”x11” sheets, hardbound cover, GBC bound. Text font size shall be no smaller than 10 points. Supplementary sheets including resumes may be inserted at the end of the proposal.
 - 2) Cover Letter must be signed by the individual authorized to bind the contractor and must stipulate that the proposal is valid for 90 days. The letter should also indicate the address and telephone number of the contractor’s office located nearest to Orange, California, and the office from which the project will be managed.
 - 3) In the background and understanding of the Scope of Services, briefly describe your understanding of the City’s proposed scope of work and the objectives to be accomplished for this project/service. It should explain understanding of the project and its complexity and provide potential solutions to identified issues and constraints.
 - 4) The Work Plan should describe the proposed approach and plan for completing the services described in the Scope of Services. Discuss how you will manage resources, including a description of the role(s) of any subcontractors if applicable, and how their work will be supervised. Identify methods that will be used to ensure quality, budget and schedule control.
 - 5) The Project Organization and Staffing should briefly describe the project team members to be utilized on this project. Identify the Project Manager, the key person responsible for the quality and the person who will be the principal contact with the City. Briefly describe the responsibilities of each person on the project team, including qualifications and experiences. Indicate the availability of the project team members for the duration of the project. Any change in the assigned personnel shall require the approval of the City. List the portion of work that will be subcontracted, if applicable. Include a list of subcontractors expected to be engaged in the work and their relevant qualifications and experiences. City reserves the right to approve final selection of all subcontractors.
 - 6) Provide a statement that the required insurance coverage will be obtained by the contractor, and that the contractor understands said coverage is a prerequisite for entering into an agreement with the City. Selected

contractor shall provide insurance documents for project per the attached check list and sample contract agreement prior to contract award.

THE COST PROPOSAL

- 1) A Cost Proposal shall be prepared for project. The cost proposal for project shall contain no more than two (2) pages on 8 1/2"x11" sheets. Submit in a separate sealed envelope.
- 2) The Cost Proposal shall itemize man-hours, hourly rates, and any other costs for the tasks shown in the Scope of Services below.
- 3) It is anticipated that the contract resulting from this solicitation, if awarded, will be on a not-to-exceed price contract. Contractor shall submit a not-to-exceed fee that shall include all expenses; there shall be no line items for reimbursables.

PROPOSAL PREPARATION EXPENSES

This Request for Proposal does not commit the City to pay any costs incurred in the preparation of a response. The City reserves the right to reject any or all submitted proposals.

CITY'S RESERVATIONS OF RIGHTS

The City reserves the right to withdraw this Request for Proposal at any time for any reason. All firms submitting a proposal will be duly notified of any change in the status of this Request for Proposal.

This Request for Proposal and the proposal evaluation process do not:

- Obligate the City to accept or select any Proposal; or
- Constitute an agreement by the City that it will actually enter into a contract with any Proposer.

When it best serves the City's interests, the City may do any one or more of the following:

- Reject any Proposal or all Proposals at its sole discretion.
- Extend the deadline for accepting Proposals.
- Accelerate the pace of the RFP process if only one or a handful of Proposals is received.
- Waive any or all information, defects, irregularities, or informalities in a Proposal.
- Accept amendments to Proposals after the Proposal Deadline.
- Revise, change, or amend the RFP's evaluation or selection criteria before the Proposal Deadline.
- Cancel, withdraw, revise, change, amend, or negotiate the terms of this RFP, the proposed Contract, or both.
- Reissue a Request for Proposals.
- Conduct one or more oral interviews.
- Visit a Proposer's business or facilities.
- Examine financial records of a Proposer to the extent necessary to ensure financial stability.
- Make a partial award.
- Negotiate with one or more Proposers.
- Award a contract to one or more Proposers.
- Require a best and final offer from one or more Proposers.

SCOPE OF SERVICES

Contractor shall provide professional construction management services, including inspection, quality control, CPM schedule management, utility coordination, and administration services during construction. Work shall be performed in accordance with City of Orange standards of practice. Construction management and inspection services may include, but are not limited to, the following tasks:

A. Construction Management Services:

Construction Phase

- 1) Arrange and conduct Pre-Construction meeting, inviting the City's Project Manager, Inspector Contractor, public utilities, private entities, general contractor and other project stakeholders. Prepare minutes of Pre-Construction meeting for distribution to all attendees.
- 2) Provide and maintain sufficient field personnel to administer and manage construction contract.
- 3) Review construction schedule, including activity sequences and duration, schedule of submittals and delivery schedule of long lead materials and equipment. Review contractor's update and revisions as may be required to reflect actual progress of work.
- 4) Schedule and conduct progress meetings to discuss contract issues, procedures, progress, problems, change orders, submittals, request for information (RFIs), deficiencies and schedules. Prepare minutes of progress meetings for distribution to all attendees.
- 5) Under administrative direction, provide technical and administrative work in the office and field in the contract administration of the project to ensure compliance with City standard specifications, codes and all applicable legislation.
- 6) Investigate field problems affecting property owners and contractors.
- 7) Process and approve contractor's submittals for City staff and process project design consultant's review and approval.
- 8) Process and track RFIs, submittals, shop drawings, proposed change orders and revisions.
- 9) Review and evaluate proposed change orders. Review estimates for reasonableness and cost effectiveness and render recommendations to City. Conduct negotiations with contractors and resolve problems.
- 10) Maintain cost accounting records on authorized work performed under contract unit costs and additional work performed based on actual costs of time (labor) and materials (T&M).
- 11) Review contractor submittals for extra or unforeseen work. Review potential Construction Change Orders (CCO) for accuracy and provide recommendation(s) to City staff for proper course of action and processing of CCO's.
- 12) Develop a reasonable cost control system, including regular monitoring of actual costs for activities in progress and estimates for uncompleted tasks and proposed changes.
- 13) Assist City in coordinating services of other consultants that may be hired or selected for the project.
- 14) Coordinate with project designer the contractor's requests for interpretation or clarification of meaning and intent of project plans and specifications.
- 15) Establish and implement job safety procedures in compliance with CAL-OSHA requirements. Monitor contractor's compliance with established safety program, respond to deficiencies and hazards, and investigate and report on accidents.
- 16) Track quantities of work completed for progress payments. Develop and implement procedures for review and processing of progress payment applications. Assist City with review and certification for payment.
- 17) Establish procedures and monitor contractor compliance with state prevailing wage regulations and requirements.
- 18) Assist City in preparing and processing reimbursements.
- 19) Maintain a complete project filing system, including records of all changes and field notes. Filing system shall be in accordance with City procedures.

Post-Construction Phase

- 1) Evaluate completion of work and recommend to City when work is ready for final inspection.
- 2) Conduct final inspection/walk through with City staff.
- 3) Coordinate with Inspector final punch list, including schedule for punch list completion. Monitor and follow through with contractor until completion of all punch list items.
- 4) Secure and transmit required guarantees, certifications, affidavits, leases, easement deeds, operating & maintenance manuals, warranties and other documents as stipulated in contract documents.
- 5) Secure and provide accurate and detailed "As-Built" drawings for the project, AutoCAD format preferred.
- 6) Secure and provide neat and orderly material sheets, inspection reports,
- 7) Review and process contractor's request for final payment and release of retention.
- 8) Deliver project files to City.

B. Construction Inspection Services:

- 1) Conduct all inspections in a courteous and professional manner.
- 2) Provide community sensitive inspection services on a daily basis.
- 3) Communicate effectively with Public Works staff to assure that City priorities are met.
- 4) Review plans, specifications, and other contract and construction-related documents. Become familiar with traffic control plans, construction schedules, construction sequences, and permit requirements from other agencies.
- 5) Photograph, log and pre-work video prior, during, and after construction.
- 6) Attend pre-construction meetings and present special concerns, if any.
- 7) Interpret plans, specifications and regulations and ensure that contractors are following their contracts. Provide field inspections to ensure projects are constructed according to project plans, specifications and applicable standards. The inspector shall have a complete set of construction plans, specifications, Standard Specifications for Public Works Construction and APWA Standard Plans.
- 8) Direct and notify construction contractors about non-compliance and correct compliance problems as soon as they are discovered.
- 9) Maintain Daily Inspection Reports showing site and weather conditions; traffic control measures taken by contractors; description of inspections; personnel on site; labor, equipment and materials used; quantity of work performed; photos; and major incidents/safety violations. Daily Inspection Reports shall be submitted to City upon project completion.
- 10) Review construction progress schedules on a regular basis; verify schedules are on track with project milestones; identify deviations; and ensure that corrective actions are taken to bring projects back on schedule.
- 11) Provide accurate measurements of work completed by contractors in accordance with contract documents.
- 12) Ensure that contractors do not install materials without approved material testing certifications. Any failed tests shall be reported and direct contractor to take correction measures to achieve compliance.
- 13) Monitor contractors' utility coordination to minimize utility conflict delays and potential need for utility relocations.
- 14) Attend progress meetings to communicate, coordinate and resolve any issues or problems that may arise at the job site.
- 15) Coordinate with contractor access to adjacent businesses/residents during construction. Coordinate mitigation of construction impacts with contractor, City and other agencies.
- 16) Provide inspection of traffic control, channelization, and all other traffic-related work. Oversee implementation of approved traffic control plans.
- 17) Ensure conformance with plans, specifications, department regulations, applicable laws and codes.
- 18) Observe construction safety, public safety and convenience, and report discovered problems to City.

- 19) Monitor and ensure compliance in the field with approved Storm Water Pollution Prevention Plan and City's National Pollutant Discharge Elimination System (NPDES) Permits and requirements. Monitor compliance with all other local, state, and federal laws and regulations.
- 20) Create and maintain inspection reports and other construction related records.
- 21) Maintain data for change orders and record information regarding time of dispute, time of notification by contractor, and action taken by inspector.
- 22) Provide complete measurements and calculations to administer progress payments and make recommendations for payments.
- 23) Prepare and transmit to contractors, correspondence related to construction management and inspection of projects. All correspondence sent to and received from contractors shall be copied and transmitted to City.
- 24) Coordinate preparation and submittal of as-built plans to City upon project completion.
- 25) Prepare preliminary and final punch list and follow through with contractor until completion. Administer final inspection and ensure all correction items are completed.
- 26) Review and make recommendations as to the adequacy of as-built plans.
- 27) Perform any necessary duties related to the construction inspection as assigned by the City's Project Manager or their designee.

SELECTION CRITERIA

Submittals will be evaluated on the basis of their response to the provisions of this Request for Proposal (RFP). Award of this contract, if made, will be on the basis of the contractor's qualifications/experience, quality of submittal, understanding of the scope/methodology and the fee proposal. In addition to the written proposal, the City may choose to conduct oral interviews. The City will establish a specific date to conduct interviews and no other dates will be provided.



Agenda Item

City Council

Item #: 3.8.

9/8/2020

File #: 20-077

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Thomas C. Kisela, Chief of Police

1. SUBJECT

Agreement with the County of Orange for Fiscal Year 2018-2019 Edward Byrne Memorial Justice Assistance Grant Program.

2. SUMMARY

The eligible joint allocation amount awarded to the County of Orange is \$401,800 of which \$20,090 is allocated to the City of Orange. The County of Orange is requesting approval of an agreement that allocates the City's 2019 program funds as follows: \$2,009 for grant administrative fees to the County with \$18,081 retained by the City to purchase tactical communication headsets.

3. RECOMMENDED ACTION

1. Approve the agreement with the County of Orange in the amount of \$18,081 for Fiscal Year 2018-2019 Edward Byrne Memorial Justice Assistance Grant Program and authorize the City Manager to execute on behalf of the City.
2. Accept into the City's revenue budget an \$18,081 grant from the County of Orange, into revenue account number 353.4011.45150.30129, Federal Grants-2019 JAG.
3. Authorize the appropriation of \$18,081 into expenditure account number 353.4011.55131.30129, Equipment - 2019 JAG.

4. FISCAL IMPACT

The total appropriations for this grant are funded by the additional revenue received from the County of Orange.

5. STRATEGIC PLAN GOALS

Goal 1: Provide for a safe community

- a: Provide staffing and resources to deliver services that ensure public safety.

6. DISCUSSION AND BACKGROUND

The Edward Byrne Memorial Justice Assistance Grant (JAG) Program is the primary provider of federal criminal justice funding to states and units of local government. Beginning in Fiscal Year 2018-2019 (FY19), all recipients, either through direct award or sub-grants, were required to provide a properly executed certification related to 8 U.S.C §1357 and certain other federal statutes. An inquiry into JAG grant award conditions by the Orange County Sheriff's Department resulted in a delay in

allocation of JAG funds to all agencies. In July 2020, the U.S. Department of Justice approved the application for funding under the FY19 Edward Byrne Memorial JAG Program.

The eligible joint allocation amount awarded to the County of Orange is \$401,800, of which \$18,081 is allocated to the City of Orange. The County of Orange is requesting approval of an agreement that allocates the City's 2019 JAG funds as follows: \$2,009 for grant administrative fees to the County with \$18,081 retained by the City.

The Orange Police Department's 2019 jurisdictional project identified the need for tactical communication headsets for the Police Department's Special Weapons and Tactics (SWAT) team. Due to a delay of 2019 JAG funds, the Department purchased communication headsets in March 2020 through a budget modification of the 2018 JAG Program, award 2018-DJ-BX-0820. The proposed jurisdictional project for the 2019 JAG Program, award 2019-DJ-BX-0899, will require a budget modification once the award has been processed. The Department anticipates using 2019 JAG funds in the future to augment SWAT equipment.

7. ATTACHMENTS

- JAG MOU 2019-DJ-BX-0899



Agenda Item

City Council

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9/8/2020

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7. ATTACHMENTS

- JAG MOU 2019-DJ-BX-0899

**MEMORANDUM OF UNDERSTANDING BETWEEN THE COUNTY OF ORANGE (SHERIFF) AND THE
CITY OF ORANGE TO DISTRIBUTE THE 2019 EDWARD BYRNE MEMORIAL FUND – JUSTICE ASSISTANCE
GRANT “JAG”**

AWARD #2019-DJ-BX-0899

AWARD DATE 9/18/2019

ACCEPTANCE DATE: 7/14/2020

I. Participants

Participants hereto acknowledge the County of Orange as lead fiscal agent in charge of programmatic oversight and administration of funds and compliance over all eligible participant law enforcement agencies, hereinafter referred to individually as "Party" and jointly as "the Parties."

II. Purpose

The purpose of this Memorandum of Understanding (MOU) is to support of the objectives of the Office of Justice Programs, expressly those identified as Priority Purpose Areas (PPAs) for the term of this award.

III. Program Overview and Description of Project(s)

The Edward Byrne Memorial Justice Assistance Grant Program (JAG) allows states and units of local government, including tribes, to support a broad range of criminal justice related activities based on their own state and local needs and conditions. Equipment purchases or funded initiatives such as overtime, task forces, drug programs, information sharing, etc. will be aimed at reducing crime and/or enhancing public/officer safety.

JAG funds can be used for state and local initiatives, technical assistance, training, personnel, equipment, supplies, contractual support, and information systems for criminal justice, including for any one or more of the following purpose areas: 1) law enforcement programs; 2) prosecution and court programs; 3) prevention and education programs; 4) corrections and community corrections programs; 5) drug treatment and enforcement programs; 6) planning, evaluation, and technology improvement programs; 7) crime victim and witness programs (other than compensation); and 8) mental health programs and related law enforcement and corrections programs, including behavioral programs and crisis intervention teams. The County of Orange (Sheriff) will determine validity of each project included in the application

MEMORANDUM OF UNDERSTANDING BETWEEN THE COUNTY OF ORANGE (SHERIFF) AND THE CITY OF ORANGE TO DISTRIBUTE THE 2019 EDWARD BYRNE MEMORIAL FUND – JUSTICE ASSISTANCE GRANT “JAG”

AWARD #2019-DJ-BX-0899

AWARD DATE 9/18/2019

ACCEPTANCE DATE: 7/14/2020

and subsequent awards. JAG funding will be used to support criminal justice initiatives that fall under one or more of the allowable program areas above.

This award is subject to all administrative and financial requirements, including the timely submission of all financial and programmatic reports, resolution of all interim audit findings, and the maintenance of a minimum level of cash-on-hand. Should you not adhere to these requirements, you will be in violation of the terms of this agreement and the award will be subject to termination for cause or other administrative action as appropriate.

THE UNDERSIGNED PARTIES HERETO ACKNOWLEDGE THE RECEIPT OF FUNDS FROM THE DEPARTMENT OF JUSTICE AND TRANSFER OF FUNDS FROM COUNTY TO MUNICIPAL GOVERNMENTS AS DETAILED IN “ATTACHMENT 1: LOCAL AWARD ALLOCATION TABLE: ORANGE COUNTY, CA.”

COUNTY OF ORANGE

ORANGE COUNTY SHERIFF DON BARNES on behalf of
COUNTY EXECUTIVE OFFICER, FRANK KIM



AUTHORIZED SIGNATORY

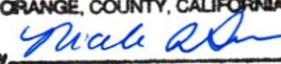
ORANGE COUNTY SHERIFF’S DEPARTMENT
FISCAL AGENT, GRANTS ADMINISTRATOR



AUTHORIZED SIGNATORY

ORANGE CITY
ORANGE POLICE DEPARTMENT
CITY MANAGER

AUTHORIZED SIGNATORY

APPROVED AS TO FORM
OFFICE OF THE COUNTY COUNSEL
ORANGE, COUNTY, CALIFORNIA
By 
Deputy
Date: 8/3/20

2019 ORANGE COUNTY CA LOCAL JAG ALLOCATIONS					
\$401,800.00					
Recipient Agency	Government Type	Direct Allocation	% Funding Level	Admin Fee 10%	Amount Retained
ORANGE COUNTY (SHERIFF)	County	\$16,072.00	7.0%	\$ 1,607.20	\$ 14,464.80
ANAHEIM CITY	Municipal	\$86,387.00	21.5%	\$ 8,638.70	\$ 77,748.30
BUENA PARK CITY	Municipal	\$20,090.00	5.0%	\$ 2,009.00	\$ 18,081.00
COSTA MESA CITY	Municipal	\$24,108.00	6.0%	\$ 2,410.80	\$ 21,697.20
FULLERTON CITY	Municipal	\$24,108.00	6.0%	\$ 2,410.80	\$ 21,697.20
GARDEN GROVE CITY	Municipal	\$40,180.00	10.0%	\$ 4,018.00	\$ 36,162.00
HUNTINGTON BEACH CITY	Municipal	\$28,126.00	7.0%	\$ 2,812.60	\$ 25,313.40
ORANGE CITY	Municipal	\$20,090.00	5.0%	\$ 2,009.00	\$ 18,081.00
SANTA ANA CITY	Municipal	\$110,495.00	27.5%	\$ 11,049.50	\$ 99,445.50
WESTMINSTER CITY	Municipal	\$20,090.00	5.0%	\$ 2,009.00	\$ 18,081.00
TOTALS		\$ 389,746.00	100%	\$ 38,974.60	\$ 350,771.40
NIBRS Mandatory Compliance County Local					
Fee	Government	\$ 401,800.00	3%	\$ 12,054.00	\$ 389,746.00
Fiscal Agency Administrative County Local					
Fee	Government	\$ 389,746.00	10%	\$ 38,974.60	\$ 350,771.40

Edward Byrne Memorial Justice Assistance Grant Program FY 2019 Local Solicitation CFDA# 16.738



Agenda Item

City Council

Item #: 3.9.

9/8/2020

File #: 20-078

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Thomas C. Kisela, Chief of Police

1. SUBJECT

Agreement with the City of Santa Ana for Fiscal Year 2018-2019 Urban Areas Security Initiative grant.

2. SUMMARY

The Anaheim/Santa Ana Urban Areas Security Initiative grant program is an agreement for transfer or purchase of equipment and services needed to manage and organize preparedness activities attributed to acts of terrorism and other threats.

3. RECOMMENDED ACTION

Approve the agreement with the City of Santa Ana for Fiscal Year 2018-2019 Urban Areas Security Initiative grant and authorize the City Manager to execute on behalf of the City.

4. FISCAL IMPACT

None.

5. STRATEGIC PLAN GOALS

Goal 1: Provide for a safe community

c: Enhance the emergency management system to provide public safety during times of disaster.

6. DISCUSSION AND BACKGROUND

The Anaheim/Santa Ana Urban Areas Security Initiative (UASI) grant program provides funds to state and local agencies to prevent terrorism and other catastrophic events by focusing on a range of preparedness activities, including planning, organization, equipment purchases, training, and exercises. These activities can only be realized through information sharing and collaboration between local and federal agencies seeking to reduce the risks posed by terrorism. Such activities require careful planning and training geared towards evolving threats identified in the below four priority areas.

- 1) Enhancing cybersecurity
- 2) Enhancing protection of soft targets/crowded places
- 3) Enhancing information/intelligence sharing and cooperation with federal agencies, including

the Department of Homeland Security

4) Addressing emergent threats

To support the UASI grant program, the Orange Police Department currently has 87 Terrorism Liaison Officers trained to report suspicious activity that may be encountered during the course of his or her normal duties. In addition, key personnel participate in regional training exercises to prepare and improve our ability to respond to complex threats. Regional training program objectives ensure training programs are delivered to accomplish core capabilities and heightened awareness levels that address the above priority levels among first responders.

The California Governor's Office of Emergency Services' performance period for the Anaheim/Santa Ana Urban Area is September 1, 2019 through May 31, 2022. However, the Sub-Recipient performance period for the FY19 UASI Grant Program is April 9, 2020 through March 31, 2022. The agreement allows officers to participate in eligible training courses maintained by Homeland Security at no cost. Due to a reduced UASI grant allocation, reimbursement for overtime and backfill for training is no longer being offered. The UASI grant is a transfer agreement that provides unique equipment, training, planning, and exercise needs with no monetary value. Additionally, the transfer agreement is a required condition to maintain federally funded equipment acquired through the UASI grant program. Current equipment acquired through the UASI grant program is maintained at the Orange Police Department and includes automatic license plate readers, mobile radios, Community Emergency Response Team (CERT) equipment, and most recently, a CERT trailer.

7. ATTACHMENTS

- FY19 UASI Agreement



Agenda Item

City Council

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- FY19 UASI Agreement

AGREEMENT

SUB-RECIPIENT: CITY OF ORANGE

City Contract Number _____

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Exhibit A	Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion Lower Tier Covered Transactions
Exhibit B	Certification Regarding Lobbying
Exhibit C	Standard Assurances

AGREEMENT FOR TRANSFER OR PURCHASE OF EQUIPMENT/SERVICES OR FOR
REIMBURSEMENT OF TRAINING COSTS
FOR FY2019 URBAN AREAS SECURITY INITIATIVE (UASI)

BETWEEN
THE CITY OF SANTA ANA
AND CITY OF ORANGE

THIS AGREEMENT is made and entered into this ____ day of MONTH, YEAR, by and between the CITY OF SANTA ANA, a municipal corporation (the "CITY"), and CITY OF ORANGE (the "SUB-RECIPIENT" or "Contractor").

WITNESSETH

WHEREAS, CITY, acting through the Santa Ana Police Department in its capacity as a Core City for the Anaheim/Santa Ana Urban Area under the FY2019 Urban Areas Security Initiative, has applied for, received and accepted a grant entitled "FY 2019 Urban Areas Security Initiative" from the federal Department Of Homeland Security(DHS) Federal Emergency Management Agency (FEMA), through the State of California Governor's Office of Emergency Services (CalOES), to enhance countywide emergency preparedness (the "grant"), as set forth in the grant guidelines and assurances that are incorporated to this Agreement by reference and located at:

"U.S. Department of Homeland Security "Fiscal Year 2019 Homeland Security Grant Program (HSGP) Notice of Funding Opportunity (NOFO)"
https://www.fema.gov/media-library-data/1555008381091-144e7470ec5e1958d6ad5e103c0825ad/FY_2019_HSGP_NOFO_FINAL_508.pdf

California Governor's Office of Emergency Services "FY2019 Homeland Security Grant Program: California Supplement to Federal Program Guidance and Application Kit"
<https://www.caloes.ca.gov/GrantsManagementSite/Documents/FY%202019%20HSGP%20State%20Guidance.pdf>

Copies of the grant guidelines shall be retained in the Anaheim/Santa Ana Grant Office.

WHEREAS, this financial assistance is administered by the CITY OF SANTA ANA ("CITY") and is overseen by the California Governor's Office of Emergency Services ("Cal-OES"); and

WHEREAS, this financial assistance is being provided to address the unique equipment, training, planning, and exercise needs of large urban areas, and to assist them in building an enhanced and sustainable capacity to prevent, respond to, and recover from threats or acts of terrorism; and

WHEREAS, the Anaheim/Santa Ana Urban Area ("ASAUA") consists of 34 cities in Orange County, including the City of Santa Ana and the City of Anaheim, the County of Orange, including the unincorporated area of the County of Orange, Santa Ana Unified School District Police, California State University, Fullerton, University of California, Irvine, Municipal Water District of Orange County, and the Orange County Fire Authority; and

WHEREAS, the Office of Grants Management ("OGM") awarded a FY2019 UASI Grant of \$4,850,000 ("Grant Funds") to the CITY OF SANTA ANA, as a Core City, for use in the ASAUA; and

WHEREAS, the CITY has designated the Chief of Police, or his designee and the Santa Ana Police Department, Homeland Security Division ("UASI Grant Office") to provide for terrorism prevention and emergency preparedness; and

WHEREAS, the UASI Grant Office now wishes to distribute FY2019 UASI Grant Funds throughout the ASAUA, as further detailed in this Agreement ("Agreement") to CITY OF ORANGE ("SUB-RECIPIENT") and others;

WHEREAS, the CITY and SUB-RECIPIENT are desirous of executing this Agreement as authorized by the City Council and the City Manager which authorizes the CITY to prepare and execute the Agreement.

NOW, THEREFORE, IT IS MUTUALLY AGREED AS FOLLOWS:

I
INTRODUCTION

§101. Parties to the Agreement

The parties to this Agreement are:

- A. The CITY, a municipal corporation, having its principal office at 20 Civic Center Plaza, Santa Ana, CA 92702; and
- B. CITY OF ORANGE, a municipal corporation, 300 E. Chapman Avenue, Orange, CA 92866

§102. Representatives of the Parties and Service of Notices

A. The representatives of the respective parties who are authorized to administer this Agreement and to whom formal notices, demands and communications shall be given are as follows:

- 1. The representative of the CITY OF SANTA ANA shall be, unless otherwise stated in the Agreement:

Michael Claborn, Commander
Santa Ana Police Department
Homeland Security Division
60 Civic Center Plaza
Santa Ana, CA 92702
Phone: (714) 245-8304
Fax: (714) 245-8098
mclaborn@santa-ana.org

- 2. The representative of CITY OF ORANGE shall be:

Clara Ramirez, Police Sergeant
CITY OF ORANGE
300 E. Chapman Avenue, Orange, CA 92866
Phone: (714) 744-7462
E-mail: cramirez@orangepd.org

- B. Formal notices, demands and communications to be given hereunder by either party shall be made in writing and may be effected by personal delivery or by registered or certified mail, postage prepaid, return receipt requested and shall be deemed communicated as of the date of mailing.
- C. If the name of the person designated to receive the notices, demands or communications or the address of such person is changed, written notice shall be given, in accord with this section, within five (5) business days of said change.

§103. Independent Party

SUB-RECIPIENT is acting hereunder as an independent party, and not as an agent or employee of the CITY OF SANTA ANA. No employee of SUB-RECIPIENT is, or shall be an employee of the CITY OF SANTA ANA by virtue of this Agreement, and SUB-RECIPIENT shall so inform each employee organization and each employee who is hired or retained under this Agreement. SUB-RECIPIENT shall not represent or otherwise hold out itself or any of its directors, officers, partners, employees, or agents to be an agent or employee of the CITY OF SANTA ANA.

§104. Conditions Precedent to Execution of This Agreement

SUB-RECIPIENT shall provide copies of the following documents to the CITY OF SANTA ANA, unless otherwise exempted.

- A. Grant Assurances in accordance with section 415C of this Agreement attached hereto as Exhibit C and made part hereof.
- B. Certifications Regarding Ineligibility, Suspension and Debarment as required by Executive Order 12549 in accordance with Section 415A12 of this Agreement and attached hereto as Exhibit A and made a part hereof.
- C. Certifications and Disclosures Regarding Lobbying in accordance with Section 415C of this Agreement and attached hereto as Exhibit B and made a part hereof. SUB-RECIPIENT shall also file a Disclosure Form at the end of each calendar quarter in which there occurs any event requiring disclosure or which materially affects the accuracy of the information contained in any Disclosure Form previously filed by SUB-RECIPIENT.

II
TERM AND SERVICES TO BE PROVIDED

§201. Time of Performance

The term of this Agreement shall commence on 04/09/2020 and end on 03/31/2022 or upon the final disbursement of all of the Grant Amount (as defined in Section 301) and any additional period of time as is required to complete any necessary close out activities. Said term is subject to the provisions herein.

§202. Use of Grant Funds

- A. CITY may, a) transfer to SUB-RECIPIENT, equipment or services purchased with grant funds and in accordance with grant guidelines set forth above; or, b) reimburse SUB-RECIPIENT for purchase of authorized equipment, exercises, services or training upon receiving prior written approval from CITY or its designee and in accordance with grant guidelines and in full compliance with all of the SUB-RECIPIENT'S purchasing and bidding procedures. SUB-RECIPIENT shall specify the equipment, services, exercises and training to be purchased using the Application for Project Funding. A paper copy of this document will be provided to SUB-RECIPIENT by CITY. In addition, copies of the document will be provided electronically to SUB-RECIPIENT by CITY. If additional copies of the document are needed, SUB-RECIPIENT may contact the Santa Ana Grant Coordinator and it will be provided.
- B. SUB-RECIPIENT shall provide any reports requested by the CITY regarding the performance of the Agreement. Reports shall be in the form requested by the CITY, and shall be provided in a timely manner.
- C. SUB-RECIPIENT shall provide the CITY a copy of its most current procurement guidelines and follow its own procurement requirements as long as they meet the minimum federal requirements. Federal procurement requirements for the FY 2019 UASI Grant can be found at 2 Code of Federal Regulations (CFR) Part 200 "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards."
- D. The Authorized Equipment List (AEL) is a list of the allowable equipment which may be purchased pursuant to this Agreement and is located at http://www.fema.gov/media-library-data/20130726-1825-25045-7138/fema_preparedness_grants_authorized_equipment_list.pdf, and incorporated to this Agreement by reference. A copy of the AEL shall be retained in the Anaheim/Santa Ana Grant Office. Unless otherwise stated in program guidance any equipment acquired pursuant to this Agreement shall meet all mandatory regulations and/or DHS-adopted standards to be eligible for purchase using grant funds.

Any equipment acquired or obtained with Grant Funds:

1. Shall be made available under the California Disaster and Civil Defense Master Mutual Aid Agreement in consultation with representatives of the various fire, emergency medical, hazardous materials response services, and law enforcement agencies within the jurisdiction of the applicant;
2. Shall be consistent with needs as identified in the National Priorities and Core Capabilities, the State Homeland Security Strategy and the Anaheim/Santa Ana Urban Area and Orange County Operational Area Homeland Security Grants Strategy; and deployed in conformance with those plans;
3. Shall be made available pursuant to applicable terms of the California Disaster and Civil Defense Master Mutual Aid Agreement and deployed with personnel trained in the use of such equipment in a manner consistent with the California Law Enforcement Mutual Aid Plan or the California Fire Services and Rescue Mutual Aid Plan;
4. Shall be subject to the requirements of Title 2 CFR Part 200.313 and 200.314. For the purposes of this subsection, "Equipment" is defined as nonexpendable property that is not consumed or does not lose its identity by being incorporated into another item of equipment, which costs \$5,000 or more per unit, or is expected to have a useful life of one (1) year or more.
5. Shall be used by SUB-RECIPIENT in the program or project for which it was acquired as long as needed, whether or not the project or program continues to be supported by Federal funds. When no longer useful for the original program or project, the Equipment may be used in other activities currently or previously supported by a Federal agency.
6. Shall be made available for use on other projects or programs currently or previously supported by the Federal Government, providing such use will not interfere with the work on the projects or program for which it was originally acquired. First preference for other use shall be given to other programs or projects supported by the awarding agency.
7. Shall be recorded on a ledger. The record shall include: (a) description of the item of Equipment, (b) a serial number or other identification number, (c) the source of funding for the property (including the FAIN), (d) who holds the title, (e) the acquisition date, (f) the cost of the property, (g) percentage of Federal participation in the project costs for the Federal award under which the property was acquired, (h) location, (i) use and condition of Equipment, and (j)

ultimate disposition data including the date of disposal and sale price of the property. Records must be retained pursuant to 2 CFR Part 200.313.

8. All equipment obtained under this Agreement shall have an ASUA identification decal affixed to it, and, when practical, shall be affixed where it is readily visible.
 9. A physical inventory of the Equipment shall be taken and the results reconciled with the Equipment records at least once every two years. Inventory shall also be taken prior to any UASI, State or Federal monitor visits.
 10. SUB-RECIPIENT shall exercise due care to preserve and safeguard equipment acquired with grant funds from damage or destruction and shall provide regular maintenance and such repairs for said equipment as necessary, in order to keep said equipment continually in good working order. Such maintenance and servicing shall be the sole responsibility of SUB-RECIPIENT, who shall assume full responsibility for maintenance and repair of the equipment throughout the life of said equipment.
 11. SUB-RECIPIENT shall identify a Point-of-Contact (POC) to be responsible for all Equipment prior to the receipt of the item(s). POC will serve as the custodian of the Equipment. SUB-RECIPIENT shall notify the CITY of any change in the POC and assume the responsibility of advising the new custodian of all UASI grant program guidelines and requirements.
 12. SUB-RECIPIENT shall contact the ASUA Grant Office prior to initiating the disposition process. Disposal of equipment shall be conducted pursuant to 2 CFR Part 200.313. The ASUA will contact the awarding agency for disposition instructions, if necessary, prior to any action being taken.
- D. Any training paid pursuant to this Agreement shall conform to the guidelines as listed in FY 2019 Homeland Security Grant Program, as set forth above. All training expenses must be pre-authorized by Cal-OES at <https://www.caloes.ca.gov/CaliforniaSpecializedTrainingInstituteSite/Documents/HSG%20Funds%20Tracking%20Number%20Request%20Form.pdf>. A catalogue of Grantor approved and sponsored training courses is available at <https://cdp.dhs.gov/>.
- E. Any exercise paid pursuant to this Agreement shall conform to the guidelines as listed in FY 2019 Homeland Security Grant Program, as set forth above. Detailed Homeland Security Exercise and Evaluation Program Guidance is available at <http://hseep.dhs.gov>.

- F. Any planning paid pursuant to this Agreement shall conform to the guidelines as listed in FY 2019 Homeland Security Grant Program, as set forth above.
- G. Any organizational activities paid pursuant to this Agreement shall conform to the guidelines as listed in FY 2019 Homeland Security Grant Program, as set forth above.

III
PAYMENT

§301. Payment of Grant Funds and Method of Payment

- A. CITY may, a) transfer to SUB-RECIPIENT, equipment or services purchased with grant funds; or, b) reimburse SUB-RECIPIENT for the purchase of authorized equipment, exercises, services or training upon receiving prior written approval from CITY or its designee and in accordance with grant guidelines and in full compliance with all of the SUB-RECIPIENT'S purchasing and bidding procedures. SUB-RECIPIENT shall specify the equipment, exercises, services or training to be purchased using the Application for Project Funding. A copy of this document will be provided to SUB-RECIPIENT by CITY. If additional copies of the document are needed, SUB-RECIPIENT may contact the Santa Ana Grant Coordinator and it will be provided. Funds may be used for planning, exercises, organizational and training activities, and the purchase of equipment as described in Section 202 above.
- B. SUB-RECIPIENT shall provide invoices to the CITY requesting payment and all supporting documentation. Each reimbursement request shall be accompanied by the Reimbursement Request for Grant Expenditures detailing the expenditures made by SUB-RECIPIENT as authorized by Section 202 above. Each reimbursement request shall be submitted to the Santa Ana UASI Grant Office. For equipment for which SUB-RECIPIENT is requesting reimbursement, all appropriate back-up documentation must be attached to the reimbursement form, including invoices, proof of payment, packing slips, and Equipment Reimbursement Worksheet. For training reimbursements, SUB-RECIPIENT must include a copy of any certificates issued or a copy of the class roster verifying training attendees, proof that a CalOES tracking number has been assigned to the course, timesheets and payroll registers for all training attendees, receipts for travel expenses related to the training, and Training Reimbursement Worksheet. For regional project reimbursements, SUB-RECIPIENT must include approval from the lead agency for all submitted invoices.
- C. Payment of final invoice shall be withheld by the CITY until the SUB-RECIPIENT has turned in all supporting documentation and completed the requirements of this Agreement.
- D. It is understood that the CITY makes no commitment to fund this Agreement beyond the terms set forth herein.
- E. Funding for all periods of this Agreement is subject to the continuing availability to the CITY of federal funds for this program. The Agreement may be terminated immediately upon written notice to SUB-RECIPIENT of a loss or reduction of federal grant funds.

IV
STANDARD PROVISIONS

§401. Construction of Provisions and Titles Herein

All titles or subtitles appearing herein have been inserted for convenience and shall not be deemed to affect the meaning or construction of any of the terms or provisions hereof. The language of this Agreement shall be construed according to its fair meaning and not strictly for or against either party. The word "Sub-recipient" herein and in any amendments hereto includes the party or parties identified in this Agreement. The singular shall include the plural. If there is more than one Sub-recipient as identified herein, unless expressly stated otherwise, their obligations and liabilities hereunder shall be joint and several. Use of the feminine, masculine, or neuter genders shall be deemed to include the genders not used.

§402. Applicable Law, Interpretation and Enforcement

Each party's performance hereunder shall comply with all applicable laws of the United States of America, the State of California, and the CITY. This Agreement shall be enforced and interpreted under the laws of the State of California and the CITY.

If any part, term or provision of this Agreement shall be held void, illegal, unenforceable, or in conflict with any law of a federal, state or local government having jurisdiction over this Agreement, the validity of the remaining portions of provisions shall not be affected thereby.

§403. Integrated Agreement

This Agreement sets forth all of the rights and duties of the parties with respect to the subject matter hereof, and replaces any and all previous agreements or understandings, whether written or oral, relating thereto. This Agreement may be amended only by a written instrument executed by both parties hereto.

§404. Excusable Delays

In the event that performance on the part of any party hereto shall be delayed or suspended as a result of circumstances beyond the reasonable control and without the fault and negligence of said party, none of the parties shall incur any liability to the other parties as a result of such delay or suspension. Circumstances deemed to be beyond the control of the parties hereunder shall include, but not be limited to, acts of God or of the public enemy; insurrection; acts of the Federal Government or any unit of State or Local Government in either sovereign or contractual capacity; fires; floods; epidemics; quarantine

restrictions; strikes, freight embargoes or delays in transportation; to the extent that they are not caused by the party's willful or negligent acts or omissions and to the extent that they are beyond the party's reasonable control.

§405. Breach

Except for excusable delays, if any party fails to perform, in whole or in part, any promise, covenant, or agreement set forth herein, or should any representation made by it be untrue, any aggrieved party may avail itself of all rights and remedies, at law or equity, in the courts of law. Said rights and remedies are cumulative of those provided for herein except that in no event shall any party recover more than once, suffer a penalty or forfeiture, or be unjustly compensated.

§406. Prohibition Against Assignment or Delegation

SUB-RECIPIENT may not, unless it has first obtained the written permission of the CITY:

- A. Assign or otherwise alienate any of its rights hereunder, including the right to payment; or
- B. Delegate, subcontract, or otherwise transfer any of its duties hereunder.

§407. Permits

SUB-RECIPIENT and its officers, agents and employees shall obtain and maintain all permits and licenses necessary for SUB-RECIPIENT performance hereunder and shall pay any fees required therefore. SUB-RECIPIENT further certifies to immediately notify the CITY of any suspension, termination, lapses, non renewals or restrictions of licenses, certificates, or other documents.

§408. Nondiscrimination and Affirmative Action

SUB-RECIPIENT shall comply with the applicable nondiscrimination and affirmative action provisions of the laws of the United States of America, the State of California, and the CITY. In performing this Agreement, SUB-RECIPIENT shall not discriminate in its employment practices against any employee or applicant for employment because of such person's ancestry, familial status, race, color, religious creed (including religious dress and grooming practices), sex (which includes pregnancy, childbirth, breastfeeding, and medical conditions related to pregnancy, childbirth, or breastfeeding), gender, gender identity, gender expression, sexual orientation, marital status, national origin, ancestry, mental or physical disability, genetic information, medical condition, age, pregnancy, denial of medical and family care leave, or pregnancy disability (California Government Code §§ 12490, 12945, 12945.2), military or veteran status, and/or retaliation for protesting illegal discrimination related to one of these categories, or for reporting patient abuse in tax supported institutions.. SUB-RECIPIENT shall comply with Executive Order 11246, entitled "Equal

Employment Opportunity,” as amended by Executive Order 11375, and as supplemented in Department of Labor regulations (41 CFR Part 60).

If required, SUB-RECIPIENT shall submit an Equal Employment Opportunity Plan (“EEOP”) to the DOJ Office of Civil Rights (“OCR”) in accordance with guidelines listed at <http://www.ojp.usdoj.gov/ocr/eeop.htm>,

Any subcontract entered into by the SUB-RECIPIENT relating to this Agreement, to the extent allowed hereunder, shall be subject to the provisions of this § 408.

§409. Bonds

SUB-RECIPIENT must purchase a performance bond for any equipment item over \$250,000 or any vehicle (including aircraft or watercraft) financed with homeland security funds. SUB-RECIPIENT must provide a copy of performance bond to CITY no later than the time of reimbursement.

§410. Indemnification

Each of the parties to this Agreement is a public entity. In contemplation of the provisions of Section 895.2 of the Government Code of the State of California imposing certain tort liability jointly upon public entities, solely by reason of such entities being parties to an Agreement as defined by Section 895 of said Code, the parties hereto, as between themselves, pursuant to the authorization contained in Section 895.4 and 895.6 of said Code, will each assume the full liability imposed upon it or upon any of its officers, agents, or employees by law, for injury caused by a negligent or wrongful act or omission occurring in the performance of this Agreement, to the same extent that such liability would be imposed in the absence of Section 895.2 of said Code. To achieve the above-stated purpose, each party indemnifies and holds harmless the other party solely by virtue of said Section 895.2. The provision of Section 2778 of the California Civil Code is made a part hereto as if fully set forth herein. SUB-RECIPIENT certifies that it has adequate self insured retention of funds to meet any obligation arising from this Agreement.

§411. Conflict of Interest

- A. SUB-RECIPIENT covenants that none of its directors, officers, employees, or agents shall participate in selecting, or administrating any subcontract supported (in whole or in part) by Federal funds where such person is a director, officer, employee or agent of the subcontractor; or where the selection of subcontractors is or has the appearance of being motivated by a desire for personal gain for themselves or others such as family business, etc.; or where such person knows or should have known that:
1. A member of such person's immediate family, or domestic partner or organization has a financial interest in the subcontract;
 2. The subcontractor is someone with whom such person has or is negotiating any prospective employment; or

3. The participation of such person would be prohibited by the California Political Reform Act, California Government Code §87100 et seq. if such person were a public officer, because such person would have a "financial or other interest" in the subcontract.

B. Definitions:

1. The term "immediate family" includes but is not limited to domestic partner and/or those persons related by blood or marriage, such as husband, wife, father, mother, brother, sister, son, daughter, father in law, mother in law, brother in law, sister in law, son in law, daughter in law.
 2. The term "financial or other interest" includes but is not limited to:
 - a. Any direct or indirect financial interest in the specific contract, including a commission or fee, a share of the proceeds, prospect of a promotion or of future employment, a profit, or any other form of financial reward.
 - b. Any of the following interests in the subcontractor ownership: partnership interest or other beneficial interest of five percent or more; ownership of five percent or more of the stock; employment in a managerial capacity; or membership on the board of directors or governing body.
- C. The SUB-RECIPIENT further covenants that no officer, director, employee, or agent shall solicit or accept gratuities, favors, anything of monetary value from any actual or potential subcontractor, supplier, a party to a sub agreement, (or persons who are otherwise in a position to benefit from the actions of any officer, employee, or agent).
- D. The SUB-RECIPIENT shall not subcontract with a former director, officer, or employee within a one year period following the termination of the relationship between said person and the Contractor.
- E. Prior to obtaining the CITY'S approval of any subcontract, the SUB-RECIPIENT shall disclose to the CITY any relationship, financial or otherwise, direct or indirect, of the SUB-RECIPIENT or any of its officers, directors or employees or their immediate family with the proposed subcontractor and its officers, directors or employees.
- F. For further clarification of the meaning of any of the terms used herein, the parties agree that references shall be made to the guidelines, rules, and laws of the SUB-RECIPIENT, State of California, and Federal regulations regarding conflict of interest.
- G. The SUB-RECIPIENT warrants that it has not paid or given and will not pay or give to any third person any money or other consideration for obtaining this

Agreement.

- H. The SUB-RECIPIENT covenants that no member, officer or employee of SUB-RECIPIENT shall have interest, direct or indirect, in any contract or subcontract or the proceeds thereof for work to be performed in connection with this project during his/her tenure as such employee, member or officer or for one year thereafter.
- I. The SUB-RECIPIENT shall incorporate the foregoing subsections of this Section into every agreement that it enters into in connection with this project and shall substitute the term "subcontractor" for the term "SUB-RECIPIENT" and "sub subcontractor" for "Subcontractor".

§412. Restriction on Disclosures

Any reports, analysis, studies, drawings, information, or data generated as a result of this Agreement are to be governed by the California Public Records Act (California Government Code Sec. 6250, et seq.).

§413. Statutes and Regulations Applicable To All Grant Contracts

- A. SUB-RECIPIENT shall comply with all applicable requirements of state, federal, county and SUB-RECIPIENT laws, executive orders, regulations, program and administrative requirements, policies and any other requirements governing this Agreement. SUB-RECIPIENT shall comply with state and federal laws and regulations pertaining to labor, wages, hours, and other conditions of employment. SUB-RECIPIENT shall comply with new, amended, or revised laws, regulations, and/or procedures that apply to the performance of this Agreement. These requirements include, but are not limited to:

- 1. Office of Management and Budget (OMB)

- SUB-RECIPIENT shall comply with 2 Code of Federal Regulation (CFR) Part 200 (Uniform Administrative, Cost Principles, and Audit Requirements for Federal Awards).

- 2. Single Audit Act

- If Federal funds are used in the performance of this Agreement, SUB-RECIPIENT shall adhere to the rules and regulations of the Single Audit Act, 31 USC Sec. 7501 et seq.; Title 2 Code of Federal Regulations, Part 200, Subpart F Audit Requirements; and any administrative regulation or field memos implementing the Act. When reporting under on the FY19 UASI Grant Program under the Single Audit Act, SUB-RECIPIENT shall use Catalog of Federal Domestic Assistance (CFDA) Program Number 97.067 "Homeland Security Grant Program"; Grant Identification Number 2019-0035; and identify the CITY OF SANTA ANA as the Pass-Through.

- 3. Americans with Disabilities Act

SUB-RECIPIENT hereby certifies that it will comply with the Americans with Disabilities Act, 42 USC §§ 12101, et seq., and its implementing regulations. SUB-RECIPIENT will provide reasonable accommodations to allow qualified individuals with disabilities to have access to and to participate in its programs, services and activities in accordance with the provisions of the Americans with Disabilities Act. SUB-RECIPIENT will not discriminate against persons with disabilities or against persons due to their relationship to or association with a person with a disability. Any subcontract entered into by the SUB-RECIPIENT, relating to this Agreement, to the extent allowed hereunder, shall be subject to the provisions of this paragraph.

4. Political and Sectarian Activity Prohibited

None of the funds, materials, property or services provided directly or indirectly under this Agreement shall be used for any partisan political activity, or to further the election or defeat of any candidate for public office. Neither shall any funds provided under this Agreement be used for any purpose designed to support or defeat any pending legislation or administrative regulation. None of the funds provided pursuant to this Agreement shall be used for any sectarian purpose or to support or benefit any sectarian activity.

If this Agreement provides for more than \$100,000 in grant funds or more than \$150,000 in loan funds, SUB-RECIPIENT shall submit to the CITY a Certification Regarding Lobbying and a Disclosure Form, if required, in accordance with 31 USC §1352. A copy of the Certificate is attached hereto as Exhibit B. No funds will be released to SUB-RECIPIENT until the Certification is filed.

SUB-RECIPIENT shall file a Disclosure Form at the end of each calendar quarter in which there occurs any event requiring disclosure or which materially affects the accuracy of any of the information contained in any Disclosure Form previously filed by SUB-RECIPIENT. SUB-RECIPIENT shall require that the language of this Certification be included in the award documents for all sub-awards at all tiers and that all subcontractors shall certify and disclose accordingly.

5. Records Inspection

In accordance with 2 CFR §200.336, at any time during normal business hours and as often as the CITY, the U.S. Comptroller General, and/or the Auditor General of the State of California may deem necessary, SUB-RECIPIENT shall make available for examination all of its records with respect to all matters covered by this Agreement. The CITY, the U.S. Comptroller General and/or the Auditor General of the State of California shall have the authority to audit, examine and make excerpts or transcripts from records,

including SUB-RECIPIENT'S invoices, materials, payrolls, records of personnel, conditions of employment and other data relating to all matters covered by this Agreement.

SUB-RECIPIENT agrees to provide any reports requested by the CITY regarding performance of the Agreement.

6. Records Maintenance

Records, in their original form, shall be maintained in accordance with requirements prescribed by the CITY with respect to all matters covered on file for all documents specified in this Agreement. Original forms are to be maintained on file for all documents specified in this Agreement. Such records shall be retained for a period of three (3) years after the CITY receives notification of grant closeout from CalOES and after final disposition of all pending matters. "Pending matters" include, but are not limited to, an audit, litigation or other actions involving records. The CITY may, at its discretion, take possession of, retain and audit said records. Records, in their original form pertaining to matters covered by this Agreement, shall at all times be retained within the County of Orange unless authorization to remove them is granted in writing by the CITY.

7. Subcontracts and Procurement

SUB-RECIPIENT shall comply with the federal and SUB-RECIPIENT standards in the award of any subcontracts. For purposes of this Agreement, subcontracts shall include but not be limited to purchase agreements, rental or lease agreements, third party agreements, consultant service contracts and construction subcontracts.

SUB-RECIPIENT shall ensure that the terms of this Agreement with the CITY are incorporated into all Subcontractor Agreements. The SUB-RECIPIENT shall submit all Subcontractor Agreements to the CITY for review prior to the release of any funds to the subcontractor. The SUB-RECIPIENT shall withhold funds to any subcontractor agency that fails to comply with the terms and conditions of this Agreement and their respective Subcontractor Agreement.

8. Labor

SUB-RECIPIENT shall comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements, and the Hatch Act (5 USC §§1501-1508 and 7324-7328).

SUB-RECIPIENT shall comply with the Federal Fair Labor Standards

Act (29 USC §201) regarding wages and hours of employment. None of the funds shall be used to promote or deter Union/labor organizing activities. CA Gov't Code Sec. 16645, et seq.

SUB-RECIPIENT shall comply with provisions which require every employer to be insured to protect workers who may be injured on the job at all times during the performance of the work of this Agreement, as per the workers compensation laws set forth in California Labor Code §§ 3700 et seq.

9. Civil Rights

SUB-RECIPIENT shall comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681- 1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination against those with disabilities or access and functional needs; (d) The Age Discrimination act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) Public Health Service Act of 1912 (42 U.S.C. §§ 290), relating to confidentiality of patient records regarding substance abuse treatment; (f) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601, et seq.), as amended, relating to non-discrimination in the sale, rental or financing of housing as implemented by the Department of Housing and Urban Development at 24 C.F.R. Part 100. The prohibition on disability discrimination includes the requirement that new multifamily housing with four or more dwelling units-i.e., the public and common use areas and individual apartment units (all units in buildings with elevators and ground floor units in buildings without elevators)-be designed and constructed with certain accessible features (See 24 C.F.R. § 100.201); (g) Executive Order 11246, which prohibits federal contractors and federally assisted construction contractors and subcontractors, who do over \$10,000 in Government business in one year from discriminating in employment decisions on the basis of race, color, religion, sex, sexual orientation, gender identification, or national origin; (h) Executive Order 11375, which bans discrimination on the basis of race, color, religion, sex, sexual orientation, gender identification, or national origin in hiring and employment in both the United States federal workforce and on the part of government contractors; (i) California Public Contract Code §10295.3, which prohibits discrimination based on domestic partnerships and those in same sex marriages; (j) DHS policy to ensure the equal treatment of faith-based organizations, under which all applicants and recipients must comply with equal treatment policies and requirements contained in 6 C.F.R. Part 19; (k) Any other nondiscrimination provisions in the specific statute(s) under which application for federal

assistance is being made; and (l) The requirements of any other nondiscrimination statute(s) which may apply to the application.

10. Environmental

SUB-RECIPIENT shall comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.

SUB-RECIPIENT shall comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190); the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA; and Executive Order 12898 which focuses on the environmental and human health effects of federal actions on minority and low-income populations with the goal of achieving environmental protection for all communities; (b) Executive Order (EO) 11514; (c) notification of violating facilities pursuant to EO 11738; (d) protection of wetlands pursuant to EO 11990; (e) evaluation of flood hazards in floodplains in accordance with EO 11988; (f) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451, et seq.); (g) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401, et seq.); (h) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); (i) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205); and (j) Flood Disaster Protection Act of 1973 §102(a) (P.L. 93-234).

SUB-RECIPIENT shall comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271, et seq.) related to protecting components or potential components of the national wild and scenic rivers system.

SUB-RECIPIENT shall comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801, et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.

SUB-RECIPIENT shall comply with the Federal Water Pollution Control Act (33 U.S.C. 1251-1387) which restores and maintains the chemical, physical and biological integrity of the Nation's waters.

SUB-RECIPIENT shall comply with the Federal Clean Water Act (CWA) (33 U.S.C §1251 et seq.), which establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters.

SUB-RECIPIENT shall comply with Federal Clean Air Act of 1955 (42 U.S.C. § 7401) which regulates air emissions from stationary and mobile sources.

SUB-RECIPIENT shall ensure that the facilities under its ownership, lease or supervision which shall be utilized in the accomplishment of this project are not listed in the Environmental Protection Agency's (EPA) list of Violating Facilities and that it will notify the Federal Grantor agency of the receipt of any communication from the Director of the EPA Office of Federal Activities indicating that a facility to be used in the project is under consideration for listing by the EPA.

SUB-RECIPIENT shall comply with the Energy Policy and Conservation Act (P.L. 94-163, 89 Stat. 871).

SUB-RECIPIENT shall not be: (1) in violation of any order or resolution promulgated by the State Air Resources Board or an air pollution district; (2) subject to a cease and desist order pursuant to § 13301 of the California Water Code for violation of waste discharge requirements or discharge prohibitions; or (3) determined to be in violation of federal law relating to air or water pollution.

By signing this Agreement, SUB-RECIPIENT ensures that it is in compliance with the California Environmental Quality Act (CEQA), Public Resources Code §21000, et seq., CEQA Guidelines (California Code of Regulations, Title 14 Division 6, Chapter 3, §§ 15000-15387), and is not impacting the environment negatively.

11. Preservation

SUB-RECIPIENT shall comply with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1, et seq.).

12. Suspension and Debarment

SUB-RECIPIENT shall comply with Federal Register, Volume 68, Number 228, regarding Suspension and Debarment, and SUB-RECIPIENT shall submit a Certification Regarding Debarment required by Executive Order 12549 and any amendment thereto. Said Certification shall be submitted to the CITY concurrent with the execution of this Agreement and shall certify that neither SUB-

RECIPIENT nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any federal department head or agency. SUB-RECIPIENT shall require that the language of this Certification be included in the award documents for all sub-award at all tiers and that all subcontractors shall certify accordingly.

As required by Executive Orders (EO) 12549 and 12689, and 2 CFR §200.212 and codified in 2 CFR Part 180, Debarment and Suspension, SUB-RECIPIENT will provide protection against waste, fraud and abuse by debaring or suspending those persons deemed irresponsible in their dealings with the Federal government.

13. Drug-Free Workplace

SUB-RECIPIENT shall comply with the federal Drug-Free Workplace Act of 1988, 41 USC §701, 44 CFR Part 67; the California Drug-Free Workplace Act of 1990, CA Gov't Code §§ 8350-8357.

14. Financial Management

SUB-RECIPIENT will comply with 31 U.S.C §3729 which sets forth that no subgrantee, recipient or subrecipient shall submit a false claim for payment, reimbursement or advance.

15. Reporting – Accountability

SUB-RECIPIENT agrees to comply with applicable provisions of the Federal Funding Accountability and Transparency Act (FFATA) (2 CFR Chapter 1, Part 170), specifically (a) the reporting of sub awards obligating \$25,000 or more in federal funds and (b) executive compensation data for first-tier sub-awards. This includes the provisions of FFATA, which includes requirements on executive compensation, and also requirements implementing the Act for the non-Federal entity at 2 CFR part 25 Financial Assistance Use of Universal Identifier and Central Contractor Registration and 2 CFR part 170 Reporting Sub-award and Executive Compensation Information.

SUB-RECIPIENT must also comply with statutory requirements for whistleblower protections at 10 U.S.C. §2409, 41 U.S.C. §4712, and 10 U.S.C. §2324, 41 U.S.C. §4304 and §4310 and 31 U.S.C. §6101 et seq.

16. Human Trafficking

SUB-RECIPIENT will comply with the requirements of Section 106(g) of the Trafficking Victims Protection Act (TVPA) of 2000, as amended (22 U.S.C. §7104) which prohibits grant award recipients or a sub-recipient from (1) Engaging in severe forms of trafficking in

persons during the period of time that the award is in effect (2) Procuring a commercial sex act during the period of time that the award is in effect or (3) Using forced labor in the performance of the award or sub-awards under the award.

17. Freedom of Information Act

SUB-RECIPIENT acknowledges that all information submitted in the course of applying for funding under this program or provided in the course of an entity's grant management activities which is under Federal control is subject to the Freedom of Information Act (FOIA), 5 U.S.C. §552. SUB-RECIPIENT should also consult State and local laws and regulations regarding the release of information, which should be considered when reporting sensitive matters in the grant application, needs assessment and strategic planning process.

18. California Public Records Act

SUB-RECIPIENT acknowledges that all information submitted in the course of applying for funding under this program or provided in the course of an entity's grant management activities may be subject to the California Public Records Act (California Government Code §§6250-6276.48), which requires inspection and/or disclosure of governmental records to the public upon request, unless exempted by law.

B. Statutes and Regulations Applicable To This Particular Grant

SUB-RECIPIENT shall comply with all applicable requirements of state and federal laws, executive orders, regulations, program and administrative requirements, policies and any other requirements governing this particular grant program. SUB-RECIPIENT shall comply with new, amended, or revised laws, regulations, and/or procedures that apply to the performance of this Agreement. These requirements include, but are not limited to:

1. Title 2 Code of Federal Regulations (CFR) Part 200; EO 12372; Department of Justice (DOJ) Office of Judicial Programs (OJP) Office of the Comptroller, U.S. Department of Homeland Security, Preparedness Directorate Financial Management Guide; U.S. Department of Homeland Security, Office of Grants and Training, FY 2019 Homeland Security Grant Program –Notice of Funding Opportunity; ODP WMD Training Course Catalogue; and DOJ Office for Civil Rights.

Standardized Emergency Management System (SEMS) requirements as stated in the California Emergency Services Act, Government Code Chapter 7 of Division 1 of Title 2, § 8607.1(e) and CCR Title 19, §§ 2445-2448.

Provisions of 44 CFR applicable to grants and cooperative agreements, including Part 18, Administrative Review Procedures; Part 20, Criminal Justice Information Systems; Part 22, Confidentiality of Identifiable Research and Statistical Information; Part 23, Criminal Intelligence Systems Operating Policies; Part 30, Intergovernmental Review of Department of Justice Programs and Activities; Part 35, Nondiscrimination on the Basis of Disability in State and Local Government Services; Part 38, Equal Treatment of Faith-based Organizations; Part 42, Nondiscrimination/Equal employment Opportunities Policies and Procedures; Part 61, Procedures for Implementing the National Environmental Policy Act; Part 63, Floodplain Management and Wetland Protection Procedures; Part 64, Floodplain Management and Wetland Protection Procedures; Federal laws or regulations applicable to federal Assistance Programs; Part 69, New Restrictions on Lobbying; Part 70, Uniform Administrative Requirements for Grants and Cooperative Agreements (including sub-awards) with Institutions of Higher Learning, Hospitals and other Non-Profit Organizations; and Part 83, Government- Wide Requirements for a Drug Free Workplace (grants).

2. Travel Expenses

SUB-RECIPIENT as provided herein may be compensated for SUB-RECIPIENT'S reasonable travel expenses incurred in the performance of this Agreement, to include travel and per diem, unless otherwise expressed. Travel including in-State and out-of-State travel shall not be reimbursed without prior written authorization from the UASI Grant Office.

SUB-RECIPIENT'S travel and per diem reimbursement costs shall be reimbursed based on the SUB-RECIPIENT'S travel policies and procedures. If SUB-RECIPIENT does not have established travel policies and procedures, SUB-RECIPIENT'S reimbursement rates shall not exceed the amounts established under 5 U.S.C 5701-11, ("Travel and Subsistence Expenses; Mileage Allowances"), or by the Administrator of General Services, or by the President (or his or her designee) pursuant to any provisions of such subchapter must apply to travel under federal awards (48 CFR 31.205-46(a)).

3. Personally Identifiable Information

SUB-RECIPIENT collecting Personally Identifiable Information (PII) must have a publically-available policy that describes what PII they collect, how they plan to use the PII, whether they share PII with third parties, and how individuals may have their PII corrected where appropriate. DHS defines personally identifiable information (PII) as any information that permits the identity of an

individual to be directly or indirectly inferred, including any information that is linked or linkable to that individual.

4. Hotel and Motel Fire Safety Act of 1990

SUB-RECIPIENT must ensure that all conference, meeting, convention, or training space funded in whole or in part with Federal funds complies with Section 6 of the fire prevention and control guidelines of the Federal Fire Prevention and Control Act of 1974, 15 U.S.C. §2225a.

5. Terrorist Financing E.O. 13224

SUB-RECIPIENT must comply with U.S. Executive Order 13224 and U.S. law that prohibit transactions with, and the provisions of resources and support to, individuals and organizations associated with terrorism.

6. USA Patriot Act of 2001

SUB-RECIPIENT must comply with the requirements of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act (USA Patriot Act), which amends 18 U.S.C. §§175-175c.

7. Acknowledgement of Federal Funding from DHS

SUB-RECIPIENT must acknowledge their use of federal funding when issuing statements, press releases, requests for proposals, bid invitations, and other documents describing projects or programs funded in whole or in part with federal funds.

8. Federal Debt Status

SUB-RECIPIENT is required to be non-delinquent in their repayment of any federal debt. Examples of relevant debt include delinquent payroll and other taxes, audit disallowances, and benefit overpayments. See OMB Circular A-129.

9. Fly America Act of 1974

SUB-RECIPIENT must comply with Preference for U.S. Flag Air Carriers: (air carriers holding certificates under 49 U.S.C. § 41102) for international air transportation of people and property to the extent that such service is available, in accordance with the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. § 40118) and the interpretative guidelines issued by the Comptroller General of the United States in the March 31, 1981, amendment to Comptroller General Decision B-138942

10. Noncompliance

SUB-RECIPIENT understands that failure to comply with any of the above assurances may result in suspension, termination or reduction of grant funds, and repayment by SUB-RECIPIENT to CITY of any unlawful expenditures.

C. Compliance With Standard Assurances

To obtain the Grant Funds, the Grantor required an authorized representative of the CITY to sign certain promises regarding the way the Grant Funds would be spent ("Standard Assurances"), attached hereto as Exhibit C. By signing these Standard Assurances, the CITY became liable to the Grantor for any funds that are used in violation of the grant requirements. SUB-RECIPIENT shall be liable to the Grantor for any funds the Grantor determines SUB-RECIPIENT used in violation of these Grant Assurances. SUB-RECIPIENT shall indemnify and hold harmless the CITY for any sums the Grantor determines SUB-RECIPIENT used in violation of the Standard Assurances.

§414. Federal, State and Local Taxes

Federal, State and local taxes shall be the responsibility of SUB-RECIPIENT as an independent party and not as a CITY employee.

§415. Inventions, Patents and Copyrights

A. Reporting Procedure for Inventions

If any project produces any invention or discovery (Invention) patentable or otherwise under title 35 of the U.S. Code, including, without limitation, processes and business methods made in the course of work under this Agreement, the SUB-RECIPIENT shall report the fact and disclose the Invention promptly and fully to the CITY. The CITY shall report the fact and disclose the Invention to the Grantor. Unless there is a prior agreement between the CITY and the Grantor, the Grantor shall determine whether to seek protection on the Invention. The Grantor shall determine how the rights in the Invention, including rights under any patent issued thereon, will be allocated and administered in order to protect the public interest consistent with the policy ("Policy") embodied in the Federal Acquisition Regulations System, which is based on Ch. 18 of title 35 U.S.C. Sections 200, et seq. (Pub. L. 95-517, Pub. L. 98-620, 37 CFR part 401); Presidential Memorandum on Government Patent Policy to the Heads of the Executive Departments and Agencies, dated 2/18/1983); and Executive Order 12591, 4/10/87, 52 FR 13414, 3 CFR, 1987 Comp., p. 220 (as amended by Executive Order 12618, 12/22/87, 52 FR 48661, 3 CFR, 1987 Comp., p. 262). SUB-RECIPIENT hereby agrees to be bound by the Policy, and will contractually require its personnel to be bound by the Policy.

B. Rights to Use Inventions

CITY shall have an unencumbered right, and a non-exclusive, irrevocable, royalty- free license, to use, manufacture, improve upon, and allow others to do so for all government purposes, any Invention developed under this Agreement.

C. Copyright Policy

1. Unless otherwise provided by the terms of the Grantor or of this Agreement, when copyrightable material ("Material") is developed under this Agreement, the author or the CITY, at the CITY'S discretion, may copyright the Material. If the CITY declines to copyright the Material, the CITY shall have an unencumbered right, and a non-exclusive, irrevocable, royalty- free license, to use, manufacture, improve upon, and allow others to do so for all government purposes, any Material developed under this Agreement.
2. The Grantor shall have an unencumbered right, and a non-exclusive, irrevocable, royalty-free license, to use, manufacture, improve upon, and allow others to do so for all government purposes, any Material developed under this Agreement or any Copyright purchased under this Agreement.
3. SUB-RECIPIENT shall comply with all applicable requirements in the Code of Federal Regulations related to copyrights and copyright policy.

D. Rights to Data

The Grantor and the CITY shall have unlimited rights or copyright license to any data first produced or delivered under this Agreement. "Unlimited rights" means the right to use, disclose, reproduce, prepare derivative works, distribute copies to the public, and perform and display publicly, or permit others to do so; as required by 48 CFR 27.401. Where the data are not first produced under this Agreement or are published copyrighted data with the notice of 17 U.S.C. Section 401 or 402, the Grantor acquires the data under a copyright license as set forth in 48 CFR 27.404(f)(2) instead of unlimited rights. (48 CFR 27.404(a)).

E. Obligations Binding on Subcontractors

SUB-RECIPIENT shall require all subcontractors to comply with the obligations of this section by incorporating the terms of this section into all subcontracts.

F. Patents and Intellectual Property Rights

Unless otherwise provided by law, SUB-RECIPIENT is subject to the Bayh-Dole Act, Pub. L. No. 96-517, as amended, and codified in 35 U.S.C. § 200 et seq. SUB-RECIPIENT is subject to the specific requirements governing the development, reporting, and disposition of rights to inventions and patents resulting from financial assistance awards located at 37 C.F.R. Part 401 and

the standard patent rights clause located at 37 C.F.R. § 401.14.

§416. Minority, Women, And Other Business Enterprise Outreach Program

It is the policy of the CITY to provide minority business enterprises (MBEs), women business enterprises (WBEs) and all other business enterprises an equal opportunity to participate in the performance of all SUB-RECIPIENT contracts, including procurement, construction and personal services. This policy applies to all Contractors and Sub-Contractors.

V
DEFAULTS, SUSPENSION, TERMINATION, AND AMENDMENTS

§501. Defaults

Should SUB-RECIPIENT fail for any reason to comply with the contractual obligations of this Agreement within the time specified by this Agreement, the CITY reserves the right to terminate the Agreement, reserving all rights under state and federal law.

§502. Amendments

Any change in the terms of this Agreement, including changes in the services to be performed by SUB-RECIPIENT and any increase or decrease in the amount of compensation which are agreed to by the CITY and SUB-RECIPIENT shall be incorporated into this Agreement by a written amendment properly executed and signed by the person authorized to bind the parties thereto.

SUB-RECIPIENT agrees to comply with all future CITY Directives, or any rules, amendments or requirements promulgated by the CITY affecting this Agreement.

VI
ENTIRE AGREEMENT

§601. Complete Agreement

This Agreement contains the full and complete Agreement between the two parties. Neither verbal agreement nor conversation with any officer or employee of either party shall affect or modify any of the terms and conditions of this Agreement.

§602. Number of Pages and Attachments

This Agreement is executed in two (2) duplicate originals, each of which is deemed to be an original. This Agreement includes twenty-nine (29) pages and three (3) Exhibits which constitute the entire understanding and agreement of the parties.

IN WITNESS WHEREOF, the City and CITY OF ORANGE have caused this Agreement to be executed by their duly authorized representatives on the date first set forth above.

ATTEST:

CITY OF SANTA ANA, a municipal Corporation of the State of California

By: _____
Maria D. Huizar
Clerk of the Council

By: _____
Kristine Ridge
City Manager

RECOMMENDED FOR APPROVAL:

By: _____
David Valentin
Chief of Police

SUB-RECIPIENT
CITY OF ORANGE
DUNS # 08-9140982

APPROVED AS TO FORM:

By: _____

Printed Name _____

By: _____
Tamara Bogosian
Assistant City Attorney

Title

APPROVED AS TO FORM

By: _____

Printed Name _____

Title

EXHIBIT A
CERTIFICATION REGARDING DEBARMENT, SUSPENSION AND OTHER
RESPONSIBILITY MATTERS

Applicants should refer to the regulations cited below to determine the certification to which they are required to attest. Applicants should also review the instructions for certification included in the regulations before completing this form. Signature of this form provides for compliance with certification requirements under the applicable CFR covering New Restrictions on Government-wide Debarment and Suspension (Nonprocurement). The certification shall be treated as a material representation of fact upon which reliance will be placed when the Agency determines to award the covered transaction or cooperative agreement.

As required by Executive Order 12549, Debarment and Suspension, and implemented under the applicable CFR, for prospective participants in covered transactions, as defined in the applicable CFR

A. The applicant certifies that it and its principals:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, sentenced to a denial of Federal benefits by a State or Federal court, or voluntarily excluded from covered transactions by any Federal department or agency;
- (b) Have not within a three-year period preceding this application been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal State or local) with commission of any of these offenses enumerated in paragraph (1) (b) of this certification; and
- (d) Have not within a three-year period preceding this application had one or more public transactions (Federal, State or local) terminated for cause or default; and

B. Where the applicant is unable to certify to any of the statements in this certification, he or she shall attach an explanation to this application.

Authorized Agent Signature

Address: _____

Printed or Typed Name

Title

INSTRUCTIONS FOR CERTIFICATION

1. By signing and submitting this document, the prospective recipient of Federal assistance funds is providing the certification as set out below.
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective recipient of Federal assistance funds knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
3. The prospective recipient of Federal assistance funds shall provide immediate written notice to the person to whom this agreement is entered, if at any time the prospective recipient of Federal assistance funds learns that its certification was erroneous, when submitted or has become erroneous by reason of changed circumstances.
4. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549.
5. The prospective recipient of Federal assistance funds agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
6. The prospective recipient of Federal assistance funds further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion Lower Tier Covered Transactions," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the List of Parties Excluded from Procurement or Non Procurement Programs.
8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under Paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntary excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

EXHIBIT B

CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form LLL "Disclosure Form to Report Lobbying" in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.
4. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352 Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

AGREEMENT NUMBER

CONTRACTOR/BORROWER/AGENCY

NAME AND TITLE OF AUTHORIZED REPRESENTATIVE

SIGNATURE

DATE

EXHIBIT C
California Governor's Office of Emergency Services
Standard Assurances
(For All Cal OES Federal Grant Programs)

As the duly authorized representative of the Applicant, I hereby certify that the Applicant has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay any non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application, within prescribed timelines.

I further acknowledge that the Applicant is responsible for reviewing and adhering to all requirements within the:

- (a) Applicable Federal Regulations (see below);
- (b) Federal Program Notice of Funding Opportunity (NOFO);
- (c) Federal Preparedness Grants Manual;
- (d) California Supplement to the NOFO; and
- (e) Federal and State Grant Program Guidelines.

Federal Regulations

Government cost principles, uniform administrative requirements and audit requirements for federal grant programs are housed in Title 2, Part 200 of the Code of Federal Regulations (CFR) and in updates issued by the Office of Management and Budget (OMB) on <http://www.whitehouse.gov/omb/>.

Significant state and federal grant award requirements (some of which appear in the documents listed above) are called out below. The Applicant hereby agrees to comply with the following:

1. Proof of Authority

The Applicant will obtain written authorization from the city council, governing board or authorized body in support of this project. This written authorization must specify that the Applicant and the city council, governing board or authorized body agree:

- (a) To provide all matching funds required for said project and that any cash match will be appropriated as required.
- (b) Any liability arising out of the performance of this agreement shall be the responsibility of the Applicant and the city council, governing board or authorized body.
- (c) Grant funds shall not be used to supplant expenditures controlled by the city council, governing board or authorized body.
- (d) The official executing this agreement is, in fact, authorized to do so.

This Proof of Authority must be maintained on file and readily available upon request.

2. Period of Performance

The Applicant will initiate work after approval of the award and complete all work within the period of performance specified in the grant.

3. Lobbying and Political Activities

As required by Section 1352, Title 31 of the United States Code (U.S.C.), for persons entering into a contract, grant, loan or cooperative agreement from an agency or requests or receives from an agency a commitment providing for the United States to insure or

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guarantee a loan, the Applicant certifies that:

- (a) No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
- (b) If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.
- (c) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

The Applicant will also comply with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and §§7324- 7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with federal funds.

Finally, the Applicant agrees that federal funds will not be used, directly or indirectly, to support the enactment, repeal, modification or adoption of any law, regulation or policy without the express written approval from the California Governor's Office of Emergency Services (Cal OES) or the federal awarding agency.

4. Debarment and Suspension

As required by Executive Orders 12549 and 12689, and 2 C.F.R. §200.212 and codified in 2 C.F.R. Part 180, Debarment and Suspension, the Applicant will provide protection against waste, fraud, and abuse by debarring or suspending those persons deemed irresponsible in their dealings with the federal government. The Applicant certifies that it and its principal, sub-grantees, recipients or sub-recipients:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal department or agency;
- (b) Have not within a three-year period preceding this application been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or contract under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a

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- governmental entity (federal, state, or local) with commission of any of the offenses enumerated in paragraph (2)(b) of this certification; and
- (d) Have not within a three-year period preceding this application had one or more public transaction (federal, state, or local) terminated for cause or default.

Where the Applicant is unable to certify to any of the statements in this certification, he or she shall attach an explanation to this application.

5. Non-Discrimination and Equal Employment Opportunity

The Applicant will comply with all federal statutes relating to non-discrimination. These include, but are not limited to, the following:

- (a) Title VI of the Civil Rights Act of 1964 (Public Law (P.L.) 88-352 and 42 U.S.C. §2000d et. seq.) which prohibits discrimination on the basis of race, color, or national origin and requires that recipients of federal financial assistance take reasonable steps to provide meaningful access to persons with limited English proficiency (LEP) to their programs and services;
- (b) Title IX of the Education Amendments of 1972, (20 U.S.C. §§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex in any federally funded educational program or activity;
- (c) Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. §794), which prohibits discrimination against those with disabilities or access and functional needs;
- (d) Americans with Disabilities Act (ADA) of 1990, which prohibits discrimination on the basis of disability and requires buildings and structures be accessible to those with disabilities and access and functional needs (42 U.S.C. §§ 12101-12213.);
- (e) Age Discrimination Act of 1975, (42 U.S.C. §§ 6101-6107), which prohibits discrimination on the basis of age;
- (f) Public Health Service Act of 1912 (42 U.S.C. §§ 290), relating to confidentiality of patient records regarding substance abuse treatment;
- (g) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §3601 et seq.), relating to nondiscrimination in the sale, rental or financing of housing as implemented by the Department of Housing and Urban Development at 24 C.F.R. Part 100. The prohibition on disability discrimination includes the requirement that new multifamily housing with four or more dwelling units—i.e., the public and common use areas and individual apartment units (all units in buildings with elevators and ground-floor units in buildings without elevators)— be designed and constructed with certain accessible features (See 24 C.F.R. § 100.201);
- (h) Executive Order 11246, which prohibits federal contractors and federally assisted construction contractors and subcontractors, who do over \$10,000 in Government business in one year from discriminating in employment decisions on the basis of race, color, religion, sex, sexual orientation, gender identification, or national origin;
- (i) Executive Order 11375, which bans discrimination on the basis of race, color, religion, sex, sexual orientation, gender identification, or national origin in hiring and employment in both the United States federal workforce and on the part of government contractors;
- (j) California Public Contract Code §10295.3, which prohibits discrimination based on domestic partnerships and those in same sex marriages;

- (k) DHS policy to ensure the equal treatment of faith-based organizations, under which all applicants and recipients must comply with equal treatment policies and requirements contained in 6 C.F.R. Part 19;
- (l) Any other nondiscrimination provisions in the specific statute(s) under which application for federal assistance is being made; and
- (m) The requirements of any other nondiscrimination statute(s) which may apply to the application.

In addition to the items listed in (a) through (m), the Applicant will comply with California's Fair Employment and Housing Act (FEHA). FEHA prohibits harassment and discrimination in employment because of ancestry, familial status, race, color, religious creed (including religious dress and grooming practices), sex (which includes pregnancy, childbirth, breastfeeding and medical conditions related to pregnancy, childbirth, or breastfeeding), gender, gender identity, gender expression, sexual orientation, marital status, national origin, ancestry, mental and physical disability, genetic information, medical condition, age, pregnancy, denial of medical and family care leave, or pregnancy disability leave (California Government Code §§ 12940, 12945, 12945.2), military and veteran status, and/or retaliation for protesting illegal discrimination related to one of these categories, or for reporting patient abuse in tax supported institutions.

6. Drug-Free Workplace

As required by the Drug-Free Workplace Act of 1988 (41 U.S.C. §701 et seq.), the Applicant certifies that it will maintain a drug-free workplace and a drug-free awareness program as outlined in the Act.

7. Environmental Standards

The Applicant will comply with state and federal environmental standards, which may be prescribed pursuant to the following, as applicable:

- (a) California Environmental Quality Act (CEQA) (California Public Resources Code §§ 21000- 21177), to include coordination with the city or county planning agency;
- (b) CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, §§ 15000- 15387);
- (c) Federal Clean Water Act (CWA) (33 U.S.C. § 1251 et seq.), which establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters;
- (d) Federal Clean Air Act of 1955 (42 U.S.C. § 7401) which regulates air emissions from stationary and mobile sources;
- (e) Institution of environmental quality control measures under the National Environmental Policy Act (NEPA) of 1969 (P.L. 91-190); the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA; and Executive Order 12898 which focuses on the environmental and human health effects of federal actions on minority and low-income populations with the goal of achieving environmental protection for all communities;
- (f) Evaluation of flood hazards in floodplains in accordance with Executive Order 11988;

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- (g) Executive Order 11514 which sets forth national environmental standards;
- (h) Executive Order 11738 instituted to assure that each federal agency empowered to enter into contracts for the procurement of goods, materials, or services and each federal agency empowered to extend federal assistance by way of grant, loan, or contract shall undertake such procurement and assistance activities in a manner that will result in effective enforcement of the Clean Air Act and the Federal Water Pollution Control Act Executive Order 11990 which requires preservation of wetlands;
- (i) The Safe Drinking Water Act of 1974, (P.L. 93-523);
- (j) The Endangered Species Act of 1973, (P.L. 93-205);
- (k) Assurance of project consistency with the approved state management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.);
- (l) Conformity of Federal Actions to State (Clear Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.);
- (m) Wild and Scenic Rivers Act of 1968 (16 U.S.C. § 1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.

The Applicant shall not be: 1) in violation of any order or resolution promulgated by the State Air Resources Board or an air pollution district; 2) subject to a cease and desist order pursuant to § 13301 of the California Water Code for violation of waste discharge requirements or discharge prohibitions; or 3) determined to be in violation of federal law relating to air or water pollution.

8. Audits

For sub-recipients expending \$750,000 or more in federal grant funds annually, the Applicant will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and Title 2 of the Code of Federal Regulations, Part 200, Subpart F Audit Requirements.

9. Access to Records

In accordance with 2 C.F.R. §200.336, the Applicant will give the awarding agency, the Comptroller General of the United States and, if appropriate, the state, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award.

The Applicant will require any sub-recipients, contractors, successors, transferees and assignees to acknowledge and agree to comply with this provision.

10. Conflict of Interest

The Applicant will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.

11. Financial Management

False Claims for Payment the Applicant will comply with 31 U.S.C §§ 3729-3733 which sets forth that no recipient shall submit a false claim for payment, reimbursement or

advance.

12. Reporting - Accountability

The Applicant agrees to comply with applicable provisions of the Federal Funding Accountability and Transparency Act (FFATA) (P.L. 109-282), specifically (a) the reporting of sub-awards obligating \$25,000 or more in federal funds and (b) executive compensation data for first-tier sub-awards. This includes the provisions of FFATA, which includes requirements for executive compensation, and also requirements implementing the Act for the non-federal entity at 2 C.F.R. Part 25 Financial Assistance Use of Universal Identifier and Central Contractor Registration and 2 C.F.R. Part 170 Reporting Sub-award and Executive Compensation Information.

13. Whistleblower Protections

The Applicant also must comply with statutory requirements for whistleblower protections at 10 U.S.C. § 2409, 41 U.S.C. § 4712, and 10 U.S.C. § 2324, 41 U.S.C. § 4304 and § 4310.

14. Human Trafficking

The Applicant will comply with the requirements of Section 106(g) of the Trafficking Victims Protection Act of 2000, as amended (22 U.S.C. § 7104) which prohibits grant award recipients or a sub-recipient from: (1) engaging in trafficking in persons during the period of time that the award is in effect: (2) procuring a commercial sex act during the period of time that the award is in effect: or (3) using forced labor in the performance of the award or sub-awards under the award.

15. Labor Standards

The Applicant will comply with the following federal labor standards:

- (a) The Davis-Bacon Act (40 U.S.C. §§ 276a to 276a-7), as applicable, and the Copeland Act (40 U.S.C. § 3145 and 18 U.S.C. § 874) and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§ 327-333), regarding labor standards for federally-assisted construction contracts or subcontracts; and
- (b) The Federal Fair Labor Standards Act (29 U.S.C. § 201 et al.) as they apply to employees of institutes of higher learning (IHE), hospitals and other non-profit organizations.

16. Worker's Compensation

The Applicant must comply with provisions which require every employer to be insured to protect workers who may be injured on the job at all times during the performance of the work of this Agreement, as per the workers compensation laws set forth in California Labor Code §§ 3700 et seq.

17. Property-Related

If applicable to the type of project funded by this federal award, the Applicant will:

- (a) Comply with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of federal or federally-assisted programs. These

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requirements apply to all interests in real property acquired for project purposes regardless of federal participation in purchase;

- (b) Comply with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires sub-recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more;
- (c) Assist the awarding agency in assuring compliance with Section 106 of the
- (d) National Historic Preservation Act of 1966, as amended (16 U.S.C. § 470), Executive Order 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. § 469a-1 et seq.); and
- (e) Comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. § 4831 and 24 CFR Part 35) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.

18. Certifications Applicable Only to Federally-Funded Construction Projects

For all construction projects, the Applicant will:

- (a) Not dispose of, modify the use of, or change the terms of the real property title or other interest in the site and facilities without permission and instructions from the awarding agency. Will record the federal awarding agency directives and will include a covenant in the title of real property acquired in whole or in part with federal assistance funds to assure nondiscrimination during the useful life of the project;
- (b) Comply with the requirements of the awarding agency with regard to the drafting, review and approval of construction plans and specifications; and
- (c) Provide and maintain competent and adequate engineering supervision at the construction site to ensure that the complete work conforms with the approved plans and specifications and will furnish progressive reports and such other information as may be required by the assistance awarding agency or State.

19. Use of Cellular Device While Driving is Prohibited

Applicants are required to comply with California Vehicle Code sections 23123 and 23123.5. These laws prohibit driving a motor vehicle while using an electronic wireless communications device to write, send, or read a text-based communication. Drivers are also prohibited from the use of a wireless telephone without hands-free listening and talking, unless to make an emergency call to 911, law enforcement, or similar services.

20. California Public Records Act and Freedom of Information Act

The Applicant acknowledges that all information submitted in the course of applying for funding under this program, or provided in the course of an entity's grant management activities that are under Federal control, is subject to the Freedom of Information Act (FOIA), 5 U.S.C. § 552, and the California Public Records Act, California Government Code section 6250 et seq. The Applicant should consider these laws and consult its own State and local laws and regulations regarding the release of information when reporting sensitive matters in the grant application, needs assessment, and strategic

planning process.

HOMELAND SECURITY GRANT PROGRAM - PROGRAM SPECIFIC ASSURANCES / CERTIFICATIONS

21. Reporting Accusations and Findings of Discrimination

If during the past three years the recipient has been accused of discrimination on any basis the recipient must provide a list of all such proceedings, pending or completed, including outcome and copies of settlement agreements to the DHS Financial Assistance Office and the DHS Office for Civil Rights and Civil Liberties (CRCL) by e-mail at crcl@hq.dhs.gov or by mail at U.S. Department of Homeland Security Office for Civil Rights and Civil Liberties, Building 410, Mail Stop #0190, Washington, D.C. 20528.

If the courts or administrative agencies make a finding of discrimination on grounds of race, color, national origin (including LEP), sex, age, disability, religion, or familial status against the recipient, or the recipients settle a case or matter alleging such discrimination, recipients must forward a copy of the complaint and findings to the DHS Financial Assistance Office and the CRCL by e-mail or mail at the addresses listed above.

The United States has the right to seek judicial enforcement of these obligations.

22. Acknowledgment of Federal Funding from DHS

All recipients must acknowledge their use of federal funding when issuing statements, press releases, requests for proposals, bid invitations, and other documents describing projects or programs funded in whole or in part with federal funds.

23. Activities Conducted Abroad

All recipients must ensure that project activities carried on outside the United States are coordinated as necessary with appropriate government authorities and that appropriate licenses, permits, or approvals are obtained.

24. Best Practices for Collection and Use of Personally Identifiable Information (PII)

DHS defines personally identifiable information (PII) as any information that permits the identity of an individual to be directly or indirectly inferred, including any information that is linked or linkable to that individual. All recipients who collect PII are required to have a publically-available privacy policy that describes standards on the usage and maintenance of PII they collect. Recipients may also find the DHS Privacy Impact Assessments: Privacy Guidance and Privacy template a useful resource respectively.

25. Copyright

All recipients must affix the applicable copyright notices of 17 U.S.C. §§ 401 or 402 and an acknowledgement of U.S. Government sponsorship (including the award number) to any work first produced under federal financial assistance awards.

26. Duplication of Benefits

Any cost allocable to a particular federal financial assistance award provided for in 2 C.F.R. Part 200, Subpart E may not be charged to other federal financial assistance awards to overcome fund deficiencies, to avoid restrictions imposed by federal statutes, regulations, or federal financial assistance award terms and conditions, or for other reasons. However, these prohibitions would not preclude recipients from shifting costs that are allowable under two or more awards in accordance with existing federal statutes, regulations, or the federal financial assistance award terms and conditions.

27. Energy Policy and Conservation Act

All recipients must comply with the requirements of 42 U.S.C. § 6201 which contain policies relating to energy efficiency that are defined in the state energy conservation plan issued in compliance with this Act.

28. Federal Debt Status

All recipients are required to be non-delinquent in their repayment of any federal debt. Examples of relevant debt include delinquent payroll and other taxes, audit disallowances, and benefit overpayments. See OMB Circular A-129.

29. Fly America Act of 1974

All recipients must comply with Preference for U.S. Flag Air Carriers: (air carriers holding certificates under 49 U.S.C. § 41102) for international air transportation of people and property to the extent that such service is available, in accordance with the International Air Transportation Fair Competitive Practices Act of 1974 (49 U.S.C. § 40118) and the interpretative guidelines issued by the Comptroller General of the United States in the March 31, 1981, amendment to Comptroller General Decision B-138942

30. Hotel and Motel Fire Safety Act of 1990

In accordance with Section 6 of the Hotel and Motel Fire Safety Act of 1990, all recipients must ensure that all conference, meeting, convention, or training space funded in whole or in part with federal funds complies with the fire prevention and control guidelines of the Federal Fire Prevention and Control Act of 1974, as amended, 15 U.S.C. § 2225a.

31. Non-supplanting Requirements

All recipients who receive federal financial assistance awards made under programs that prohibit supplanting by law must ensure that federal funds do not replace (supplant) funds that have been budgeted for the same purpose through non-federal sources.

32. Patents and Intellectual Property Rights

Unless otherwise provided by law, recipients are subject to the Bayh-Dole Act, Pub. L. No. 96-517, as amended, and codified in 35 U.S.C. § 200 et seq. All recipients are subject to the specific requirements governing the development, reporting, and disposition of rights to inventions and patents resulting from financial assistance awards located at 37 C.F.R. Part 401 and the standard patent rights clause located

at 37 C.F.R. § 401.14.

33. SAFECOM

All recipients who receive federal financial assistance awards made under programs that provide emergency communication equipment and its related activities must comply with the SAFECOM Guidance for Emergency Communication Grants, including provisions on technical standards that ensure and enhance interoperable communications.

34. Terrorist Financing

All recipients must comply with Executive Order 13224 and U.S. law that prohibit transactions with, and the provisions of resources and support to, individuals and organizations associated with terrorism. Recipients are legally responsible to ensure compliance with the Order and laws.

35. Reporting of Matters Related to Recipient Integrity and Performance

If the total value of the recipient's currently active grants, cooperative agreements, and procurement contracts from all federal assistance offices exceeds \$10,000,000 for any period of time during the period of performance of this federal financial assistance award, you must comply with the requirements set forth in the government-wide Award Term and Condition for Recipient Integrity and Performance Matters located at 2 C.F.R. Part 200, Appendix XII, the full text of which is incorporated here by reference in the award terms and conditions.

36. USA Patriot Act of 2001

All recipients must comply with requirements of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act (USA PATRIOT Act), which amends 18 U.S.C. §§ 175–175c.

37. Use of DHS Seal, Logo, and Flags

All recipients must obtain permission from their DHS Financial Assistance Office, prior to using the DHS seal(s), logos, crests or reproductions of flags or likenesses of DHS agency officials, including use of the United States Coast Guard seal, logo, crests or reproductions of flags or likenesses of Coast Guard officials.

IMPORTANT

The purpose of the assurance is to obtain federal and state financial assistance, including any and all federal and state grants, loans, reimbursement, contracts, etc. The Applicant recognizes and agrees that state financial assistance will be extended based on the representations made in this assurance. This assurance is binding on the Applicant, its successors, transferees, assignees, etc. Failure to comply with any of the above assurances may result in suspension, termination, or reduction of grant funds.

All appropriate documentation, as outlined above, must be maintained on file by the Applicant and available for Cal OES or public scrutiny upon request. Failure to comply with these requirements may result in suspension of payments under the grant or termination of the grant or both and the sub-recipient may be ineligible for award of any future grants if the Cal OES determines that any of the following has occurred: (1) the recipient has

Initials _____

made false certification, or (2) violates the certification by failing to carry out the requirements as noted above.

All of the language contained within this document must be included in the award documents for all sub-awards at all tiers. All recipients are bound by the Department of Homeland Security Standard Terms and Conditions 2018 ,Version 8.1, hereby incorporated by reference, which can be found at: <https://www.dhs.gov/publication/fy15-dhs-standard-terms-and-conditions>.

Applicant: _____

Signature of Authorized Agent: _____

Printed Name of Authorized Agent: _____

Title: _____ Date: _____



Agenda Item

City Council

Item #: 3.10.

9/8/2020

File #: 20-087

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: William Crouch, Community Development Director

1. SUBJECT

Agreement with Sargent Town Planning for preparation of the North Tustin Street Specific Plan.

2. SUMMARY

Consultant Services Agreement with Sargent Town Planning to prepare a North Tustin Street Specific Plan with a not to exceed cost of \$445,152 plus a contingency allowance of \$54,848.

3. RECOMMENDED ACTION

Approve the agreement with Sargent Town Planning in the total amount of \$500,000, representing an original contract amount of \$445,152, plus a contingency allowance of \$54,848, for the creation of the North Tustin Street Specific Plan; and authorize the Mayor and City Clerk to execute on behalf of the City.

4. FISCAL IMPACT

The total expenditure, including the contingency, for this agreement is \$500,000 and will be funded in the North Tustin Street Specific Plan (30143) through:

Senate Bill 2 (SB-2) Planning Grant Program (312)	\$240,000
Reimbursable Capital Projects (550)	<u>260,000</u>
Total:	\$500,000

5. STRATEGIC PLAN GOALS

Goal 2: Be a fiscally healthy community

e: Create an environment to attract, retain, and expand economic opportunities.

Goal 3: Enhance and promote quality of life in the community

c: Support and enhance attractive, diverse living environments.

6. DISCUSSION AND BACKGROUND

The North Tustin Street Corridor became a redevelopment project area in 1983. In conjunction with establishment of the redevelopment area, a zoning classification specific to the area was created, the Commercial-Tustin Redevelopment Area (C-TR) zone. The Tustin Street Design Standards were also adopted at that time. The purpose of these two actions was to reinvigorate and generate

property reinvestment in the corridor. The anticipated benefits of the C-TR zoning and design standards came to limited fruition, with respect to land uses and the visual quality of the area. Hence, a fresh look at land use policy for the corridor is warranted.

The corridor predominantly maintains Limited Business - Tustin Redevelopment Project Area (C-TR) zoning and a General Commercial (GC) General Plan Land Use Element designation. The C-TR designation would be replaced under a North Tustin Specific Plan (NTSP). The corridor is characterized by a mix of single-tenant occupied parcels, small to mid-sized commercial centers, auto dealerships, big box retail, the Village at Orange shopping center (with the loss of an anchor tenant), offices and services providing uses, and some multi-family complexes. The commercial parcels along the corridor are shallow in many areas but span outward on larger properties such as the Village of Orange and along the intersections of streets such as Katella, Taft, Meats, and Lincoln Avenues.

The NTSP will establish a vision for the North Tustin Street corridor between Katella Avenue and Lincoln Avenue as shown on the proposed area map attachment. The intent of the plan is to facilitate private property revitalization, entitlement streamlining, economic development, housing opportunities, transit-oriented development, pedestrian orientation, and high-quality aesthetics. A full background, objectives list, and desired plan content is provided in the Request for Proposals attachment. The Project Scope and Deliverables are provided in the Consultant Services Agreement attachment under the "Scope and Deliverables" attachment.

On May 18, 2020, the Community Development Department sent a request for proposals to ten qualified planning firms for the preparation of the NTSP, which includes the market and fiscal analysis and related Programmatic Environmental Impact Report. Six proposals were received. Four firms were interviewed, with Sargent Town Planning being interviewed twice.

Staff received competitive proposals from the following firms:

Firm	Cost	Rank
De Novo	\$364,695 + \$100,090 in options	3
Kimley-Horn	\$398,780 + \$7,480 in options	5
KTGY	\$797,583 + \$22,010 in options	6
MIG	\$623,049 + \$119,550 in options	4
Placeworks	\$517,683 + \$28,469 in options	2
Sargent Town Planning	\$445,152 as negotiated	1

Staff conducted a comprehensive review of each proposal and recommends City Council select Sargent Town Planning on the basis of their proposal and interviews, demonstrating the best conveyance of project understanding, experience, proposed work scope, ability to complete the project on time, and ability to complete the work under budget.

Sargent Town Planning provided references from the cities of Rancho Cucamonga, Indio, Palm Desert, and Oxnard. Sargent’s project proposal portfolio includes the following comparable projects which are active or have been completed in recent years:

- Indio 111 Corridor & Downtown Plans
- Burbank Standards & Guidelines for Mixed-Use Places
- San Fernando Downtown Corridors Transit-Oriented Development Specific Plan
- Rancho Cucamonga Foothill Boulevard Corridor Vision Plan Study
- Lancaster Gateways, Corridors & Centers Plan
- Beverly Hills Southeast Area Community Plan
- Pasadena Street Design Guide
- Palm Desert Corridor Plan, Code & Implementation Manual
- Fontana Downtown Area Plan & General Plan Update
- Lancaster Boulevard Streetscape Transformation
- East Los Angeles Third Street Corridor Specific Plan

The work will involve extensive stakeholder and community outreach, a land use fiscal and market analysis, consideration of multi-modal transportation options, and development of a plan that ultimately serves to reposition the area as a community gateway that strikes a balance between enhancing the quality of life for current residents of the area, refreshing the image of the corridor, and facilitating opportunities for new commercial and residential development.

The NTSP must be completed by February 2022 in order for the City to fulfill collection of grant funding. The project will require 18 months to complete initial analysis, including market analysis, public outreach, the specific plan framework and alternatives, the specific plan, the Environmental Impact Report with agency and public review, and public meetings. An aggressive project schedule is included within the third attachment.

7. ATTACHMENTS

- Proposed NTSP Area Map
- Request for Proposals
- Consultant Services Agreement including Scope and Deliverables, Schedule, and Fee Proposal



Agenda Item

City Council

Item #: 3.10.

9/8/2020

File #: 20-087

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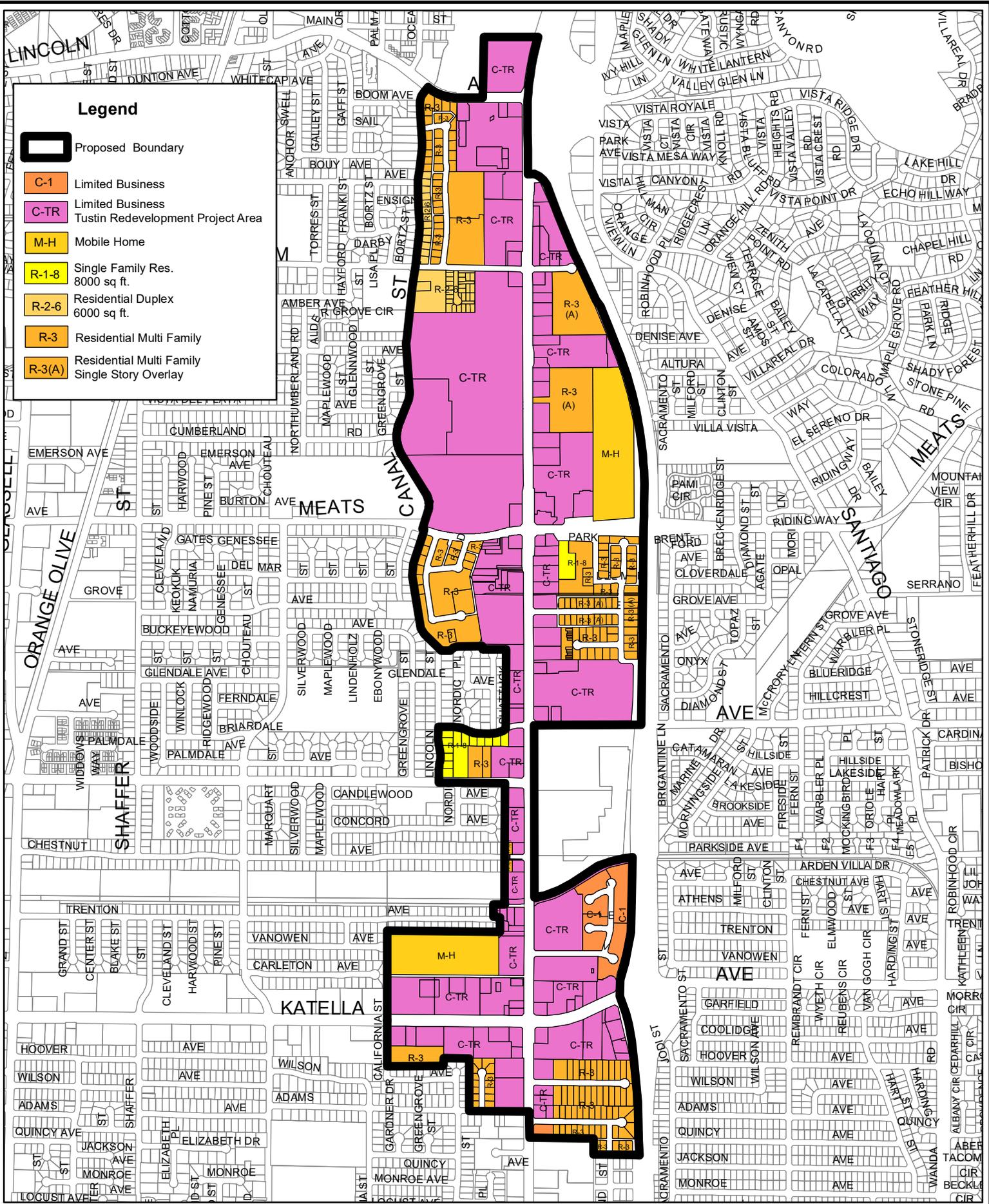
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7. ATTACHMENTS

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- Request for Proposals
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Legend

- Proposed Boundary
- C-1 Limited Business
- C-TR Limited Business Tustin Redevelopment Project Area
- M-H Mobile Home
- R-1-8 Single Family Res. 8000 sq. ft.
- R-2-6 Residential Duplex 6000 sq. ft.
- R-3 Residential Multi Family
- R-3(A) Residential Multi Family Single Story Overlay

North Tustin Specific Plan Area

Commercial : 9,757,662 sq. ft.
 Residential : 3,896,698 sq. ft.
 Mobile Home : 1,108,482 sq. ft.



April 28th 2020

CITY OF ORANGE

NORTH TUSTIN STREET SPECIFIC PLAN

REQUEST FOR PROPOSALS

The City of Orange is seeking proposals from a qualified consultant to prepare a Specific Plan and related Programmatic Environmental Impact Report using Senate Bill (SB) 2 Planning Grants Program funding for the North Tustin Street Corridor. Preparation of a market and fiscal analysis is also requested in the work effort to provide an informed basis for the Specific Plan land use program.

BACKGROUND

The North Tustin Street corridor is geographically located in the north-central portion of the City of Orange, between Katella Avenue to the south, Lincoln Avenue to the north, State Route (SR) 55 to the east, and established post-War single and multi-family residential neighborhoods to the west. Tustin Street is a major transportation corridor in the City characterized by eclectic strip commercial development dating from the 1960s through the present. Pockets of modest multi-family residential development dating from a similar timeframe are located in the eastern portion of the corridor between the rear of commercial properties fronting Tustin Street and SR 55 (see attached map).

The City of Orange has a population of approximately 141,952 and is situated in north-central Orange County, approximately 32 miles southeast of Los Angeles. The City's incorporated land area is approximately 35 square miles. The City's land uses consist of a mix of residential, commercial, industrial and open space. The North Tustin Specific Plan study area includes 14,762,843 square feet of property broken down into 9,757,662 square feet of commercially zoned property, 3,896,698 square feet of multi-family residential property, and 1,108,482 square feet of mobile home park zoned property. The study area represents a significant portion of the north-central section of Orange.

Land Use History

The North Tustin Corridor became a redevelopment project area in 1983. In conjunction with establishment of the redevelopment area, a zoning classification specific to the area was created, the Commercial-Tustin Redevelopment Area (C-TR) zone. The Tustin Street Design Standards were also adopted at that time. The purpose of these two actions was to reinvigorate and generate property reinvestment in the corridor. The anticipated benefits of the C-TR zoning and design standards came to limited fruition, with respect to land uses and the visual quality of the area. However, the Tustin Corridor, from the study area continuing south to the city limit is recognized as a commercial district where a wide variety of the community's retail and service needs can be met; if there's something you need, you can probably find it on Tustin Street.

The corridor predominantly maintains Limited Business - Tustin Redevelopment Project Area (C-TR) zoning and a General Commercial (GC) General Plan Land Use Element designation. The corridor is characterized by a mix of single-tenant occupied parcels, small to mid-sized commercial centers, auto dealerships, big box retail, the Village at Orange shopping center with an underperforming mall, office and service providing uses, and some multi-family complexes. The commercial parcels along the corridor are shallow in many areas but span outward on larger properties such as the Village of Orange and along the intersections of streets such as Katella, Taft, Meats, and Lincoln Avenues.

Residential properties in the study area have General Plan land use designations of Low Medium Density Residential (6-15 du/acre) and Medium Density Residential (16-24 du/acre). These properties are zoned Residential Duplex (R-2), Residential Multi-family (R-3) (some of which are also subject to a single-story overlay), Mobile Home (MH), and Limited Business (C-1).

Much of the study area was developed in the 1970's when the city was growing. Although redevelopment has occurred gradually, several properties retain buildings originally constructed in the 1970's and 1980's. The North Tustin Street Design Standards were intended to visually unify the corridor with thematic districts. However, the themes are now outdated and did not significantly implement into the physical environment.

Transportation

In conjunction with the corridor's role as a major commercial corridor, Tustin Street is designated as a Major Arterial in the City's Master Plan of Streets and Highways, carrying high traffic volumes and bus transit routes. In addition to supporting Orange County Transportation Authority (OCTA) services, the north end of the corridor also serves the Riverside Transportation Authority (RTA) given the proximity of the SR 55 and SR 91 interchange, and the Orange County employment destination for Riverside County residents. The southern terminus of the North Tustin Corridor study area provides a transit link via Katella Avenue to the Anaheim Regional Intermodal Transportation Center (ARTIC) and the Anaheim Resort area further to the west. The northern terminus of the corridor also offers a transit link via Lincoln Avenue to the City of Anaheim.

A significant feature of the North Tustin Corridor are the two freeway access points offered at Katella Avenue and Lincoln Avenue. These ramp areas are constrained and present sources of traffic congestion in the area. Pedestrian amenities are limited on the corridor due to a proliferation of access points into commercial properties, high voltage power lines supported by substantial telephone poles, and a number of other utility features. In many instances, incremental roadway widening has left limited space for private property landscaped setbacks, street trees, or bus shelters.

Urban Design/Streetscape

The City's General Plan Urban Design Element recognizes the North Tustin Corridor as a northern gateway into the City as well as a major streetscape having potential to better convey a positive community business district image. The Urban Design Element provides goals, policies, and aspirations in support of establishing a distinctive and refreshed image of the North Tustin Corridor.

PROJECT OBJECTIVES

The overall objectives of the Specific Plan are to:

- Develop an informed land use program that allows for preservation and enhancement of sales tax revenue, while allowing a diversification of land uses including integrated multi-family residential development.
- Accommodate new and intensified infill development within the corridor that is sensitive to abutting residential uses and improves the land use transition from the Specific Plan area to adjacent single-family residential properties.
- Continue to promote economic development and enable opportunities for Tustin Street to become a recognized quality local and regional retail destination.
- Identify appropriate sites that may accommodate greater residential density in a stand-alone or mixed use format to advance the City's regional housing needs assessment (RHNA) allocations.
- Create a walkable, complete urban neighborhood district with a mix of complementary retail uses, services, and amenities that foster a vibrant and livable environment.
- Enhance Tustin Street as a City gateway with a unified streetscape that accommodates a variety of users and functions.
- Capitalize on the high transit nature of the Tustin Street corridor combined with a mix of services to accomplish a multi-modal environment.
- Streamline new development.

The successful consultant must demonstrate experience with corridor-spanning specific plans and have a solid understanding of the City's needs. We encourage your firm to submit a proposal.

SUBMITTAL REQUIREMENTS

Proposals shall be received by the City no later than **4:00 p.m. on Thursday, June 18, 2020**. Proposals may be submitted in hardcopy or electronic format. If submitting hardcopies, mark envelopes containing the proposal as "North Tustin Street Specific Plan Proposal." Submit one hardcopy of the cost proposal in a separate sealed envelope. Submit two hardcopies and a digital copy on USB to:

Attn: Chad Ortlieb
Senior Planner
Community Development Department
300 East Chapman Avenue, Orange, CA 92866
(714) 744-7237
cortlieb@cityoforange.org

As an alternative to hardcopies, proposals may be submitted in pdf format via email to Chad Ortlieb, Senior Planner, at cortlieb@cityoforange.org. The cost proposal must be emailed as a separate pdf file.

CONSULTANT SELECTION SCHEDULE

- RFP Released – May 4, 2020
- Proposals Deadline – June 18, 2020 by 4:00 p.m.
- Consultant Interviews – June-July, 2020
- Notice to Proceed- July 2020

SELECTION PROCESS

This is a competitive selection process. Proposals will be evaluated and firms ranked based on qualifications and responsiveness to the City's needs. Following the proposal evaluation, oral interviews may be held with top ranked firms. The City will select a firm and negotiate a final scope and cost. If an appropriate cost cannot be agreed upon, the City will move on to the next top ranked firm until an appropriate cost can be agreed upon. The City reserves the right to award all or part of the project at its discretion.

PROJECT SCHEDULE

The City is seeking to present the City Council with a North Tustin Street Specific Plan in October 2021. Project completion must occur by February 2022.

PROPOSAL REQUIREMENTS

Proposals shall contain no more than 20 pages (excluding appendices such as key staff resumes or the cost proposal). The proposal must include a Letter of Interest and the information described below. Proposals shall include sections for:

- Project Understanding - Proposal shall include knowledge of specific plans and related environmental regulations, scope of work, and issues.
- Key Staff, Qualifications and Experience- Proposal shall identify key staff and their role in completing the project. Proposal shall describe key staff qualifications to conduct requested work. Proposal shall describe at least three recent similar projects completed by key staff in the last seven years.
- Scope of Work- Proposal shall include a detailed scope of work and describe the approach, methodologies, and anticipated issues and solutions for each task.

- Schedule- Proposal shall include a simple schedule showing completion dates for each task/deliverable identified in the scope of work.
- Cost Proposal - Cost Proposal shall provide itemized costs for each task identified in the scope of work. Each itemized cost must identify: 1) a total number of staff hours by staff person by task for each task listed in the scope of work, 2) a “not to exceed” cost for each task of the project, and 3) billable rates for each key staff person.

DESIRED SPECIFIC PLAN CONTENT

The Specific Plan should establish a vision for the area supported by content that facilitates private property revitalization, entitlement streamlining, economic development, housing opportunities, transit-oriented development, pedestrian orientation, and high-quality aesthetics. Therefore, at a minimum, the following should be addressed:

A. Establish Redevelopment Incentives

- Right-size land uses and development standards for commercial, residential, and mixed-use properties based on property size and type.
- Establish flexible development standards, design standards and guidelines to accommodate a mixture of differing yet compatible architectural styles.
- Balance flexible and diverse land uses that foster economic development opportunities while supporting housing opportunities.
- Deter land uses that exist in excess in the plan area while promoting land uses that generate sales tax revenue.

B. Provide for Infill Residential Development Opportunities

- Identify sites appropriate for meeting a significant portion of the City’s RHNA allocation.
- Account for density bonus provisions for residential development to guard against over-intensification.
- Ensure a balanced mix of residential, commercial, and service uses to complement each other and seek to provide for social vitality and sense-of-place among the mix of uses, including open spaces and recreational amenities.

C. Streamline Land Use Entitlement Process

- Establish a streamlined development review process.
- A certified Program Environmental Impact Report to tier individual projects from to streamline the entitlement process.

D. Establish an Urban Design/Streetscape Framework

- Ensure appropriate transitions occur at the boundaries of surrounding established neighborhoods and enhance livability through complementary relationships between new and existing uses.

- Establish a flexible yet unifying plant palette for private property redevelopment.
- Consider the needs of water quality retention, fire access, crime prevention, solar capture, waste and recycling, and alternative fueling.
- Establish a catalyst for private investment by improving visual and functional connections and linkages as follows:
 - Given the corridor’s adjacency to the 55 Freeway, provide for a development environment appropriate for a regional destination.
 - Implement the potential for gateway features at the Katella Avenue and Lincoln Avenue intersections to designate the beginnings of the corridor and assist in corridor identification to visitors exiting the 55 Freeway.
 - Establish a unified placemaking theme for amenities in the public right-of-way such as street trees, streetlights, sidewalk widths, directional signage, bus shelters, and public utilities.
 - Evaluate the potential for median improvements in focused locations.

E. Facilitate Sustainable Transportation Opportunities

- Establish incentives and standards for multi-modality including pedestrian amenities and inter-connectivity on and between sites within the planning area, and for connectivity to adjacent residential neighborhoods and park and school uses outside of the planning area.
- Consider incentives for private property bicycle pathways that connect to adjacent parcels and the public right-of-way, when necessary.

F. Implementation

- Develop short and long-term goals and objectives for plan implementation.
- Identify local, State, and Federal grant and other funding opportunities for private redevelopment and public projects in the Specific Plan area.

SCOPE OF WORK & DELIVERABLES

Although City staff has made our best effort to outline a reasonable scope of work given the timeline and budget, staff is amendable to consultant suggestions as to any task, method or approach we have not considered. Consultant shall provide a cost estimate for the requested work but may offer additional suggestions in its proposal.

Task 1: Evaluation and Recommendations

- Attend a kick-off meeting with City staff to identify Specific Plan goals.
- Tour the North Tustin Street corridor with City staff.
- Review existing conditions, the General Plan, Zoning Code, and Tustin Street Design Standards.
- Engage in meetings and calls with City staff as necessary to obtain area insights.

Deliverable 1:

- Provide a policy and past performance assessment detailing findings, opportunities, and constraints.

Task 2: Fiscal and Market Land Use Analysis

- Conduct a fiscal and market analysis of existing land uses to inform the development of Specific Plan land use alternatives.
 - The fiscal impact analysis shall assess market conditions, and City revenues and expenditures for purposes of identify sustainable options for land use mix and development intensities that promote economic development, sales tax generation, and reposition land use policy for long-term success.
- Engage in meetings and calls with City staff as necessary to review findings and begin development of land use scenarios.

Deliverable 2:

- Prepare a screen check draft fiscal and market analysis report, integrating the findings of Task 1 into a screen check draft document for City review and comment, and identify opportunities and recommendations for purposes of developing alternative land use scenarios for the planning area.
- Prepare a final fiscal and market analysis that reflects City feedback.
- Engage in meetings and calls with City staff as necessary to review and refine recommendations based on City goals.

Task 3: Stakeholder Outreach #1

- Plan and execute a series of stakeholder meetings to engage:

- Planning area property owners, businesses, and residents
- Chamber of Commerce representatives
- Building Industry Association representatives and developers
- Real estate brokers
- Residents of abutting neighborhoods to the west and north
- Review findings from Tasks 1 and 2 with stakeholders and solicit input on issues including, but not limited to, strengths and challenges, resident quality of life matters, business attraction experiences, developer appeal, and perspective on City policies and regulations.

Deliverable 3:

- Prepare outreach materials, notices, agendas, and presentations for stakeholder meetings.
- Attend stakeholder meetings and provide associated presentation materials.
- Compile meeting notes and summarize online community survey results.

Task 4: Community Outreach #1

- Prepare an online community survey for input on the policy analysis recommendations to be published on the City’s website and included with public notices.
- Conduct a community-oriented workshop to introduce the Specific Plan project and its objectives and solicit public input on the study area

Deliverable 4:

- Prepare outreach materials, notices, agendas, and presentations for up to two community meetings.
- Attend community meetings and provide associated presentation materials.
- Compile meeting notes and summarize online community survey results.

Task 5: Specific Plan Land Use Alternatives and Specific Plan Framework

- Prepare a minimum of two (2) land use alternatives based on the input garnered in Tasks 2-4 and reflective of the City’s Specific Plan objectives in consultation with City staff.
- As an optional task prepare computer modeling of the land use scenarios.
- Prepare a preliminary Specific Plan framework addressing conceptual:
 - Multi-modal circulation network including private vehicles, transit, pedestrians and cyclists as appropriate
 - Urban design/streetscape program addressing city gateways, corridor activity nodes, open space opportunities, neighborhood transition, and linkage

- Infrastructure program

Deliverable 5:

- Provide a minimum of two (2) land use alternative scenarios.
- Provide a preliminary draft Specific Plan outline.

Task 6: Stakeholder Outreach #2

- Plan and execute a second combined stakeholder workshop to present the land use alternatives developed in Task 5. This outreach effort should engage the same groups identified in Task 3.
- Review the land use options in relation to information collected in Tasks 2-4 and solicit feedback in order to refine and establish a preferred land use alternative.

Deliverable 6:

- Prepare outreach materials, notices, agendas, and presentations for the stakeholder workshop.
- Attend and make presentations at stakeholder workshop.

Task 7: Community Outreach #2

- Plan and execute a second community workshop to present the land use alternatives developed in Task 5.
- Review the land use options in relation to information collected in Tasks 2-4 and solicit feedback in order to refine and establish a preferred land use alternative.

Deliverable 7:

- Prepare outreach materials, notices, agendas, and presentations for the stakeholder workshop.
- Attend and make presentations at a stakeholder workshop.

Task 8: Draft Specific Plan

- Finalize the Specific Plan Framework based on input from the stakeholder workshop and staff.
- Concurrent with Task 6, prepare a draft North Tustin Street Specific Plan addressing state mandated and desired City content.
- The consultant shall anticipate two rounds of screencheck draft Specific Plan review by City staff.

Deliverable 8:

- Provide a Draft North Tustin Street Specific Plan including two subsequent rounds of revisions.

Task 9: CEQA Documents

- Prepare a Notice of Preparation and coordinate with staff on scoping meeting.
- Prepare tribal consultation letters.
- Prepare a draft project description and alternatives options to staff prior to preparation of the full Administrative Draft EIR.
- Meet with staff, implement changes discussed to the draft project description and alternatives, then prepare an Administrative Draft EIR including all necessary technical support documents and mitigation monitoring and reporting plan. Anticipate two rounds of staff comments and two revision drafts.
- Technical studies could include, but are not limited to, Air Quality/Greenhouse Gas Emissions/Energy Study, Cultural Resources Study, Noise Analysis, Infrastructure and Water Assessments, and VMT Analysis.
- Respond to comments received during the 45-day public review period.
- Prepare a Final Draft EIR. Anticipate two rounds of staff comments and two revision drafts.
- Prepare CEQA Notices and submit to the State Clearinghouse as required.

Deliverable 9:

- Provide a Notice of Preparation.
- Provide tribal consultation letters.
- Provide a draft project description and alternatives options.
- Provide an Administrative Draft Program EIR including all necessary technical appendices and mitigation monitoring and reporting plan. This deliverable includes providing up to two subsequent revised drafts to implement staff comments and 10 hardcopies for public review.
- Provide a Final Draft Program EIR with a response to public comments received. This deliverable includes providing up to two subsequent revised drafts to implement staff comments. Provide 30 hardcopies and digital copy of the Final Draft EIR. Five of the hardcopies must include appendices, the others may include a cd insert.
- Provide CEQA Notices.

Task 10: Public Meetings and Hearings

- Attend up to two (2) of each of the following meetings: Design Review Committee, Planning Commission, and City Council.
- Prepare a Final Draft North Tustin Street Specific Plan as directed by City staff and in response to comments made by the City's advisory bodies.
- Assist City staff in preparing supportive public hearing materials and responding to questions by the City's recommending and decision-making bodies.

Deliverable 10:

- Attend decision-making and advisory body meetings.
- Provide 30 hardcopies of a Final Draft North Tustin Specific Plan. Five of the hardcopies must include appendices, the rest may include a cd insert.
- Provide supportive public hearing materials and respond to questions at public meetings.

Notes:

1. Unless stated otherwise, for all deliverables involving a document, the consultant is to provide 6 hardcopies and a digital copy. Staff may reduce the amount of copies required at its discretion.
2. For all deliverables or components of deliverables that are maps, the consultant shall provide the maps in both a pdf and GIS compatible format.
3. Meetings identified in the tasks may be held in person or over the phone at the discretion of staff. Key consultant staff must attend the meetings.

CONSULTANT SELECTION CRITERIA

Total possible points is 100 with each section receiving the following points.

A. Project Understanding (20 points)

- Understanding of project issues, scope and deliverables.
- Knowledge of applicable regulations.

B. Key Staff, Qualifications and Experience (30 points)

- Overall professional experience, reliability, and continuity of the firm and key staff.
- Education, certifications, and training of key personnel to be assigned to the work.
- If sub-consultants are proposed, the track records of team members' experience working together and on similar projects.

C. Scope of Work (30 points)

- Detailed approach, methodology and deliverables for each task.
- Demonstrates an understanding of project issues and the required work effort.
- Quality of the proposal. The proposal should clearly demonstrate the firms' understanding of the City's overall objectives for the North Tustin Street Specific Plan.

D. Project Schedule (10 points)

- Includes a logical sequencing of work.
- Proposed schedule is reasonable and aligned with City schedule.

E. Cost (10 points)

- The cost proposal is clear and organized by the tasks listed in the scope of work.
- The cost is reasonable and within the City's budget.

PROFESSIONAL SERVICES AGREEMENT
[North Tustin Street Corridor Specific Plan Preparation Services]

THIS PROFESSIONAL SERVICES AGREEMENT (the “Agreement”) is made at Orange, California, on this ____ day of _____, 2020 (the “Effective Date”) by and between the CITY OF ORANGE, a municipal corporation (“City”), and SARGENT TOWN PLANNING, INC. a California corporation (“Contractor”), who agree as follows:

1. Services. Subject to the terms and conditions set forth in this Agreement, Contractor shall provide the services set forth in Exhibit “A,” which is attached hereto and incorporated herein by reference. As a material inducement to City to enter into this Agreement, Contractor represents that it has thoroughly investigated and considered the scope of services and fully understands the difficulties and restrictions in performing the work. The services which are the subject of this Agreement are not in the usual course of City’s business and Contractor represents that it is independently engaged in the business of providing such services and is experienced in performing the work. Contractor shall perform all services in a manner reasonably satisfactory to City and in a manner in conformance with the standards of quality normally observed by an entity providing such services to a municipal agency under similar conditions in the same or similar locale. All services provided shall conform to all applicable federal, state and local laws, rules and regulations. The terms and conditions set forth in this Agreement shall control over any terms and conditions in Exhibit "A" to the contrary.

Chad Ortlieb, Senior Planner (“City’s Project Manager”), shall be the person to whom Contractor will report for the performance of services hereunder. It is understood that Contractor’s performance hereunder shall be under the supervision of City’s Project Manager (or his/her designee), and that Contractor shall coordinate its services hereunder with City’s Project Manager.

2. Compensation and Fees.

a. Contractor's total compensation for all services performed under this Agreement, shall not exceed FOUR HUNDRED FORTY-FIVE THOUSAND ONE HUNDRED FIFTY-TWO DOLLARS and 00/100 (\$445,152.00) without the prior written authorization of City.

b. The above compensation shall include all costs, including, but not limited to, all clerical, administrative, overhead, insurance, reproduction, telephone, travel, auto rental, subsistence and all related expenses.

c. In addition to the scheduled services to be performed by the Contractor, the parties recognize that additional, unforeseen work and services may be required by City’s Project Manager. In anticipation of such contingencies, the sum of FIFTY-FOUR THOUSAND EIGHT HUNDRED FORTY-EIGHT DOLLARS and 00/100 (\$54,848.00) has been added to the total compensation of this Agreement. City’s Project Manager may approve the additional work and the actual costs incurred by the Contractor in performance of additional work or services in accordance with such amount as City’s Project Manager and the Contractor may agree upon in

advance. Said additional work or services and the amount of compensation therefor, up to the amount of the authorized contingency, shall be memorialized in the form of an Amendment to Agreement approved by the City Manager on a form acceptable to the City Attorney. The Contractor agrees to perform only that work or those services that are specifically requested by the City's Project Manager. Any and all additional work and services performed under this Agreement shall be completed in such sequence as to assure their completion as expeditiously as is consistent with professional skill and care in accordance with a cost estimate or proposal submitted to and approved by City's Project Manager prior to the commencement of such services.

d. The total amount of compensation under this Agreement, including contingencies, shall not exceed FIVE HUNDRED THOUSAND DOLLARS and 00/100 (\$500,000.00).

3. Payment.

a. As scheduled services are completed, Contractor shall submit to City an invoice for the services completed, authorized expenses and authorized extra work actually performed or incurred.

b. All such invoices shall state the basis for the amount invoiced, including services completed, the number of hours spent and any extra work performed.

c. City will pay Contractor the amount invoiced within thirty (30) days after approval of the invoice.

d. Payment shall constitute payment in full for all services, authorized costs and authorized extra work covered by that invoice.

4. Change Orders. No payment for extra services caused by a change in the scope or complexity of work, or for any other reason, shall be made unless and until such extra services and a price therefor have been previously authorized in writing and approved by City as an amendment to this Agreement. City's Project Manager is authorized to approve a reduction in the services to be performed and compensation therefor. All amendments as mutually agreed upon in writing by City and Contractor shall set forth the changes of work, extension of time, and/or adjustment of the compensation to be paid by City to Contractor and shall be signed by Contractor and the City's Project Manager, City Manager or City Council, as applicable.

5. Licenses. Contractor represents that it and any subcontractors it may engage, possess any and all licenses which are required under state or federal law to perform the work contemplated by this Agreement and that Contractor and its subcontractors shall maintain all appropriate licenses, including a City of Orange business license, at its cost, during the performance of this Agreement.

6. Independent Contractor. At all times during the term of this Agreement, Contractor shall be an independent contractor and not an employee of City. City shall have the right to control Contractor only insofar as the result of Contractor's services rendered pursuant to

this Agreement. City shall not have the right to control the means by which Contractor accomplishes services rendered pursuant to this Agreement. Contractor shall, at its sole cost and expense, furnish all facilities, materials and equipment which may be required for furnishing services pursuant to this Agreement. Contractor shall be solely responsible for, and shall indemnify, defend and save City harmless from all matters relating to the payment of its subcontractors, agents and employees, including compliance with social security withholding and all other wages, salaries, benefits, taxes, exactions, and regulations of any nature whatsoever. Contractor acknowledges that it and any subcontractors, agents or employees employed by Contractor shall not, under any circumstances, be considered employees of City, and that they shall not be entitled to any of the benefits or rights afforded employees of City, including, but not limited to, sick leave, vacation leave, holiday pay, Public Employees Retirement System benefits, or health, life, dental, long-term disability or workers' compensation insurance benefits.

7. **Contractor Not Agent.** Except as City may specify in writing, Contractor shall have no authority, express or implied, to act on behalf of City in any capacity whatsoever as an agent. Contractor shall have no authority, express or implied, to bind City to any obligation whatsoever.

8. **Designated Persons.** Only those qualified persons authorized by City's Project Manager, or as designated in Exhibit "A," shall perform work provided for under this Agreement. It is understood by the parties that clerical and other nonprofessional work may be performed by persons other than those designated.

9. **Assignment or Subcontracting.** No assignment or subcontracting by Contractor of any part of this Agreement or of funds to be received under this Agreement shall be of any force or effect unless the assignment has the prior written approval of City. City may terminate this Agreement rather than accept any proposed assignment or subcontracting. Such assignment or subcontracting may be approved by the City Manager or his/her designee.

10. **Time of Completion.** Except as otherwise specified in Exhibit "A," Contractor shall commence the work provided for in this Agreement within five (5) days of the Effective Date of this Agreement and diligently prosecute completion of the work in accordance with the time period set forth in Exhibit "A" hereto or as otherwise agreed to by and between the representatives of the parties.

11. **Time Is of the Essence.** Time is of the essence in this Agreement. Contractor shall do all things necessary and incidental to the prosecution of Contractor's work.

12. **Reserved.**

13. **Delays and Extensions of Time.** Contractor's sole remedy for delays outside its control, other than those delays caused by City, shall be an extension of time. No matter what the cause of the delay, Contractor must document any delay and request an extension of time in writing at the time of the delay to the satisfaction of City. Any extensions granted shall be limited to the length of the delay outside Contractor's control. If Contractor believes that delays caused by City will cause it to incur additional costs, it must specify, in writing, why the delay has caused

additional costs to be incurred and the exact amount of such cost at the time the delay occurs. No additional costs can be paid that exceed the not to exceed amount stated in Section 2.a, above, absent a written amendment to this Agreement. Notwithstanding any provision to the contrary in this Agreement, City agrees that the Contractor is not responsible for damages arising directly or indirectly from any delays for causes beyond Contractor's control. For purposes of this Agreement, such causes include, but are not limited to, strikes or other labor disputes; severe weather disruptions or other natural disasters or acts of God; fires, riots, war or other emergencies; failure of any government agency to act in timely manner; failure of performance by City or City's contractor's consultants at any level; or discovery of any hazardous substances or differing site conditions.

14. Products of Contractor. The documents, studies, evaluations, assessments, reports, plans, citations, materials, manuals, technical data, logs, files, designs and other products produced or provided by Contractor for this Agreement shall become the property of City upon Contractor's receipt of payment in full for services rendered under this Agreement. Contractor shall deliver all such products to City prior to Contractor's receipt of payment for same. City may use, reuse or otherwise utilize such products without restriction.

15. Equal Employment Opportunity. During the performance of this Agreement, Contractor agrees as follows:

a. Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law. Contractor shall ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law. Such actions shall include, but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation and selection for training, including apprenticeship. Contractor agrees to post in conspicuous places, available to employees and applicants for employment, a notice setting forth provisions of this non-discrimination clause.

b. Contractor shall, in all solicitations and advertisements for employees placed by, or on behalf of Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law.

c. Contractor shall cause the foregoing paragraphs (a) and (b) to be inserted in all subcontracts for any work covered by this Agreement, provided that the foregoing provisions shall not apply to subcontracts for standard commercial supplies or raw materials.

16. Conflicts of Interest. Contractor agrees that it shall not make, participate in the making, or in any way attempt to use its position as a consultant to influence any decision of City in which Contractor knows or has reason to know that Contractor, its officers, partners, or employees have a financial interest as defined in Section 87103 of the Government Code.

Contractor further agrees that it shall not be eligible to work as the design/build firm for the project that is the subject of this Agreement.

17. Indemnity.

a. To the fullest extent permitted by law, Contractor agrees to indemnify, defend and hold City, its City Council and each member thereof, and the officers, officials, agents and employees of City (collectively the “Indemnitees”) entirely harmless from all liability arising out of:

(1) Any and all claims under workers’ compensation acts and other employee benefit acts with respect to Contractor’s employees or Contractor’s subcontractor’s employees arising out of Contractor’s work under this Agreement, including any and all claims under any law pertaining to Contractor or its employees’ status as an independent contractor and any and all claims under Labor Code section 1720 related to the payment of prevailing wages for public works projects; and

(2) Any claim, loss, injury to or death of persons or damage to property to the extent found to be caused by any negligent act, or omission other than a professional act or omission of Contractor, or person, firm or corporation employed by Contractor, either directly or by independent contract, including all damages due to loss or theft sustained by any person, firm or corporation including the Indemnitees, or any of them, arising out of, or in any way connected with the work or services which are the subject of this Agreement, including injury or damage either on or off City’s property; but not for any loss, injury, death or damage caused by the active negligence or willful misconduct of City. Contractor, at its own expense, cost and risk, shall indemnify any and all claims, actions, suits or other proceedings that may be brought or instituted against the Indemnitees on any such claim or liability covered by this subparagraph, and shall pay or satisfy any judgment that may be rendered against the Indemnitees, or any of them, in any action, suit or other proceedings as a result of coverage under this subparagraph.

b. To the fullest extent permitted by law, Contractor agrees to indemnify and hold Indemnitees entirely harmless from all liability arising out of any claim, loss, injury to or death of persons or damage to property to the extent found to be caused by its negligent professional act or omission in the performance of professional services pursuant to this Agreement.

c. Except for the Indemnitees, the indemnifications provided in this Agreement shall not be construed to extend any third-party indemnification rights of any kind to any person or entity which is not a signatory to this Agreement.

d. The indemnities set forth in this section shall survive any closing, rescission, or termination of this Agreement, and shall continue to be binding and in full force and effect in perpetuity with respect to Contractor and its successors.

18. Insurance.

a. Contractor shall carry workers' compensation insurance as required by law for the protection of its employees during the progress of the work. Contractor understands that it is an independent contractor and not entitled to any workers' compensation benefits under any City program.

b. Contractor shall maintain during the life of this Agreement the following minimum amount of comprehensive general liability insurance or commercial general liability insurance: the greater of (1) One Million Dollars (\$1,000,000) per occurrence; or (2) all the insurance coverage and/or limits carried by or available to Contractor. Said insurance shall cover bodily injury, death and property damage and be written on an occurrence basis.

c. Contractor shall maintain during the life of this Agreement, the following minimum amount of automotive liability insurance: the greater of (1) a combined single limit of One Million Dollars (\$1,000,000); or (2) all the insurance coverage and/or limits carried by or available to Contractor. Said insurance shall cover bodily injury, death and property damage for all owned, non-owned and hired vehicles and be written on an occurrence basis.

d. Any insurance proceeds in excess of or broader than the minimum required coverage and/or minimum required limits which are applicable to a given loss shall be available to City. No representation is made that the minimum insurance requirements of this Agreement are sufficient to cover the obligations of Contractor under this Agreement.

e. Each policy of general liability and automotive liability shall provide that City, its officers, officials, agents, and employees are declared to be additional insureds under the terms of the policy, but only with respect to the work performed by Contractor under this Agreement. A policy endorsement to that effect shall be provided to City along with the certificate of insurance. In lieu of an endorsement, City will accept a copy of the policy(ies) which evidences that City is an additional insured as a contracting party. The minimum coverage required by Subsection 18.b and c, above, shall apply to City as an additional insured.

f. Contractor shall maintain during the life of this Agreement professional liability insurance covering errors and omissions arising out of the performance of this Agreement with a minimum limit of One Million Dollars (\$1,000,000) per claim. Contractor agrees to keep such policy in force and effect for at least five (5) years from the date of completion of this Agreement.

g. The General Liability and Automobile Liability insurance policies maintained by Contractor shall be primary insurance and no insurance held or owned by City shall be called upon to cover any loss under the policy. Contractor will determine its own needs in procurement of insurance to cover liabilities other than as stated above.

h. Before Contractor performs any work or prepares or delivers any materials, Contractor shall furnish certificates of insurance and endorsements, as required by City, evidencing the aforementioned minimum insurance coverages on forms acceptable to City, which

shall provide that the insurance in force will not be canceled or allowed to lapse without at least ten (10) days' prior written notice to City.

i. Except for professional liability insurance coverage that may be required by this Agreement, all insurance maintained by Contractor shall be issued by companies admitted to conduct the pertinent line of insurance business in California and having a rating of Grade A or better and Class VII or better by the latest edition of Best Key Rating Guide. In the case of professional liability insurance coverage, such coverage shall be issued by companies either licensed or admitted to conduct business in California so long as such insurer possesses the aforementioned Best rating.

j. Contractor shall immediately notify City if any required insurance lapses or is otherwise modified and cease performance of this Agreement unless otherwise directed by City. In such a case, City may procure insurance or self-insure the risk and charge Contractor for such costs and any and all damages resulting therefrom, by way of set-off from any sums owed Contractor.

k. Contractor agrees that in the event of loss due to any of the perils for which it has agreed to provide insurance, Contractor shall look solely to its insurance for recovery. Contractor hereby grants to City, on behalf of any insurer providing insurance to either Contractor or City with respect to the services of Contractor herein, a waiver of any right to subrogation which any such insurer may acquire against City by virtue of the payment of any loss under such insurance.

l. Contractor shall include all subcontractors, if any, as insureds under its policies or shall furnish separate certificates and endorsements for each subcontractor to City for review and approval. All coverages for subcontractors shall be subject to all of the requirements stated herein.

19. Termination. City may for any reason terminate this Agreement by giving Contractor not less than five (5) days' written notice of intent to terminate. Upon receipt of such notice, Contractor shall immediately cease work, unless the notice from City provides otherwise. Upon the termination of this Agreement, City shall pay Contractor for services satisfactorily provided and all allowable reimbursements incurred to the date of termination in compliance with this Agreement, unless termination by City shall be for cause, including (1) breach by Contractor of any material term of this Agreement, and/or (2) failure by the parties to reach agreement on the compensation and schedule adjustments necessitated by any material changes in the Scope of Services or the nature of the project, in which event City may withhold any disputed compensation. City shall not be liable for any claim of lost profits. Contractor shall have the right to terminate this Agreement upon giving City ten (10) calendar days prior written notice for any of the following: (1) breach by City of any material term of this Agreement, including but not limited to Payment Terms; (2) failure by the parties to reach agreement on the compensation and schedule adjustments necessitated by any material changes in the Scope of Services or the nature of the project; (3) suspension of the project or Contractor's services by City for more than ninety (90) calendar days, consecutive or in the aggregate.

20. Maintenance and Inspection of Records. In accordance with generally accepted accounting principles, Contractor and its subcontractors shall maintain reasonably full and complete books, documents, papers, accounting records, and other information (collectively, the “records”) pertaining to the costs of and completion of services performed under this Agreement. City and its authorized representatives shall have access to and the right to audit and reproduce any of Contractor's records regarding the services provided under this Agreement. Contractor shall maintain all such records for a period of at least three (3) years after termination or completion of this Agreement. Contractor agrees to make available all such records for inspection or audit at its offices during normal business hours and upon three (3) days’ notice from City, and copies thereof shall be furnished if requested.

21. Compliance with all Laws/Immigration Laws.

a. Contractor shall be knowledgeable of and comply with all local, state and federal laws which may apply to the performance of this Agreement.

b. If the work provided for in this Agreement constitutes a “public works,” as that term is defined in Section 1720 of the California Labor Code, for which prevailing wages must be paid, to the extent Contractor’s employees will perform any work that falls within any of the classifications for which the Department of Labor Relations of the State of California promulgates prevailing wage determinations, Contractor hereby agrees that it, and any subcontractor under it, shall pay not less than the specified prevailing rates of wages to all such workers. The general prevailing wage determinations for crafts can be located on the website of the Department of Industrial Relations (www.dir.ca.gov/DLSR). Additionally, to perform work under this Contract, Contractor must meet all State registration requirements and criteria, including project compliance monitoring.

c. Contractor represents that Contractor:

(1) Has complied and shall at all times during the term of this Agreement comply, in all respects, with all immigration laws, regulations, statutes, rules, codes, and orders, including, without limitation, the Immigration Reform and Control Act of 1986 (IRCA); and

(2) Has not and will not knowingly employ any individual to perform services under this Agreement who is ineligible to work in the United States or under the terms of this Agreement; and

(3) Has properly maintained, and shall at all times during the term of this Agreement properly maintain, all related employment documentation records including, without limitation, the completion and maintenance of the Form I-9 for each of Contractor’s employees; and

(4) Has responded, and shall at all times during the term of this Agreement respond, in a timely fashion to any government inspection requests relating to

immigration law compliance and/or Form I-9 compliance and/or worksite enforcement by the Department of Homeland Security, the Department of Labor, or the Social Security Administration.

d. Contractor shall require all subcontractors or subconsultants to make the same representations and warranties as set forth in Subsection 21.c.

e. Contractor shall, upon request of City, provide a list of all employees working under this Agreement and shall provide, to the reasonable satisfaction of City, verification that all such employees are eligible to work in the United States. All costs associated with such verification shall be borne by Contractor. Once such request has been made, Contractor may not change employees working under this Agreement without written notice to City, accompanied by the verification required herein for such employees.

f. Contractor shall require all subcontractors or sub-consultants to make the same verification as set forth in Subsection 21.e.

g. If Contractor or subcontractor knowingly employs an employee providing work under this Agreement who is not authorized to work in the United States, and/or fails to follow federal laws to determine the status of such employee, that shall constitute a material breach of this Agreement and may be cause for immediate termination of this Agreement by City.

h. Contractor agrees to indemnify and hold City, its officers, officials, agents and employees harmless for, of and from any loss, including but not limited to fines, penalties and corrective measures City may sustain by reason of Contractor's failure to comply with said laws, rules and regulations in connection with the performance of this Agreement.

22. Governing Law and Venue. This Agreement shall be construed in accordance with and governed by the laws of the State of California and Contractor agrees to submit to the jurisdiction of California courts. Venue for any dispute arising under this Agreement shall be in Orange County, California.

23. Integration. This Agreement constitutes the entire agreement of the parties. No other agreement, oral or written, pertaining to the work to be performed under this Agreement shall be of any force or effect unless it is in writing and signed by both parties. Any work performed which is inconsistent with or in violation of the provisions of this Agreement shall not be compensated.

24. Notice. Except as otherwise provided herein, all notices required under this Agreement shall be in writing and delivered personally, by e-mail, or by certified mail, return receipt requested, postage prepaid, to each party at the address listed below. Either party may change the notice address by notifying the other party in writing. Notices shall be deemed received upon receipt of same or within three (3) days of deposit in the U.S. Mail, whichever is earlier. Notices sent by e-mail shall be deemed received on the date of the e-mail transmission.

“CONTRACTOR”

Sargent Town Planning, Inc.
706 South Hill Street, 11th Floor
Los Angeles, CA 90014
Attn.: David Sargent

Telephone: (213) 328-2601
E-Mail: dsargent@sargenttownplanning.com

“CITY”

City of Orange
300 E. Chapman Avenue
Orange, CA 92866-1591
Attn.: Chad Ortlieb

Telephone: (714) 744-7237
E-Mail: cortlieb@cityoforange.org

25. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Signatures transmitted via facsimile and electronic mail shall have the same effect as original signatures.

[Remainder of page intentionally left blank; signatures on next page]

IN WITNESS of this Agreement, the parties have entered into this Agreement as of the year and day first above written.

“CONTRACTOR”

“CITY”

SARGENT TOWN PLANNING, INC.
a California corporation

CITY OF ORANGE, a municipal corporation

*By: 
Printed Name: David Sargent
Title: President

By: _____
Mark A. Murphy, Mayor

*By: 
Printed Name: Annabelle Sargent
Title: Secretary

ATTEST:

Pamela Coleman, City Clerk

APPROVED AS TO FORM:

Mary E. Binning
Senior Assistant City Attorney

***NOTE:** City requires the following signature(s) on behalf of the Contractor:
-- (1) the Chairman of the Board, the President or a Vice-President, **AND** (2) the Secretary, the Chief Financial Officer, the Treasurer, an Assistant Secretary or an Assistant Treasurer. If only one corporate officer exists or one corporate officer holds more than one corporate office, please so indicate. **OR**
-- The corporate officer named in a corporate resolution as authorized to enter into this Agreement. A copy of the corporate resolution, certified by the Secretary close in time to the execution of the Agreement, must be provided to City.

EXHIBIT “A”

SCOPE OF SERVICES

[Beneath this sheet.]

Exhibit A. Scope of Services

North Tustin Street Specific Plan

Task 1 Project Initiation and Management

Task 1 includes collecting relevant documents and data, and getting Consultant and City well organized to work collaboratively in crafting a visionary yet practical plan for the North Tustin Street Corridor. This task also includes the on-going project management and team coordination throughout the life of the project.

Task 1.1 Data Collection and Review

The Consultant will communicate with City to identify and gather existing relevant planning documents, technical studies, and GIS data. The Consultant will prepare a working draft planning level base map of the Plan Area, and in anticipation of the kickoff meeting will conduct an initial high-level review of existing conditions and background documents, including the General Plan, Zoning Code, and Tustin Street Design Standards. Such an initial review typically improves the effectiveness of the kick-off meeting by enabling Consultant to ask better questions and engage City in a better-informed discussion of the project area, objectives, and potential opportunities and constraints.

Deliverables

- Annotated list of collected data
- Draft base map of Plan Area

Task 1.2 Kickoff Meeting and Corridor Tour

In a one-day session, the Consultant will meet with City to discuss the overall project work plan, identify Specific Plan goals, and conduct a walking/driving tour of the North Tustin Street Corridor. Depending on COVID-19 protocols at the time, this meeting may be a fully in-person event in a single day, or may be a virtual meeting with all STP team members and City staff, followed by a half-day site visit in separate cars and on foot.

The meeting will include at least one representative of each firm on the Consultant Team, and in addition to full-team discussion of the project work plan, time will be scheduled for each firm/discipline to have direct discussion with their City staff counterparts regarding data sources, analytical techniques, and documentation preferences.

Deliverables

- Kickoff meeting & corridor tour
- Meeting agenda and summary memorandum
- Refined project work plan

Task 1.3 Project Management and Ongoing Team Coordination

Consultant's approach to project management is highly collaborative and interactive, both within our consultant team and with the client team. Starting in the kickoff meeting, Consultant will rapidly form a single, seamless consultant/client team. Based on the communication protocols established in the kickoff meeting, the STP's project manager will communicate

regularly with the City’s project manager, mostly via email but also via phone and online conference calls and file-sharing via a shared cloud-based platform such as SharePoint and/or Dropbox.

The frequency of check-ins will be as mutually agreed at the kickoff meeting, and as warranted by the nature and progress of the work in each task, but no less than bi-weekly and more often when useful. Throughout the life of the project, Consultant will conduct regular and periodic conference calls with City staff to discuss the progress of work, review and resolve issues and opportunities as they arise, and receive City comments on draft work product. Such meetings may be in person at the City every month or two if possible and safe.

Consultant will submit invoices monthly, accompanied by progress reports identifying work completed, next steps, and requests for specific information or decisions and direction from the City.

At key junctures in the work, Consultant may convene working meetings in our studio, in the City’s offices and/or via online meetings in order to work rapidly, interactively and collaboratively to clarify issues, define and sharpen questions, and work together to find answers, solutions and alternatives. Examples of such points in the planning process at which such sessions are invaluable include:

- When existing conditions analysis is mostly complete, and opportunities and constraints are becoming apparent, to focus the Team’s attention on the most promising aspects/areas.
- During and after initial stakeholder engagement, similarly to focus attention on the more promising directions the work may head.
- When initial “imagine the possibilities” presentations are being finalized for use in workshops or online engagement, to calibrate them to the City’s inclination for change and likely community acceptance.
- Engage in meetings and calls with City staff as necessary to review findings and begin development of land use scenarios.
- At one or two key points in the preparation of the draft Specific Plan to review and refine recommendations based on City and community goals.
- When implementation recommendations are being crafted for the preferred land plan.

Deliverables

- Monthly invoices and progress reports
- Biweekly check-in meetings, including meeting agendas and summary memorandums
- Working meetings, including meeting agendas and summary memorandums (up to 9)

Task 2 Existing Conditions Analysis & Precedent Research

Task 2 is focused on careful analysis of the Specific Plan Area as it is, and identifying apparent opportunities for and potential constraints to beneficial change. This includes reviewing and summarizing relevant plans and regulations now in effect, existing and historic physical development patterns, current economic conditions and market potential, and current and planned transportation and mobility systems and services.

Task 2.1 Land Use and Urban Character Analysis

Based on GIS data provided by the City and supplemented by readily available aerial/satellite photography, Consultant will complete the Plan Area base map at the best available accuracy showing all streets and other public spaces, blocks, lots and buildings. Consultant will visit, analyze and photo document the Specific Plan area to prepare a series of diagnostic maps and diagrams that clarify existing urban and architectural patterns within and surrounding the Specific Plan area. Topics addressed will include existing block and street network patterns, parcellation and ownership, building footprint, heights and massing types, surface parking and other paved areas, and street frontage character and typology. Photography taken by the Consultant Team and gathered from online mapping and photography resources will be collected, organized, and incorporated into the diagrams and a PowerPoint presentation to help all participants in the planning process to see and understand the existing built environment as it is, as the foundation for imagining how elements and attributes might change over time.

The Consultant, in collaboration with the City, will identify key opportunity site within the Specific Plan area that can serve as catalysts for future revitalization, including sites appropriate for meeting portions of the City's RHNA allocation. Opportunity sites will be mapped and prioritized based on their potential to catalyze public and private investment.

Consultant will also review the General Plan and other relevant City plans and will prepare a short report and series of PowerPoint slides summarizing policies, programs, regulations, and actions that are supportive of or potentially in conflict with the objective of fostering vibrant, walkable, and sustainable infill redevelopment within the Specific Plan area. Maps and diagrams prepared will include existing land use, planned land use per the General Plan, existing development intensities, and development intensities enabled by current zoning. This PowerPoint presentation will be used in internal City staff/consultant team working sessions, in meetings with stakeholders, in briefings for City management and leadership, and in subsequent in-person and online community engagement activities.

Deliverables

- Plan Area base map
- Analytic maps and diagrams (up to 6)
- Plans and policy analysis PowerPoint presentation detailing findings, opportunities, and constraints for infill redevelopment

Task 2.2 Fiscal and Land Use Market Analysis

This task will include separate fiscal and market analyses which will then be integrated with the findings from Task 1 to provide overall direction to the land use alternatives to be considered at part of the Specific Plan formulation process. The fiscal analysis will establish a baseline understanding of what the Plan Area has contributed to the City's General Fund over the past three to five years focusing primarily on sales, property, transient occupancy tax revenues as a percent of total City revenues. The depth and precision of this analysis will depend on the City's willingness and/or ability to provide Consultant with sales tax information in some format, either on a business by business basis, or in some aggregated format, and property tax information also broken out by the study area or in some other format that would enable

Consultant to impute some average property tax values that can be multiplied by acreages by land use. Having this information for multiple years will enable the analysis to illustrate which revenue sources might be increasing, decreasing, or flat, and to compare these numbers against other trends. Key City department heads, including Finance, Police, Public Works, Fire, and Parks and Recreation will also be interviewed to establish metrics for measuring average costs to serve the current land use mix in the study area, as well as establishing metrics for costs to serve new development types that could be introduced into the area including multifamily housing, new commercial development, and mixed use development.

The market analysis will provide information regarding demographic and economic growth trends for the City of Orange, and as appropriate for one or more trade areas to understand demand dynamics as well as document existing competitive supply for commercial activities that either currently compete with, or could compete with existing or new development supply in the study area. This study will include a review of published data from the census, the CoStar real estate data base, and other locally available real estate information. The quantitative data will be augmented with qualitative interviews with local real estate developers and brokers as well as key property owners. These interviews will be used primarily to identify specific building prototypes that could be built in the Plan Area at some point in the future, as well as to confirm rents and/or sales prices that can be used to prepare a “fiscal profile” for each building type. It should be noted that these interviews will not supersede the outreach interviews in Task 3.2. The Task 3 interviews can be used to vet findings for both the market and the fiscal analysis.

Findings from the market analysis will be fed back through the fiscal analysis model to determine what the net fiscal implications would be for redevelopment in the Specific Plan Area. These findings will inform the land use alternatives to be considered as part of the Specific Plan process.

Deliverables

- Screen check draft fiscal and market analysis report
- Final fiscal and market analysis

Task 2.3 Transportation and Mobility Analysis

In the Specific Plan Area, Tustin Street is a commercial corridor with three travel lanes in each direction and a center left turn lane. The roadway, constructed in the car-centric era of the late 20th century, presents multiple challenges for pedestrians, including long walking distances to pedestrian crosswalks at signalized intersections approximately a quarter-mile apart, and large number of commercial driveways that create many points of conflict and safety concerns for pedestrians and motorists alike. Also, motorists making left-turns onto Tustin Street from the commercial driveways must cross three travel lanes with vehicles traveling at speeds of 40 mph and higher.

Consultant will prepare an initial high-level summary of existing traffic and multi-modal mobility networks. Consultant will evaluate roadway characteristics and vehicular traffic within the Plan Area - identify distribution of vehicular traffic, existing and potential bottlenecks, locations of high concentration of collisions, gaps in the pedestrian and bicycle network, existing public

transit stops and amenities, street crossings, bike lanes, etc. Consultant will conduct vehicular operations analysis on up to 14 focused study intersections to identify existing congestion areas, bottlenecks, safety concerns, challenges and opportunities. Consultant may obtain existing traffic data from the City or a count vendor for the analysis. Existing VMT analysis will be conducted to determine the baseline conditions when developing alternatives. Consultant will gather online mapping and photos along with photos taken by Consultant and be incorporated into diagrams identify existing conditions and opportunities for new or enhanced transportation and mobility features. The diagrams will be used by the Consultant Team during the development of alternatives in Task 4.2.

Deliverables

- Screen check draft transportation and mobility analysis report
- Final transportation and mobility analysis

Task 2.4 Infrastructure Analysis

Consultant will coordinate with City and other utility providers to obtain mapping of existing and planned utility plans, infrastructure systems, and assessment reports. This will include review of City-owned Utility Master Plans for sewer, water, recycled water, and storm drainage. This task will focus on backbone infrastructure for the Specific Plan area and will identify major existing deficiencies, planned improvements, and potential future deficiencies.

Deliverables

- Memorandum of infrastructure assessment

Task 2.5 Initial Precedent Research: Places, Projects, Policies and Strategies

Based on the Specific Plan objectives as refined and clarified through discussion with City staff, and the results of the analyses in Tasks 2.1-2.4, Consultant will collect imagery and diagrams of selected places in which change of the types contemplated for the Plan Area have been successful, or perhaps less than successful.

Deliverables

- Precedents case study memorandum

Task 3 Community Engagement and Visioning

In Task 3, the Consultant Team will engage City leaders, City staff, and the community in envisioning the possibilities for the Plan Area, and in ascertaining the level of community interest in potential land use, urban design, and transportation changes that might evolve the North Tustin Street Corridor into a more complete, active, valuable, and transit supportive series of places in which residents, workers and visitors can live, work, shop and play in north-central Orange.

STP anticipates that community engagement – whether physical community workshops and/or virtual workshops utilizing online engagement tools – would be interspersed with the work in Tasks 4 and 5. That would allow the community to weigh in on alternatives and preferences at each stage

of Plan definition, and allow the Consultant Team to receive fresh input at key points in the iterative scenario development process.

Task 3.1 Public Outreach

Consultant will develop an Outreach Strategy Memo with outreach objectives and measures of success, key steps of the process, targeted stakeholders and audiences, meetings and workshops for the project, proposed outreach activities, public information and communication, and roles and responsibilities. Consultant will work with City staff to finalize target audiences, locations and format for the outreach sessions.

To encourage and gather input from a cross-section representative of community demographics, Consultant will conduct the following two community-wide workshops – a Discovery Workshop and Vision Workshop – at key points in the public outreach process. If required by health protocols at that time, the workshop may be organized using online engagement techniques, or some combination of both.

A Discovery Workshop will be the initial step in the broader public outreach and engagement process in which the Consultant Team shares with the community the goals and area of the Specific Plan project, the information and insights gained so far from existing conditions analyses, and encourages them to imagine the possibilities. If in-person engagement is feasible, we recommend a Saturday morning workshop with light breakfast and coffee, to provide a comfortable setting in which attendees can receive information, ask questions, share their views, and discuss their hopes, concerns and dreams for the future of the Study Area. If a location within the Plan Area is available, a walk-around component might be added to the workshop. If required by health protocols at that time, the workshop may be organized using online engagement techniques, or some combination of both.

The Vision Workshop will be held after initial concepts and land use alternatives have been drafted. In this physical and/or virtual workshop, the Consultant Team will present a short synopsis of information and insights gained in previous Tasks, and a draft illustrated land use alternatives presentation. The presentation will summarize high level goals and objectives and will illuminate the possibilities for place-making and economic development for the North Tustin Street corridor, as well as connectivity between those transformed places and adjoining neighborhoods and transit. Community members will have the opportunity to review the transportation and public realm framework, land use mix, and development intensity options and provide feedback in order to refine and establish a preferred land use alternative at this workshop. This workshop will be conducted in parallel with a workshop of the Planning Commission and/or City Council to maximize opportunities for input.

At several critical junctures in the project, Consultant will prepare brief online surveys that can be placed on the City's website and included with public notices. The topics of the surveys can vary but may include:

- Developing and prioritizing key issues and challenges
- Participating in a visual preference survey for the overall design character
- Reviewing and voting on land use alternatives

- Reviewing and voting on potential policy directions for topics such as affordable housing, parking, and bicycle infrastructure
- Voting on priority implementation actions

Consultant will prepare at minimum two brief online surveys and more as is possible within the scope and budget.

Deliverables

- Outreach strategy memo
- Two (2) public outreach sessions, including agendas and collateral materials
- Outreach summary draft and final memorandum
- Online surveys (min. 2)
- Summary memorandum of online community survey results

Task 3.2 Stakeholder Outreach

Consultant will work with City to identify key stakeholders and to prepare and conduct two rounds of outreach with them – first stakeholder interviews and second a stakeholder workshop. Stakeholders will include property owners, businesses, and residents in the Plan Area, Chamber of commerce representatives, Building Industry Association representatives and developers, real estate brokers, and residents of abutting neighborhoods.

- **Stakeholder Interviews.** Consultant will review findings from Tasks 1 and 2 with stakeholders and solicit input on issues including, but not limited to, strengths and challenges, resident quality of life matters, business attraction experiences, developer appeal, and perspective on City policies and regulations. Interviews may be conducted up to two full days in Orange, or an equivalent amount of time via video conference calls.
- **Stakeholder Workshop.** Consultant will prepare and conduct a stakeholder workshop to present initial vision concepts and land use alternatives. Stakeholders will have the opportunity to review the land use options in relation to information collected in Tasks 2-4 and provide feedback to the Consultant Team to refine and establish a preferred land use alternative. The workshop is expected to be an evening or weekend meeting that last approximately three to four hours.

The option of confidentiality will be offered in these interviews to increase the openness with which stakeholders are willing to share insights regarding real estate and business interests with our Team. The compiled notes will identify issues, hopes and concerns expressed, but in some cases without attributing specific inputs to specific individuals or property or business interests.

Deliverables

- Prepare outreach materials, notices, agendas, and presentations for stakeholder interviews and workshop.
- Stakeholder interviews (up to 10).
- Stakeholder workshop
- Summary memorandum of stakeholder interviews and workshop

Task 3.3 Meetings with City Officials

Key members of the Consultant Team will attend and assist City staff in leading up to two meetings each with the Design Review Committee, Planning Commission, and City Council. At City's discretion, meetings may be joint study sessions, or could be a meeting with each body, or could be a hybrid as agreed upon by City and Consultant. We anticipate that decisions as to the preferred format of each of the meetings, whether joint sessions or separate, will be made initially in the kick-off meeting and may be adjusted as the work progresses.

Consultant will meet with the City advisory bodies at two key junctures throughout the Specific Plan process. First, after the initial round of community outreach and conclusion of the existing conditions analysis. This will provide the DRC/PC/CC the opportunity to review and discuss the issues and opportunities identified by the Project Team and the feedback received from the community to date. The Consultant Team will also be able to gather their feedback on the issues and opportunities as well as their vision, goals and overall direction for the North Tustin Street corridor. The second meeting will be held during refinement of the preferred land use alternative. This will provide the DRC/PC/CC to provide substantive input on finalizing the preferred land use alternative and the Plan Framework Consultant will assist City staff in preparing meeting materials and responding to questions by the City's recommending and decision-making bodies.

Deliverables

- Attendance at Design Review Committee, Planning Commission, and City Council meetings (up to 2 each)

Task 4 Land Use Alternatives and Urban Design & Streetscape Framework

In Task 4, Consultant will develop and confirm the City and Community's vision for the North Tustin Street Corridor, building on and refining the initial concepts and possibilities into a series of place-specific strategies and design alternatives for systematically evolving the Corridor into an active, attractive and complete, walkable and transit-served, mixed-use urban district, destination and gateway into the City.

Task 4.1 Initial Concepts and Urban Design & Streetscape Framework

Based on the existing conditions analysis in Task 2 and input and direction from City Council and City staff in Task 3.3 and the information received from the community and key stakeholders in Tasks 3.1 and 3.2, Consultant will review and refine commercial corridor, town center and infill development precedents, and conduct an "internal charrette" with the entire Consultant Team and City staff either in Consultant's LA studio or virtually, depending on COVID-19 guidelines at that time.

In this 2- to 3-day session, all Team members will work rapidly and collaboratively to define initial concepts for streetscape and public space improvements, adaptive reuse and infill development typologies, transit connections and benefits, and other key strategies for increasing commercial activity, including providing new opportunities for sustainable community and neighborhood-serving retail and employment uses, inserting new housing into high quality living environments, promoting active transportation and pedestrian activity, and better leveraging the value of proximity to high quality transit in the Plan Area.

The result of this work will be an initial draft Urban Design & Streetscape Framework that begins to organize the corridor into unique “place types” based on a variety of existing and potential urban characteristics. Because of the length of the corridor, we anticipate there being three to five of such place types; for instance: “enhanced commercial center/strip,” “lifestyle/mixed-use commercial center,” “walkable mixed-use neighborhood center,” “mixed-use town center,” “walkable mixed-use neighborhood,” and potentially others. These may also likely include multiple nodes or centers (concentrations of activity, entertainment, commerce, etc.) that must be well-connected and woven together by a unified/unifying public realm.

Each Place Type will be summarized and illustrated (with initial urban design visualizations and precedent imagery) to describe a potential of range of uses, mix of uses, building scale and development intensity, pattern and connectivity of the public realm, and architectural and urban scale and character. Central focuses of these types will be streetscape character, active transportation accommodation, transit support, and financial feasibility.

This work will be summarized and compiled into an “imagine the possibilities” PowerPoint presentation and potentially also as display boards or web-ready material for use at the Vision Workshop, as described in Task 3.1.

Deliverables

- Internal charrette
- Draft PowerPoint of initial concepts and visualizations

Task 4.2 Sustainable Transportation Opportunities

Based on the outcomes of Tasks 2 and 3, Consultant will explore potential opportunities for rebalancing the allocation of the Tustin Street right-of-way in favor of pedestrian and bicycle modes, and in support of potential future improvements in the level of transit service. This includes:

- Exploring potential opportunities to implement bicycle facilities that connect to existing and future bicycle facilities outside the planning area for local and regional connectivity. Such bicycle facilities will be evaluated to determine the appropriate bicycle facility providing direct and safe access to and from the existing and new residential, commercial, and other uses along and surrounding the Tustin Street corridor.
- Identifying existing and new locations for new sidewalks, curb ramps and street crossings throughout the planning area to provide minimal conflict with vehicular traffic to provide a safe pedestrian environment with ADA-compliant pedestrian facilities.
- Evaluating the potential for micro-transit opportunities within the planning area. With potential mixed-use developments along the corridor, micro-transit opportunities may be evaluated to be incorporated along the commercial areas, providing alternative modes of transportation opportunities between areas within the corridor. We will also consider incentives for businesses to support micro-transit opportunities along the corridor.
- Evaluation of the corridor to determine if traffic volumes warrant the existing three lanes in each direction and the potential for roadway reconfigurations. We will analyze the potential for reducing vehicle travel lanes along the Tustin Street corridor from

three lanes in each direction to two lanes for implementation of buffered bike lanes, and develop the corridor to truly serve all modes of transportation. We will also evaluate the potential for bus stop turnouts along the major routes to minimize the impacts to vehicular traffic during peak periods.

- Evaluate the vehicular operations at a regional level (VMT) and focused level (Intersection) of recommended roadway improvements for each alternative developed in Task 4.2.

Tustin Street is a commercial corridor in close proximity and parallel to SR-55 freeway. Moderating vehicle travel speeds to create a sense of place will likely be important for business owners, shoppers, and local residents, improving as it can the safety and comfort of pedestrians, cyclists and motorists, while also enhancing the visibility of businesses to passing motorists. After conducting intensive public outreach with stakeholders, traffic calming measures such as narrowing of travel lane widths, adding mid-block pedestrian crossings, and other treatments may be evaluated for the various planning area alternatives.

Consultant will develop incentives and standards, to be included in the Specific Plan, for multi-modality including pedestrian amenities, bicycle facilities and inter-connectivity on and between sites within the Plan Area, and for connectivity to adjacent residential neighborhoods and park and school uses outside of the Plan Area.

Deliverables

- Memorandum of Sustainable Transportation Opportunities in the Planning Area

Task 4.3 Alternatives Development

Based on the feedback received on the initial Urban Design and Streetscape Framework and supporting vision illustrations, Consultant will define up to three (3) land use alternatives, refining the mapping of the identified Place Types onto the Plan Area and narrowing in on the intended degree/type of change anticipated for each part of the corridor. The nature and range of the alternatives will be as defined through the process of engagement with City staff, the community, and City leadership, but we expect them to include a “less ambitious change” alternative focused on improved retail and limited zoning changes, a “more ambitious change” alternative introducing more housing in horizontal and/or vertical mixed-use configurations,” and some “most ambitious change” or “aspirational” alternative envisioning a significant town center and transit-ready mixed use development in much of the Plan Area.

The alternatives will be diagrammed and illustrated in map form, with illustrative vignettes of key areas in plan, section and perspective sketch views. The primary focus of these illustrations will be the form and character of the public realm (human-scaled blocks, streets and public spaces), building massing, and property frontages, and will likely include, but not be limited to:

- Refined studies for potential infill development opportunities studying building use, form and character, parking (potentially sharable) strategies, etc.
- Recommendations for circulation and connectivity improvements along the corridor, including:
 - Opportunities to insert new network connectivity into several of the very large

- parcels along the corridor – including the potential insertion of additional (new) street connections crossing Tustin St.
 - Opportunities for new/improved connectivity to adjacent neighborhoods and open spaces.
 - Opportunities for improved transit and bicycle facilities and accommodations.
 - The potential for long term trip reduction on Tustin St through reduced trip generation from mixed-use areas and diversion of short trips from arterials onto enhanced/completed local street networks.
- Recommendations for streetscape and public frontage improvements along the Tustin St corridor, including:
 - Potential improvements to sidewalks, crosswalks, street landscaping, lighting, furnishing, and signage for enhanced pedestrian comfort and safety.
 - Potential roadway re-configuration in focused areas.
 - Opportunities for incorporation of stormwater retention and bio infiltration in streetscape/landscape elements.
 - Opportunities for gateways, local and citywide wayfinding and branding elements.
- Strategies for sensitively transitioning between areas of intensity along the corridor and adjacent neighborhoods.

Deliverables

- Land use alternatives (up to 3)

Task 4.4 Preferred Alternative

Based on input and feedback from City Staff, City Council/Planning Commission and the Community, the Consultant Team will converge upon a preferred land use, urban design and streetscape framework (“alternative”). This will likely include the assignment of the degree/type of change scenarios identified in Task 4.3 (or hybrids thereof) to selected segments of the corridor as the preferred alternative is clarified.

This framework will present a clear picture the intended physical, functional, and economic evolution of the corridor. It will also be the basis for the Vision chapter(s) of the North Tustin Corridor Specific Plan (NTCSP) and the Regulating Plan for implementation of the NTCSP’s objective development standards and design guidelines, and it will directly inform the Project Description studied by the EIR. It is worth noting here that the preferred alternative will define a range of potential use mixes and intensities for each segment and node of the corridor, not a single static “project design” for any portion thereof, as is the nature of “a plan” as distinct from “a development project.”

Deliverables

- Preferred Alternative
- Development Program for EIR Project Description.

Task 5 Specific Plan Preparation

Based on the Preferred Alternative, Consultant will prepare administrative, public review, and public hearing drafts of the North Tustin Street Specific Plan. The Specific Plan will include a vision for the public realm and private development within the Specific Plan area, along with policies, programs, and implementation strategies.

Task 5.1 Specific Plan Framework

Consultant will prepare a detailed outline for the Specific Plan, including an implementation framework, for review and approval by City staff. It will include brief descriptions addressing concepts for:

- Multi-modal circulation network including private vehicles, transit, pedestrians and cyclists as appropriate
- Urban design/streetscape program addressing city gateways, corridor activity nodes, open space opportunities, neighborhood transition, and linkage
- Infrastructure program
- Short and long-term goals and objectives for plan implementation.
- Local, State, and Federal grant and other funding opportunities for private redevelopment and public projects in the Specific Plan area.
- Streamlined development review process.

Deliverables

- Preliminary draft Specific Plan outline

Task 5.2 Administrative Draft Specific Plan

Based on the approved Specific Plan outline from Task 5.1, Consultant will prepare an administrative draft of the North Tustin Street Specific Plan that meets the requirements of Government Code §65450-65457. Consultant will follow a structure generally as below but will be flexible to ensure that its organization and contents meet the City's needs and preferences.

- **Introduction and Purpose:** This section will describe the background and purpose for the Plan; briefly summarize the planning and transportation setting (more detailed background analysis may be included as an Appendix); and describe the relation to other plans, including the General Plan.
- **Vision and Guiding Principles:** This chapter will present the community's vision for the Specific Plan area and local and regional connectivity and transitions. It will tell the story of the community's hopes for the area's long-term future, and how the plan will enable the systematic coordination of each increment of public and private reinvestment toward that future vision.
 - **Land Use and Urban Form:** This section will present the overall patterns of connectivity, mobility, the distribution and intensity of land uses, and the intended urban patterns and forms.
 - **Land use regulations.** A Conceptual Regulating Plan will present the distribution of place-based land use and urban form designations.

- **Land Use direction/policies.**
- **Design guidelines.** Design guidelines will be provided for areas of change and areas of conservation to help ensure high quality development and the creation of a vibrant, pedestrian-oriented corridor.
- **Development Code.** Based on final direction received from City Staff, the Specific Plan will prepare Objective Development Standards for the Plan Area.
- **Public Realm, Transportation and Infrastructure:** This section will focus on the public space and transportation networks within and connecting to the Plan Area. KOA will provide expertise to ensure that mobility recommendations support and are integrated with larger land use and placemaking objectives. It will include the following topics/section:
 - **Multimodal Network.** Based on assessment of existing conditions the Team will identify multimodal improvement recommendations to facilitate convenient, safe, and equitable access by all modes to the Plan Area.
 - **Street Network.** High-level conceptual design of potential access and safety improvements.
 - **Parking.** Comprehensive parking strategy including demand management policies to ensure availability while increasing cost-effectiveness and accommodating future demand.
 - **Infrastructure.** Technical information for utilities will include diagrams and descriptions for internal accommodations and connections to local/regional networks, demand analysis for sewer, water, recycled water, and drainage, capacities/deficiencies for existing utility networks, and planning level cost budgets for utility system improvements and upgrades and roadway improvements/upgrades. Planning-level cost estimates will also be provided in alignment with the demand analysis prepared in this task, and with the availability of information about system improvements needed to address existing utility capacities and deficiencies.
- **Plan Administration.** This chapter will present a clear review process to provide an understanding of how the Specific Plan applies to development projects. Community benefits framework and development incentives will be included.
- **Implementation.** Consultant will coordinate with the consultant team, primarily advising on public financing options, to make recommendations for capital improvement program planning and related strategies. A range of financial considerations and policy issues are often involved in the selection of funding sources and financing mechanisms and it will be important to clearly understand the City's viewpoint at the outset of this effort. Consultant will review desired infrastructure improvement projects and associated costs and consider potential funding sources for various categories of investment. Reflective of City priorities and funding/financing strategies, Consultant will provide a review of funding and financing tools that may be applicable to development within the Plan Area. For the most promising funding and financing approaches, Consultant will evaluate applicability and implementation requirements. This funding and financing evaluation will consider site-specific funding options and City-wide sources.

Consultant will submit the Administrative Draft Specific Plan to City staff for review and will participate in conference calls and screen-share sessions to review and discuss staff questions and comments.

Deliverables

- Administrative Draft Specific Plan

Task 5.3 Screencheck Draft Specific Plan

Based on comments from staff, Consultant will prepare a Screencheck Draft Specific Plan in InDesign. Consultant will submit the Screencheck Draft Specific Plan to City staff for review and will participate in conference calls and screen-share sessions to review and discuss staff questions and comments.

Deliverables

- Screencheck Draft Specific Plan

Task 5.4 Public Review Draft Specific Plan

Consultant will prepare a Public Review Draft of the Specific Plan based on minor, editorial, and formatting comments provide by staff’s review of the Screencheck Draft. This will be the version that will be presented to the City Council and Planning Commission during the public hearing process. City staff will compile public comments and provide clear direction to the Team on how to implement specific changes.

Consultant will provide 30 hardcopies of the Public Draft North Tustin Specific Plan. Per the RFP, five of the hardcopies will include appendices and the rest will include a cd insert.

Deliverables

- Public Review Draft Specific Plan, including 30 hardcopies

Task 5.5 Final Specific Plan

Consultant will prepare a Final North Tustin Street Specific Plan in response to comments made by the City’s advisory bodies and clear direction from City staff on the specific changes to be made. Consultant scope and budget assume that only minor changes will be needed to finalize the document.

Deliverables

- Final North Tustin Specific Plan

Task 6 CEQA Documents

Consultant will prepare a Program Environmental Impact Report evaluating the Specific Plan and any associated actions, including any amendments to the 2010 General Plan or the City’s zoning or zoning ordinance.

Task 6.1 Notice of Preparation & Scoping Meeting

Consultant will prepare the Notice of Preparation (NOP) for the EIR containing all information required by Section 15082 of the CEQA Guidelines. Meridian Consultants will submit a draft of

the NOP for review by the City, revise this draft in response to any comments, and prepare and distribute the finalized NOP for the required 30-day review period to all parties on the distribution list provided by the City.

Consultant will prepare Project Notification letters for the City to send to Native American Tribes on the City's AB52 Notification List.

Consultant will assist City staff in organizing and conducting a public scoping meeting, including preparing a PowerPoint slide presentation on the environmental review process the City is conducting for the Project, a Project information handout, and comment forms.

Deliverables

- Prepare and Distribute Notice of Preparation
- Prepare and Distribute Tribal Consultation Letters
- Prepare Scoping Meeting Materials

Task 6.2 Administrative Draft EIR

Consultant will prepare a draft Project Description including all items required by Section 15124 of the CEQA Guidelines CEQA including the project location, project objectives as defined in the Specific Plan, the proposed discretionary approval actions and intended uses of the EIR, and a list of all other related environmental review and consultation requirements. This description will be provided for review by the City prior to work beginning on the Program EIR and revised as needed to respond to the City's comments After the revised Project Description is reviewed, it will be finalized in response to the City's comments.

Based on the characteristics of the Specific Plan and a preliminary review of the potential impacts of the Project, a preliminary range of reasonable alternatives that could feasibly meet the project objectives while reducing or avoiding likely significant impacts will be provided for review and discussion. Brief descriptions of each alternative will be provided. After meeting with staff, the alternative descriptions will be revised. After the revised alternative descriptions are reviewed, these descriptions will be finalized in response to the City's comments for incorporation into the Administrative Draft EIR.

Consultant will prepare an Administrative Draft EIR evaluating the impacts of the Specific Plan and related actions. The analysis will address any specific sites to the level of detail on future development included in the Specific Plan to streamline the environmental review of subsequent individual development projects in the Specific Plan area. Program mitigation measures will be carefully developed to address potential impacts in a manner that will reduce the need for additional environmental reviews of development projects that are consistent with the Specific Plan. Based on the location and characteristics of the area that would be affected by this plan, it is anticipated that the following topics will be evaluated in the EIR: Aesthetics, Air Quality, Energy, Greenhouse Gas Emissions, Land Use & Planning, Noise, Public Services, Transportation & Traffic and Utilities & Service Systems. The other topics on the standard Initial Study checklist form will be addressed in the Effects Not Found to be Significant Section of the EIR. Consultant will prepare Air Quality, Energy, Greenhouse Gas Emission and

Noise technical studies to support the EIR. Information from the transportation study on Vehicle Miles Traveled (VMT) and infrastructure studies prepared for the Specific Plan will be incorporated into the EIR. If the amount of development permitted by the Specific Plan meets the definition of a Water Demand Project in Section 15155(a)(1) of the CEQA Guidelines, Consultant will coordinate with the City of preparation of a Water Supply Assessment (WSA), based on the information in the City's 2015 Urban Water Management Plan (UWMP) or the 2020 UWMP if it is available, and incorporate information from the WSA prepared by the City's Water Division into the EIR.

Deliverables

- Draft project description and alternatives options.
- Administrative Draft Program EIR, including all necessary technical appendices and mitigation monitoring and reporting plan. This deliverable includes providing up to two subsequent revised drafts to implement staff comments and 10 hardcopies for public review.

Task 6.3 Draft EIR and Public Review

Consultant will meet with City staff to receive the City's comments on the Administrative Draft EIR and revise the Administrative Draft EIR to incorporate the comments and requested information to prepare Screencheck EIR for review by City staff. After City staff reviews the Screencheck EIR, final revisions will be completed to prepare the Draft EIR for public review. Consultant will prepare the Notices of Availability and Completion of the Draft EIR and distribute the Draft EIR for public review.

Deliverables

- Draft EIR, including NOA and distribution for public review

Task 6.4 Final EIR

Following the close of the 45-day public review period, Consultant will prepare the Final EIR will include a revised Executive Summary, a section containing corrections and additions to the Draft EIR, and the comments and responses. Consultant will compile, index, and review all written comments with the City prior to preparing the Administrative Review Final EIR for review by City staff. After staff has reviewed the Final EIR, revisions will be made in response to the City's comments and a Screencheck Final EIR will be prepared for review by City staff prior to preparation of the Final EIR. Consultant scope anticipates up to two subsequent revised drafts to implement staff comments. Per the RFP, Consultant will provide 30 hardcopies and digital copy of the Final EIR, five of which will include appendices.

Deliverables

- Final Program EIR, including response to public comments.
- CEQA Notices and submittal to the State Clearinghouse.

Task 7. Plan Adoption

Task 7.1 Public Hearings

Key members of the Consultant Team will attend up to two public hearings on the Specific Plan and PEIR. In preparation for the public hearings, Consultant will prepare a brief presentation (in PPT) describing the Specific Plan/PEIR. City staff will be responsible for preparing the staff report for the hearings. Attendance may include oral presentations to the hearing, if desired.

Deliverables

- Attendance at public hearings (up to 2)
- Presentation material for public hearings

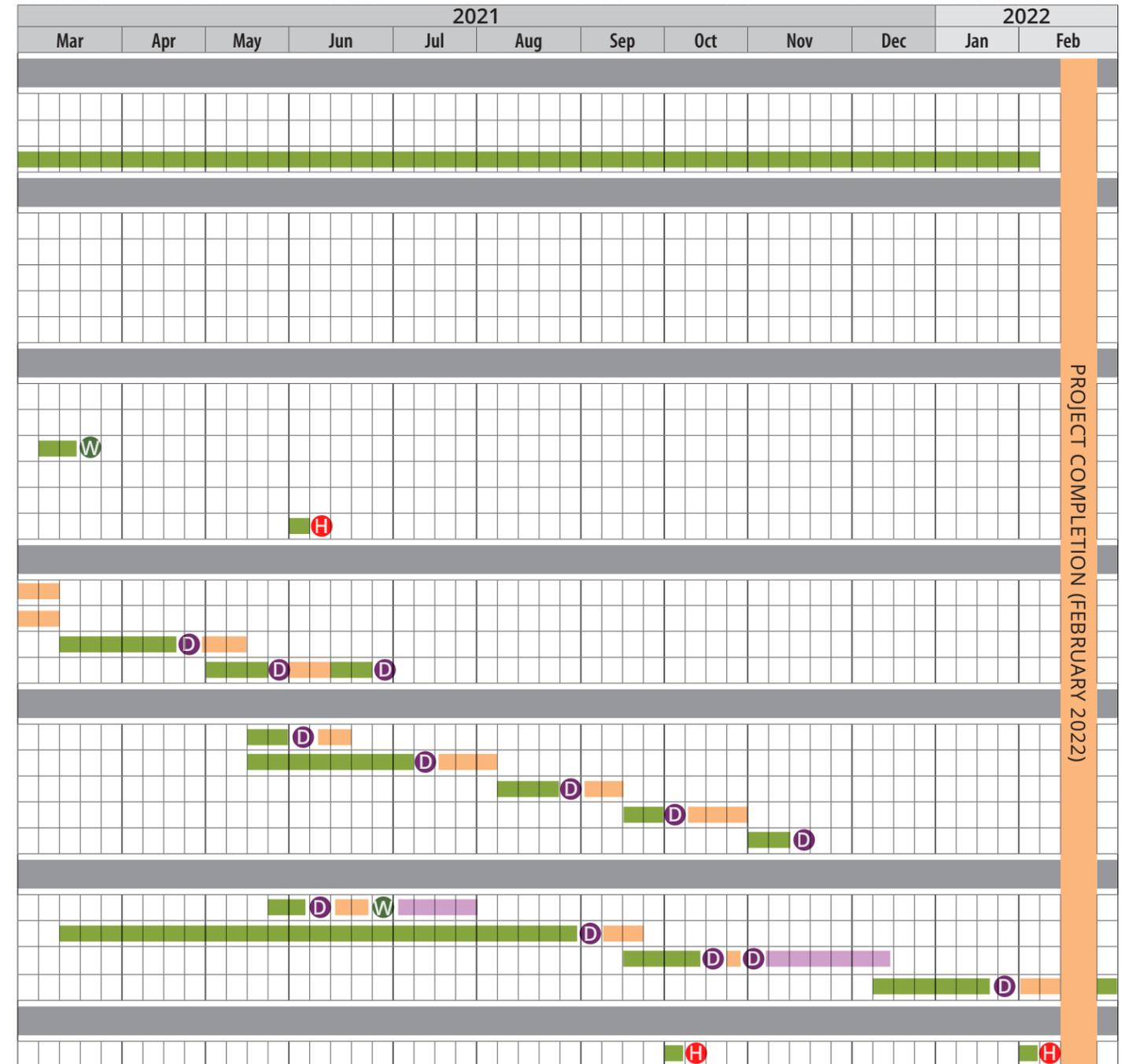
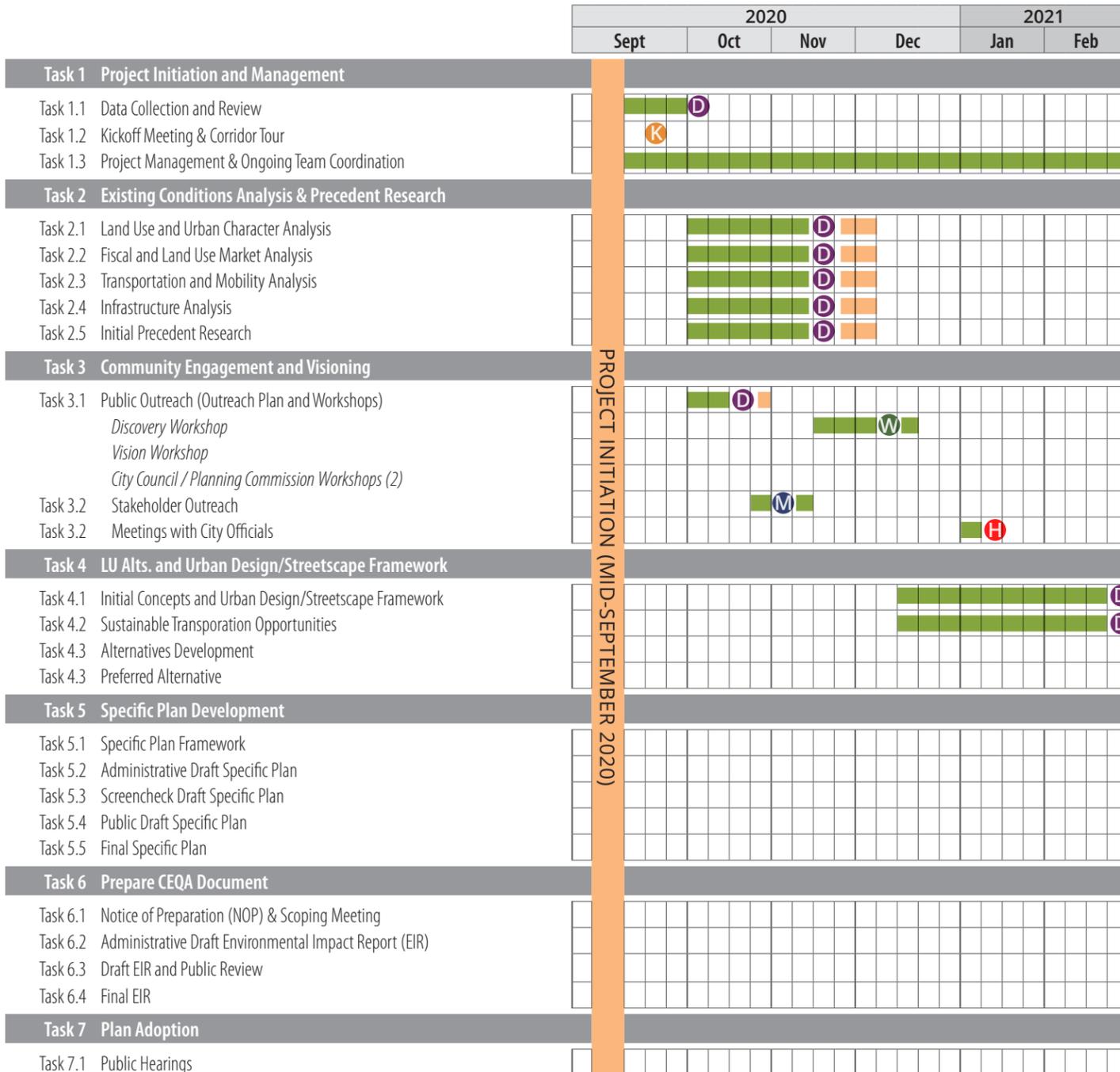
Notes:

1. Unless stated otherwise, for all deliverables involving a document, the consultant will provide 6 hardcopies and a digital copy. Staff may reduce the amount of copies required at its discretion.
2. For all deliverables or components of deliverables that are maps, the consultant shall provide the maps in both a pdf and GIS compatible format.
3. Meetings identified in the tasks may be held in person or over the phone at the discretion of staff. Key consultant staff shall attend the meetings.

EXHIBIT B. PROJECT SCHEDULE

This schedule for the North Tustin Street Specific Plan follows the task structure as described in Exhibit A. Scope of Services. The schedule will be closely monitored throughout the project and is subject to change with City approval.

- K Kick-off Meeting
- D Deliverable Submittal
- M Staff / Committee / Stakeholder Meetings
- Consultant Team Working
- W Public Meeting / Study Session / Community Workshop
- City Review of Deliverables City
- H Planning Board / City Council Workshop / Hearing
- Public Review Period





Agenda Item

City Council

Item #: 3.11.

9/8/2020

File #: 20-091

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Cash, Public Works Director

1. SUBJECT

Agreement with AECOM Technical Services, Inc. for environmental, hydraulics, geotechnical and survey services for the Santiago Creek Multipurpose Trail Extension Project (SP-4118).

2. SUMMARY

This agreement authorizes AECOM Technical Services, Inc. to provide consulting services for the environmental, hydraulics, geotechnical, and survey services for the Santiago Creek Multipurpose Trail Extension Project.

3. RECOMMENDED ACTION

Approve the agreement with AECOM Technical Services, Inc. in the amount of \$381,801 for environmental, hydraulics, geotechnical and survey services; and authorize the Mayor and City Clerk to execute the agreement on behalf of the City.

4. FISCAL IMPACT

The total expenditure for this agreement is \$381,801 and will be funded in Santiago Creek Multipurpose Trail Extension (20325) through:

Capital Projects (500)	\$ 97,532
Reimbursable Capital Projects(550)	<u>284,269</u>
Total:	\$381,801

5. STRATEGIC PLAN GOALS

Goal 3: Enhance and promote quality of life in the community

d. Maintain and improve multi-modal transportation throughout the City.

Goal 4: Provide outstanding public service

b. Provide facilities and services to meet customer expectations.

6. DISCUSSION AND BACKGROUND

On March 10, 2020, the City Council approved a Cooperative Agreement with Orange County Transportation Authority (OCTA) for the Bicycle Corridor Improvement Program (BCIP) for the Santiago Creek Multipurpose Extension project. This program provided funding for the environmental and preliminary engineering phase of the Santiago Creek Multi-Purpose Trail Extension Project.

With authorization of the City Council, City staff advertised the Request for Proposal (RFP) to the public on May 21, 2020 for four weeks. The RFP requested for the consultant services for preparation of an appropriate National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) documentation with all necessary supportive technical studies, hydraulic analysis, field survey, geotechnical analysis and right of way engineering for the Santiago Creek Multipurpose Extension project. The City received four well-qualified proposals from the following firms (alphabetical order):

1. AECOM Technical Services, Inc.
2. Environmental Science Associates
3. Huitt-Zollars, Inc.
4. Michael Baker International, Inc.

After evaluation of all proposals by city staff, the definitive consensus was that AECOM Technical Services, Inc. (AECOM) submitted the top-ranked proposal.

Staff recommends awarding a contract to AECOM. AECOM demonstrated an in-depth understanding of the project scope and structured their proposal to emphasize the key project elements. In addition, the collective experience of the project team's key personnel on projects of similar size and scope will be a great benefit to the success of our project. AECOM's initial cost proposal was \$471,642, and Public Works staff was able to negotiate the fee down to \$381,801 to AECOM.

The environmental documents and preliminary engineering is the first phase for the Santiago Creek Multipurpose Trail Extension Project which proposes to extend the existing multipurpose trail along the Santiago Creek. The project will construct approximately 1.5 miles of Class 1 asphalt concrete bike trail and rehabilitate the existing multi-purposed trail with decomposed granite along with needed amenities such as rest areas and trash receptacles. Construction of the multi-purpose trail will connect the existing bike trail west of Cannon Street, parallel the existing trail on the northern bank, and terminate at the Santiago Oaks Regional Park. Once complete, the trail will allow for uninterrupted pedestrian and bicycle traffic along an eight-mile stretch of trails from Santiago Oaks Regional Park to the westerly city boundary. The environmental study will also consider as an alternate the proposed residential development project alongside the Santiago Creek at the Mabury Avenue and Yellowstone Boulevard intersection, as shown in the proposed Tentative Tract Map No. 18163 prepared by Milan Capital Management. The proposed tract map will grant right of way for the trail along the southern tract boundary, placing the trail closer to the Santiago Creek, while maintaining frontage access to the development from Mabury Avenue. The scope of work with the consultant is meant to be flexible to accommodate either trail alignment depending on whether the development associated with Tentative Tract Map No. 18163 occurs.

City staff will continue to pursue grant opportunities for right of way and construction funding in the future.

7. ATTACHMENTS

- Consultant Services Agreement with AECOM Technical Services, Inc.



Agenda Item

City Council

Item #: 3.11.

9/8/2020

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City staff will continue to pursue grant opportunities for right of way and construction funding in the future.

7. ATTACHMENTS

- Consultant Services Agreement with AECOM Technical Services, Inc.

PROFESSIONAL SERVICES AGREEMENT
[Environmental, Hydraulics, Geotechnical and Survey Services]

THIS PROFESSIONAL SERVICES AGREEMENT (the “Agreement”) is made at Orange, California, on this ____ day of _____, 2020 (the “Effective Date”) by and between the CITY OF ORANGE, a municipal corporation (“City”), and AECOM Technical Services, Inc., a California corporation (“Contractor”), who agree as follows:

1. Services. Subject to the terms and conditions set forth in this Agreement, Contractor shall provide to the reasonable satisfaction of City the services set forth in Exhibit “A,” which is attached hereto and incorporated herein by reference. As a material inducement to City to enter into this Agreement, Contractor represents and warrants that it has thoroughly investigated and considered the scope of services and fully understands the difficulties and restrictions in performing the work. The services which are the subject of this Agreement are not in the usual course of City’s business and City relies on Contractor’s representation that it is independently engaged in the business of providing such services and is experienced in performing the work. Contractor shall perform all services in a manner reasonably satisfactory to City and in a manner in conformance with the standards of quality normally observed by an entity provided such services to a municipal agency. All services provided shall conform to all federal, state and local laws, rules and regulations and to the best professional standards and practices. The terms and conditions set forth in this Agreement shall control over any terms and conditions in Exhibit "A" to the contrary.

Youichi Nakagawa, Associate Civil Engineer (“City’s Project Manager”), shall be the person to whom Contractor will report for the performance of services hereunder. It is understood that Contractor’s performance hereunder shall be under the supervision of City’s Project Manager (or his/her designee), that Contractor shall coordinate its services hereunder with City’s Project Manager to the extent required by City’s Project Manager, and that all performances required hereunder by Contractor shall be performed to the satisfaction of City’s Project Manager and the City Manager.

2. Compensation and Fees.

a. Contractor's total compensation for all services performed under this Agreement, shall not exceed THREE HUNDRED EIGHTY-ONE THOUSAND EIGHT HUNDRED DOLLARS and 35/100 (\$381,800.35) without the prior written authorization of City.

b. The above compensation shall include all costs, including, but not limited to, all clerical, administrative, overhead, insurance, reproduction, telephone, travel, auto rental, subsistence and all related expenses.

3. Payment.

a. As scheduled services are completed, Contractor shall submit to City an invoice for the services completed, authorized expenses and authorized extra work actually performed or incurred.

b. All such invoices shall state the basis for the amount invoiced, including services completed, the number of hours spent and any extra work performed.

c. City will pay Contractor the amount invoiced within thirty (30) days after the approval of the invoice.

d. Payment shall constitute payment in full for all services, authorized costs and authorized extra work covered by that invoice.

4. **Change Orders.** No payment for extra services caused by a change in the scope or complexity of work, or for any other reason, shall be made unless and until such extra services and a price therefor have been previously authorized in writing and approved by City as an amendment to this Agreement. City's Project Manager is authorized to approve a reduction in the services to be performed and compensation therefor. All amendments shall set forth the changes of work, extension of time, and/or adjustment of the compensation to be paid by City to Contractor and shall be signed by the City's Project Manager, City Manager or City Council, as applicable.

5. **Licenses.** Contractor represents that it and any subcontractors it may engage, possess any and all licenses which are required under state or federal law to perform the work contemplated by this Agreement and that Contractor and its subcontractors shall maintain all appropriate licenses, including a City of Orange business license, at its cost, during the performance of this Agreement.

6. **Independent Contractor.** At all times during the term of this Agreement, Contractor shall be an independent contractor and not an employee of City. City shall have the right to control Contractor only insofar as the result of Contractor's services rendered pursuant to this Agreement. City shall not have the right to control the means by which Contractor accomplishes services rendered pursuant to this Agreement. Contractor shall, at its sole cost and expense, furnish all facilities, materials and equipment which may be required for furnishing services pursuant to this Agreement. Contractor shall be solely responsible for, and shall indemnify, defend and save City harmless from all matters relating to the payment of its subcontractors, agents and employees, including compliance with social security withholding and all other wages, salaries, benefits, taxes, exactions, and regulations of any nature whatsoever. Contractor acknowledges that it and any subcontractors, agents or employees employed by Contractor shall not, under any circumstances, be considered employees of City, and that they shall not be entitled to any of the benefits or rights afforded employees of City, including, but not limited to, sick leave, vacation leave, holiday pay, Public Employees Retirement System benefits, or health, life, dental, long-term disability or workers' compensation insurance benefits.

7. **Contractor Not Agent.** Except as City may specify in writing, Contractor shall have no authority, express or implied, to act on behalf of City in any capacity whatsoever as an agent. Contractor shall have no authority, express or implied, to bind City to any obligation whatsoever.

8. **Designated Persons.** Only those qualified persons authorized by City's Project Manager, or as designated in Exhibit "A," shall perform work provided for under this Agreement.

It is understood by the parties that clerical and other nonprofessional work may be performed by persons other than those designated.

9. Assignment or Subcontracting. No assignment or subcontracting by Contractor of any part of this Agreement or of funds to be received under this Agreement shall be of any force or effect unless the assignment has the prior written approval of City. City may terminate this Agreement rather than accept any proposed assignment or subcontracting. Such assignment or subcontracting may be approved by the City Manager or his/her designee.

10. Time of Completion. Except as otherwise specified in Exhibit "A," Contractor shall commence the work provided for in this Agreement within ten (10) days of the Effective Date of this Agreement and diligently prosecute completion of the work in accordance with the time period set forth in Exhibit "A" hereto or as otherwise agreed to by and between the representatives of the parties.

11. Time Is of the Essence. Time is of the essence in this Agreement. Contractor shall do all things necessary and incidental to the prosecution of Contractor's work.

12. Reserved.

13. Delays and Extensions of Time. Contractor's sole remedy for delays outside its control, other than those delays caused by City, shall be an extension of time. No matter what the cause of the delay, Contractor must document any delay and request an extension of time in writing at the time of the delay to the satisfaction of City. Any extensions granted shall be limited to the length of the delay outside Contractor's control. If Contractor believes that delays caused by City will cause it to incur additional costs, it must specify, in writing, why the delay has caused additional costs to be incurred and the exact amount of such cost at the time the delay occurs. No additional costs can be paid that exceed the not to exceed amount stated in Section 2.a, above, absent a written amendment to this Agreement.

14. Products of Contractor. The documents, studies, evaluations, assessments, reports, plans, citations, materials, manuals, technical data, logs, files, designs and other products produced or provided by Contractor for this Agreement shall become the property of City upon receipt. Contractor shall deliver all such products to City prior to payment for same. City may use, reuse or otherwise utilize such products without restriction.

15. Equal Employment Opportunity. During the performance of this Agreement, Contractor agrees as follows:

a. Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law. Contractor shall ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law. Such actions shall include, but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation and selection for training, including apprenticeship. Contractor agrees to post in

conspicuous places, available to employees and applicants for employment, a notice setting forth provisions of this non-discrimination clause.

b. Contractor shall, in all solicitations and advertisements for employees placed by, or on behalf of Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law.

c. Contractor shall cause the foregoing paragraphs (a) and (b) to be inserted in all subcontracts for any work covered by this Agreement, provided that the foregoing provisions shall not apply to subcontracts for standard commercial supplies or raw materials.

16. Conflicts of Interest. Contractor agrees that it shall not make, participate in the making, or in any way attempt to use its position as a consultant to influence any decision of City in which Contractor knows or has reason to know that Contractor, its officers, partners, or employees have a financial interest as defined in Section 87103 of the Government Code.

17. Indemnity.

a. To the fullest extent permitted by law, Contractor agrees to indemnify, defend and hold City, its City Council and each member thereof, and the officers, officials, agents and employees of City (collectively the “Indemnitees”) entirely harmless from all liability arising out of:

(1) Any and all claims under workers’ compensation acts and other employee benefit acts with respect to Contractor’s employees or Contractor’s subcontractor’s employees arising out of Contractor’s work under this Agreement, including any and all claims under any law pertaining to Contractor or its employees’ status as an independent contractor and any and all claims under Labor Code section 1720 related to the payment of prevailing wages for public works projects; and

(2) Any claim, loss, injury to or death of persons or damage to property caused by any act, neglect, default, or omission other than a professional act or omission of Contractor, or person, firm or corporation employed by Contractor, either directly or by independent contract, including all damages due to loss or theft sustained by any person, firm or corporation including the Indemnitees, or any of them, arising out of, or in any way connected with the work or services which are the subject of this Agreement, including injury or damage either on or off City’s property; but not for any loss, injury, death or damage caused by the active negligence or willful misconduct of City. Contractor, at its own expense, cost and risk, shall indemnify any and all claims, actions, suits or other proceedings that may be brought or instituted against the Indemnitees on any such claim or liability covered by this subparagraph, and shall pay or satisfy any judgment that may be rendered against the Indemnitees, or any of them, in any action, suit or other proceedings as a result of coverage under this subparagraph.

b. To the fullest extent permitted by law, Contractor agrees to indemnify and hold Indemnitees entirely harmless from all liability arising out of any claim, loss, injury to or

death of persons or damage to property caused by its negligent professional act or omission in the performance of professional services pursuant to this Agreement.

c. Except for the Indemnitees, the indemnifications provided in this Agreement shall not be construed to extend any third party indemnification rights of any kind to any person or entity which is not a signatory to this Agreement.

d. The indemnities set forth in this section shall survive any closing, rescission, or termination of this Agreement, and shall continue to be binding and in full force and effect in perpetuity with respect to Contractor and its successors.

18. Insurance.

a. Contractor shall carry workers' compensation insurance as required by law for the protection of its employees during the progress of the work. Contractor understands that it is an independent contractor and not entitled to any workers' compensation benefits under any City program.

b. Contractor shall maintain during the life of this Agreement the following minimum amount of comprehensive general liability insurance or commercial general liability insurance: the greater of (1) One Million Dollars (\$1,000,000) per occurrence; or (2) all the insurance coverage and/or limits carried by or available to Contractor. Said insurance shall cover bodily injury, death and property damage and be written on an occurrence basis.

c. Contractor shall maintain during the life of this Agreement, the following minimum amount of automotive liability insurance: the greater of (1) a combined single limit of One Million Dollars (\$1,000,000); or (2) all the insurance coverage and/or limits carried by or available to Contractor. Said insurance shall cover bodily injury, death and property damage for all owned, non-owned and hired vehicles and be written on an occurrence basis.

d. Any insurance proceeds in excess of or broader than the minimum required coverage and/or minimum required limits which are applicable to a given loss shall be available to City. No representation is made that the minimum insurance requirements of this Agreement are sufficient to cover the obligations of Contractor under this Agreement.

e. Each policy of general liability and automotive liability shall provide that City, its officers, officials, agents, and employees are declared to be additional insureds under the terms of the policy, but only with respect to the work performed by Contractor under this Agreement. A policy endorsement to that effect shall be provided to City along with the certificate of insurance. In lieu of an endorsement, City will accept a copy of the policy(ies) which evidences that City is an additional insured as a contracting party. The minimum coverage required by Subsection 18.b and c, above, shall apply to City as an additional insured.

f. Consultants shall maintain during the life of this Agreement professional liability insurance covering errors and omissions arising out of the performance of this Agreement with a minimum limit of One Million Dollars (\$1,000,000) per claim. Contractor agrees to keep

such policy in force and effect for at least five (5) years from the date of completion of this Agreement.

g. The insurance policies maintained by Contractor shall be primary insurance and no insurance held or owned by City shall be called upon to cover any loss under the policy. Contractor will determine its own needs in procurement of insurance to cover liabilities other than as stated above.

h. Before Contractor performs any work or prepares or delivers any materials, Contractor shall furnish certificates of insurance and endorsements, as required by City, evidencing the aforementioned minimum insurance coverages on forms acceptable to City, which shall provide that the insurance in force will not be canceled or allowed to lapse without at least ten (10) days' prior written notice to City.

i. Except for professional liability insurance coverage that may be required by this Agreement, all insurance maintained by Contractor shall be issued by companies admitted to conduct the pertinent line of insurance business in California and having a rating of Grade A or better and Class VII or better by the latest edition of Best Key Rating Guide. In the case of professional liability insurance coverage, such coverage shall be issued by companies either licensed or admitted to conduct business in California so long as such insurer possesses the aforementioned Best rating.

j. Contractor shall immediately notify City if any required insurance lapses or is otherwise modified and cease performance of this Agreement unless otherwise directed by City. In such a case, City may procure insurance or self-insure the risk and charge Contractor for such costs and any and all damages resulting therefrom, by way of set-off from any sums owed Contractor.

k. Contractor agrees that in the event of loss due to any of the perils for which it has agreed to provide insurance, Contractor shall look solely to its insurance for recovery. Contractor hereby grants to City, on behalf of any insurer providing insurance to either Contractor or City with respect to the services of Contractor herein, a waiver of any right to subrogation which any such insurer may acquire against City by virtue of the payment of any loss under such insurance.

l. Contractor shall include all subcontractors, if any, as insureds under its policies or shall furnish separate certificates and endorsements for each subcontractor to City for review and approval. All coverages for subcontractors shall be subject to all of the requirements stated herein.

19. Termination. City may for any reason terminate this Agreement by giving Contractor not less than five (5) days' written notice of intent to terminate. Upon receipt of such notice, Contractor shall immediately cease work, unless the notice from City provides otherwise. Upon the termination of this Agreement, City shall pay Contractor for services satisfactorily provided and all allowable reimbursements incurred to the date of termination in compliance with this Agreement, unless termination by City shall be for cause, in which event City may withhold any disputed compensation. City shall not be liable for any claim of lost profits.

20. Maintenance and Inspection of Records. In accordance with generally accepted accounting principles, Contractor and its subcontractors shall maintain reasonably full and complete books, documents, papers, accounting records, and other information (collectively, the “records”) pertaining to the costs of and completion of services performed under this Agreement. City and its authorized representatives shall have access to and the right to audit and reproduce any of Contractor's records regarding the services provided under this Agreement. Contractor shall maintain all such records for a period of at least three (3) years after termination or completion of this Agreement. Contractor agrees to make available all such records for inspection or audit at its offices during normal business hours and upon three (3) days’ notice from City, and copies thereof shall be furnished if requested.

21. Compliance with all Laws/Immigration Laws.

a. Contractor shall be knowledgeable of and comply with all local, state and federal laws which may apply to the performance of this Agreement.

b. If the work provided for in this Agreement constitutes a “public works,” as that term is defined in Section 1720 of the California Labor Code, for which prevailing wages must be paid, to the extent Contractor’s employees will perform any work that falls within any of the classifications for which the Department of Labor Relations of the State of California promulgates prevailing wage determinations, Contractor hereby agrees that it, and any subcontractor under it, shall pay not less than the specified prevailing rates of wages to all such workers. The general prevailing wage determinations for crafts can be located on the website of the Department of Industrial Relations (www.dir.ca.gov/DLSR). Additionally, to perform work under this Contract, Contractor must meet all State registration requirements and criteria, including project compliance monitoring.

c. Contractor represents and warrants that Contractor:

(1) Has complied and shall at all times during the term of this Agreement comply, in all respects, with all immigration laws, regulations, statutes, rules, codes, and orders, including, without limitation, the Immigration Reform and Control Act of 1986 (IRCA); and

(2) Has not and will not knowingly employ any individual to perform services under this Agreement who is ineligible to work in the United States or under the terms of this Agreement; and

(3) Has properly maintained, and shall at all times during the term of this Agreement properly maintain, all related employment documentation records including, without limitation, the completion and maintenance of the Form I-9 for each of Contractor’s employees; and

(4) Has responded, and shall at all times during the term of this Agreement respond, in a timely fashion to any government inspection requests relating to immigration law compliance and/or Form I-9 compliance and/or worksite enforcement by the

Department of Homeland Security, the Department of Labor, or the Social Security Administration.

d. Contractor shall require all subcontractors or subconsultants to make the same representations and warranties as set forth in Subsection 21.c.

e. Contractor shall, upon request of City, provide a list of all employees working under this Agreement and shall provide, to the reasonable satisfaction of City, verification that all such employees are eligible to work in the United States. All costs associated with such verification shall be borne by Contractor. Once such request has been made, Contractor may not change employees working under this Agreement without written notice to City, accompanied by the verification required herein for such employees.

f. Contractor shall require all subcontractors or sub-consultants to make the same verification as set forth in Subsection 21.e.

g. If Contractor or subcontractor knowingly employs an employee providing work under this Agreement who is not authorized to work in the United States, and/or fails to follow federal laws to determine the status of such employee, that shall constitute a material breach of this Agreement and may be cause for immediate termination of this Agreement by City.

h. Contractor agrees to indemnify and hold City, its officers, officials, agents and employees harmless for, of and from any loss, including but not limited to fines, penalties and corrective measures City may sustain by reason of Contractor's failure to comply with said laws, rules and regulations in connection with the performance of this Agreement.

22. Governing Law and Venue. This Agreement shall be construed in accordance with and governed by the laws of the State of California and Contractor agrees to submit to the jurisdiction of California courts. Venue for any dispute arising under this Agreement shall be in Orange County, California.

23. Integration. This Agreement constitutes the entire agreement of the parties. No other agreement, oral or written, pertaining to the work to be performed under this Agreement shall be of any force or effect unless it is in writing and signed by both parties. Any work performed which is inconsistent with or in violation of the provisions of this Agreement shall not be compensated.

24. Notice. Except as otherwise provided herein, all notices required under this Agreement shall be in writing and delivered personally, by e-mail, or by first class U.S. mail, postage prepaid, to each party at the address listed below. Either party may change the notice address by notifying the other party in writing. Notices shall be deemed received upon receipt of same or within three (3) days of deposit in the U.S. Mail, whichever is earlier. Notices sent by e-mail shall be deemed received on the date of the e-mail transmission.

“CONTRACTOR”

AECOM Technical Services, Inc.
999 Town and Country Road
Orange, CA 92806
Attn.: William Hoose

Telephone: 714-567-2421
E-Mail: William.hoose@aecom.com

“CITY”

City of Orange
300 E. Chapman Avenue
Orange, CA 92866-1591
Attn.: Youichi Nakagawa

Telephone: 714-744-5572
E-Mail: ynakagawa@cityoforange.org

25. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Signatures transmitted via facsimile and electronic mail shall have the same effect as original signatures.

[Remainder of page intentionally left blank; signatures on next page]

IN WITNESS of this Agreement, the parties have entered into this Agreement as of the year and day first above written.

“CONTRACTOR”

“CITY”

AECOM TECHNICAL SERVICES, INC.
a California corporation

CITY OF ORANGE, a municipal corporation

*By: _____
Printed Name: _____
Title: _____

By: _____
Mark A. Murphy, Mayor

*By: _____
Printed Name: _____
Title: _____

ATTEST:

Pamela Coleman, City Clerk

APPROVED AS TO FORM:

Mary E. Binning
Senior Assistant City Attorney

***NOTE:** City requires the following signature(s) on behalf of the Contractor:
-- (1) the Chairman of the Board, the President or a Vice-President, AND (2) the Secretary, the Chief Financial Officer, the Treasurer, an Assistant Secretary or an Assistant Treasurer. If only one corporate officer exists or one corporate officer holds more than one corporate office, please so indicate. OR
-- The corporate officer named in a corporate resolution as authorized to enter into this Agreement. A copy of the corporate resolution, certified by the Secretary close in time to the execution of the Agreement, must be provided to City.

EXHIBIT “A”

SCOPE OF SERVICES

[Beneath this sheet.]

1. Consultant Work Plan
2. Consultant Hourly Labor Rates
3. Sub-Consultant Hourly Labor Rates
4. Local Assistance Procedure Manual Exhibit 10-O1
5. Local Assistance Procedure Manual Exhibit 10-O2

4. PROJECT APPROACH AND UNDERSTANDING

Work Plan

To obtain environmental clearance in accordance with CEQA and Caltrans while achieving the City's goals for this project, AECOM commits our best local technical experts and our most qualified project management team to execute and deliver high-quality products identified in the RFP. The following discussion outlines our technical scope for preparation of all the deliverables by phase.

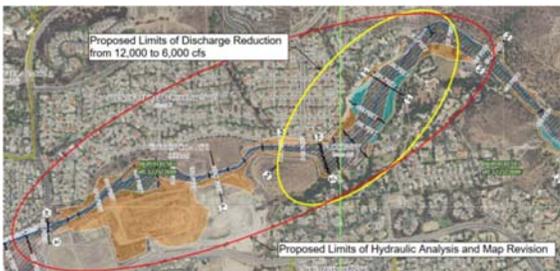
Phase 1

Hydraulic Analysis

The latest FEMA effective Flood Insurance Study (FIS) for the City of Orange is dated March 21, 2019. This contains results of a study of Santiago Creek by USACE in 1978, which was based on a peak discharge rate of 12,000 cfs. USACE subsequently prepared another hydrology study of Santiago Creek in 1990 that shows a discharge rate of 6,000 cfs. The 2019 update of the FIS and Flood Insurance Rate Maps (FIRMs) do not reflect the revised discharge rate (i.e., 6,000 cfs) in all areas. FEMA issued a Letter of Map Revision (LOMR) in 2003 from Cannon Street (previously Loma Street) to approximately 4,200 feet upstream based on the updated 6,000 cfs discharge, but the areas upstream and downstream of this reach have not yet been updated. An ongoing project just west of Cannon Street has applied for a second LOMR that is currently being reviewed by FEMA. The second LOMR extends from just west of Cannon Street to approximately Yellowstone Boulevard using 6,000 cfs.

AECOM will perform a hydraulic analysis using USACE Hydrologic Engineering Center - River Analysis System (HEC-RAS) software using 6,000 cfs. AECOM's limits of the hydraulic analysis will extend downstream of Cannon Street far enough to assure any impacts of proposed trail encroachments are documented and the water surfaces tie into the effective Base Flood Elevations of the previous LOMR, and upstream far enough to cover the project limits and tie back into the established water surface elevation. AECOM will use existing topography to the extent it is appropriate supplemented by additional survey as needed.

Figure 2 shows the proposed study limits and the area of revised flows as discussed (i.e., from 12,000 cfs to 6,000 cfs). AECOM will submit an electronic copy of the hydraulic analysis report to the City for review. We assume one (1) round of review for this task. Refer to Phases 2 and 3 for additional related tasks.



Survey Requirements

Coast Surveying, Inc. (Coast) will assist AECOM with the design survey to support the project. The areas to be surveyed and a topographic map generated is shown in Figure 3.



The total length of the areas required to be surveyed is 3500±LF. Horizontally, the survey will be tied to the California State Plane coordinate system (NAD83) and based upon the current Orange County adjustment. Vertically, the survey will be tied to the City benchmark network (NAVD88). The design survey will be developed at 1"=20' scale and will include the following items:

- Sufficient spot elevations and breaklines to accurately develop contours at a 1.0' interval with cross sections surveyed at 100' intervals. Each section is to be 50' wide on each side of the established survey centerline.
- Sufficient points shall also be taken for each of the areas to generate a topographic map of the area as shown in the diagram above.
- All trees within the areas to be surveyed that have a diameter larger than 12" shall be located.
- The study area of Santiago Creek will be flown and aerial mapping developed at 1-foot contour interval to supplement the hydraulic analysis as needed.

All Coast's project work will be done under the direct supervision of a Professional Surveyor licensed in the state of California. Electronic files of the surveying field book, notes, and topographic base plans will be submitted to the City for review. We assume one (1) round of review for this task. AECOM has assigned a liaison for this task to ensure that coordination between our team and the City is efficient.

Phase 2

Preliminary Water Quality Management Plan

In accordance with the Orange County Drainage Area Management Plan (DAMP) and the City of Orange Local Implementation Plan (LIP), AECOM will prepare a Preliminary Water Quality Management Plan (WQMP) that will include the following:

- Description of the proposed project
- Discussion of the regulatory setting, including federal and state regulations, Orange County DAMP and City LIP, and applicable Regional Water Quality Control Board (RWQCB) water quality/storm water permit requirements
- Discussion of the physical setting including soils, geology, surface water quality, groundwater quality, and sensitive aquatic/riparian habitats
- Discussion of the RWQCB's water quality standards for the receiving waters (Santiago Creek) including beneficial uses, water quality objectives, and any applicable TMDLs
- Discussion of project impacts on surface water quality during construction and post-construction
- Discussion of general water quality impact mitigation measures and applicable federal, state and local requirements for water quality protection during construction and post-construction

AECOM will submit an electronic copy of the Preliminary WQMP to the City for review. We assume one (1) round of review for this task.

Draft Environmental Technical Studies

AECOM will prepare the following technical studies for the environmental documents and will submit electronic copies of the draft technical studies to the City for review.

We assume one (1) round of review for each technical study. An electronic copy and two (2) hard copies of each final technical study will be submitted.

Air Quality, GHG Emissions, and Energy

Terry A. Hayes Associates Inc. (TAHA) will assist AECOM with the preparation of the Air Quality, GHG, and Energy Technical Memorandum. The analysis of these three CEQA resources will be submitted in one technical memorandum.

The air quality analysis will focus on construction emissions as the project would not create a new, long-term source of permanent pollutant emissions. The Air Quality Memorandum will briefly summarize the relevant regulatory framework, including the California Clean Air Act and applicable South Coast Air Quality Management District (SCAQMD) rules. The existing setting will include Criteria Air Pollutant attainment statuses and will present historic pollutant monitoring data. The analysis will quantify fugitive dust emissions as well as exhaust emissions generated by heavy-duty equipment and trucks. Emissions will be estimated using either the California Emissions Estimator Model (CalEEMod) the Roadway Construction Emissions Model. Regional and localized emissions will be compared to SCAQMD significance thresholds. The Air Quality Technical Memorandum will qualitatively discuss consistency with the Air Quality Management Plan, air toxics, and cumulative emissions.

The GHG analysis will focus on construction emissions as the project would not create a new, long-term source of permanent pollutant emissions. The analysis will be consistent with City and SCAQMD guidance and methodologies. The GHG Technical Memorandum will include a summarized description of existing conditions and regulatory framework. This will include brief discussions of the California GHG emissions inventory published by the California Air Resources Board and the City of Orange emissions. GHG emissions will be estimated using the same methods described for air quality. CalEEMod and EMFAC will be used to characterize emissions from equipment and trucks. The GHG Technical Memorandum will also discuss consistency with GHG reduction plans. Importantly, the project would promote active transportation. Active transportation is consistent with statewide and regional GHG reduction plans.

The energy analysis will focus on construction fuel use as the project would not create a new, long-term source of permanent pollutant emissions. The energy analysis will include a summarized description of existing conditions and regulatory framework. Appendix F of the CEQA Guidelines states that the goal of conserving energy implies the wise and efficient use of energy, to be achieved by decreasing overall per capita energy consumption; decreasing reliance on natural gas and oil; and increasing reliance on renewable energy resources. To assure energy implications are considered in project decisions, CEQA requires that environmental analysis documents include a discussion of the potential energy impacts of projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy. The GHG analysis prepared for the project will include a quantification of construction-related carbon dioxide emissions using the California Emissions Estimator Model. These emissions will be used to estimate construction energy from carbon dioxide emission factors derived for the California Air Resources Board GHG emissions inventory. For operations, TAHA will estimate energy use based on power requirements. Regarding consistency with renewable energy plans, active transportation projects are consistent with statewide and regional renewable energy plans. TAHA will include a discussion of how the project relates to applicable energy plans.

Biological Study (NES-MI)

In support of the PES and the IS/MND, we recommend the preparation of a Natural Environment Study-Minimal Impacts which will satisfy Caltrans requirements and can be included in the IS/MND. In support of the preparation of an NES-MI for the project, AECOM will conduct a review of the California Natural Diversity Database, the California Native Plant Society's inventory of rare and endangered plants of California, and the USFWS Information for Planning and Consultation online environmental review process to prepare a list of potentially occurring special-status plant and animal species and other protected natural resources for the project area. A reconnaissance field survey will be conducted to document existing biological resources along the proposed trail alignments, including a 300-foot buffer off the alignments. All distinct vegetation communities and wildlife habitats will be mapped and a representative plant species list and GIS layers

will be created for each distinct habitat type. Any avian nests or nesting activity observed will also be documented. This scope does not include formal protocol surveys or permitting for listed federal and/or state plant or wildlife species.

Upon completion of the database review and reconnaissance survey, AECOM will prepare a NES-MI using the latest Caltrans format. The NES-MI will describe existing biological resources within the Biological Study Area (BSA) and detail how the project may affect them. We assume two (2) rounds of review from Caltrans.

Noise/Vibration Analysis

TAHA will assist AECOM with the preparation of the noise/vibration analysis. The noise analysis will focus on construction activities as the project would not create a significant source of long-term source of permanent noise (e.g., mechanical equipment).

The Noise Technical Memorandum will briefly summarize the relevant regulatory framework including the Noise Ordinance contained within the City of Orange Municipal Code. The scope of work does not include noise monitoring. The existing setting will be established by referencing monitoring noise levels from studies associated with projects located in similar urban settings. The Noise Technical Memorandum will focus on construction activities and noise exposure to nearby residences. Construction noise levels will be predicted using the Roadway Construction Noise Model. Construction vibration levels will be estimated using information from the Caltrans Transportation- and-Construction-Induced Vibration Guidance Manual. There will also be a qualitative discussion describing why the project would not result in adverse long-term operational noise levels.

Section 106

AECOM will complete a Sacred Lands File Search with the Native American Heritage Commission (NAHC), a records search of the project area/Area of Potential Effects (APE) at the South Central Coastal Information Center (SCCIC) to identify any previously recorded resources or previous studies of the APE, and a pedestrian survey of the APE to identify any cultural resources.

We will prepare a technical memorandum that summarizes the results of the records search, the results of the NAHC Sacred Lands File Search and Native American Contact Program, the results of the pedestrian survey of the APE, and an effects analysis that will conform to the requirements of Section 106.

Community Impact Study

In support of the PES, AECOM will prepare a Land Use and Community Impacts Technical Memorandum to satisfy Caltrans requirements. The memo will identify and summarize the potential impacts associated with the following questions: Will the project require and right-of-way, including partial or full takes? Is the project inconsistent with plans and goals adopted by the community? Does the project have the potential to divide or disrupt neighborhoods/communities? Will the project require the relocation of public utilities? Will the project affect access to properties or roadways?

In addition to answering those questions, the analysis will (1) include a list of utilities anticipated to be adjusted along with the utility company name; and (2) include discussion of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and the associated protections for people whose real property is acquired. We assume two (2) rounds of Caltrans review.

Section 4(f) Evaluation

In support of the PES, AECOM will conduct a Section 4(f) Evaluation to satisfy Caltrans requirements. Given the project would be considered an independent bikeway/walkway type project and impacts are not expected to be adverse, it is anticipated that either a Section 4(f) Evaluation Memorandum with De Minimis Determination or a Programmatic Section 4(f) Evaluation for Independent Bikeways/Walkways with Negative Declaration Statement would be prepared. Also, based on a review of the Land and Water Conservation Fund (LWCF) Program, the project is not located on property where

LWCF has been used nor would acquire property where LWCF has been used; thus, Section 6(f) of the LWCF Act is anticipated to be written off in the PES and will be written off in the Section 4(f) Evaluation.

AECOM will identify and inventory potential Section 4(f) resources in the project area. Once all the potential Section 4(f) resources have been identified/inventoried, an evaluation will be conducted to determine if any of them would be used by an alternative or alternatives being carried forward by the project. As part of this inventory, AECOM will review current aerial maps, planning documents, and internet resources, as well as conduct a site visit of the project site and vicinity to verify potential Section 4(f) resources. We assume two (2) rounds of review from Caltrans.

Wetlands Study

AECOM will conduct a wetland study that includes a wetland delineation of Santiago Creek, focused at both east and west ends of the project. We will conduct a reconnaissance field survey to document existing wetland/riparian resources along the trail alignment, including a 300-foot buffer off the alignment.

In particular, two areas of focus will be the potential bridge locations (proposed to cross the Santiago Creek riparian corridor) at the east and west ends of the project. Outside of the two focus areas, a streamlined survey will verify that no other potential aquatic resources are present. AECOM will prepare a wetland study report in a format compatible with Caltrans' requirements. Jurisdictional delineation maps will show both existing conditions and potential impacts based on the trail footprint. The scope includes time to conduct a formal delineation of potential wetlands and/or waters of the U.S. and state that may occur within the BSA. The wetland study report will include conceptual discussions of wetland functions and values, as well as a conceptual approach to any required mitigation. It should be noted that this scope does not include performing a CRAM evaluation or Mitigation Plan. We assume two (2) rounds of review from Caltrans.

Floodplains Study

Available hydrologic and hydraulic data associated with the 100-year floodplain will be collected along with the digital topographic mapping for Santiago Creek. With the existing condition floodplains identified (post project LOMR), AECOM will prepare a with-project condition analysis to determine the potential encroachment impacts of the proposed improvement on the existing floodplains. This work will be conducted per Caltrans scope of work requirements for Location Hydraulics Study and Summary Floodplain Encroachment Report found at:

<http://www.dot.ca.gov/ser/vol1/sec3/special/ch17flood/chap17.htm>

PES Draft

Once the FIRM is updated and the field surveys and base maps are completed, we will work with the City to develop the project description (including trail footprint) that will be used to prepare the PES. AECOM will prepare a complete PES Draft document that will include the Caltrans PES Checklist (Exhibit 6-A) and accompanying PES attachment(s) (e.g., regional map, project location map, preliminary engineering drawings, etc.) with details substantiating the checklist items (where necessary).

We will rely upon readily available environmental data sources (databases, publications, etc.) to support Checklist explanations for Part A (Potential Environmental Effects). It is anticipated that the PES Draft will conclude that a Categorical Exclusion with required technical studies would be appropriate and would require Caltrans approval. Based on the RFP, technical studies related to biology, Section 106, Land Use and Community Impacts, Section 4(f), Wetlands, and Floodplain Study will be required (refer to previous discussion) to support the PES Draft. AECOM will provide the City with an electronic copy of the PES Draft for review. We assume one (1) round of review for this task.

Since the PES will assist with screening of the potential environmental effects (including technical studies) associated with the project and would require Caltrans' approval, it would be our recommendation to submit the PES for Caltrans' review sooner than Phase 3. By submitting earlier, the City will have confirmation as to the technical studies Caltrans expects to

see as part of the PES approval. Please note that our current scope and schedule reflects the PES being submitted to Caltrans in Phase 3 as identified in the project sequencing in the RFP.

IS/MND Screencheck Draft

AECOM will prepare the IS/MND Screencheck Draft in accordance with the CEQA Guidelines and City requirements. Upon completion, AECOM will provide an electronic copy (Microsoft Word) of the IS/MND Screencheck Draft to the City for review. Following review and comment on the IS/MND Screencheck Draft by the City, AECOM will revise and incorporate comments, as appropriate. We assume one (1) round of review for this task.

AB 52 Support

AECOM will assist the City in the preparation of notification letters to interested Native American tribes in compliance with the requirements of Assembly Bill (AB) 52. Based on the information received from the Sacred Lands File Search from the NAHC, AECOM can prepare a letter soliciting information and participation from interested tribal members.

The letters will be addressed to individual tribal members, but must be submitted by the City. We assume the records search radius will be 0.25-mile and the records search will be completed by staff at SCCIC as no in-person records searches are allowed at this time due to COVID-19, which adds additional time to the schedule. In addition, we assume City staff will be sending out letters to tribal members on City letterhead once AECOM prepares the letters. We assume one (1) round of review for this task.

Geotechnical Requirements

AECOM will prepare a geotechnical investigation report for the project to identify geotechnical hazards and conditions along the proposed trail alignment. Based on a desktop review of available data and targeted site investigations with accompanying geotechnical laboratory testing and analysis, we will develop a geologic model that characterizes ground conditions and material properties of key geologic units, and their constraints. This work will be led by a team of experienced geotechnical professionals with previous project experience in the Santiago Creek watershed and City of Orange, including ongoing investigations at Santiago Creek Dam.

Stage 1

During Stage 1, we will undertake a comprehensive desktop study to evaluate the currently available geotechnical data. The review will include a detailed site walk-through and review of historic aerial photographs, published and unpublished geologic maps, and other available reports with geotechnical relevance, such as the previous USACE flow studies from 1978 and 1990.

Stage 2

We understand the City will finalize the preferred trail route based on Stage 1 data, and we will plan our geotechnical explorations to gain subsurface data and samples for laboratory testing at agreed-upon locations along the alignment. Prior to drilling, AECOM will engage GeoVision Geophysical Services, Inc. to sweep the proposed drilling locations with ground penetrating radar, or other similar non-invasive methods, to check for utilities.

Based on site access constraints, we propose Tri-County Drilling, Inc. to undertake the drilling with a track-mounted, limited access Diedrich D-120 All Terrain rig. For budgeting purposes, we have assumed a total of five (5) HSA borings to 15ft bgs across three days of field work. The 15ft depth borings are adequate for pavement design and shallow foundation design for up to 6ft wide footings. AECOM will coordinate access and permitting, will be present in the field during all field work, including to log soil samples during drilling, and will deliver samples to AP Engineering and Testing, Inc. Samples will be submitted to AP Engineering and Testing, Inc. for testing to provide soil classification, bearing capacity, settlement, expansion index, and compaction data per the RFP requirements.

We do not believe permits will be required from the City's Public Works, City's Water Division, or the Orange County Health Care Agency for the proposed drilling based on discussions with the City and County of Orange; however, we understand three (3) encroachment permits will be required for drilling on OCFCD-owned land and have costs for these. Other AECOM disciplines will investigate if state or federal permits are needed for this fieldwork and will acquire those.

A draft geotechnical investigation report, including maps, figures and cross sections, will be prepared describing the field investigations, geologic site conditions encountered, laboratory testing, geohazards, geotechnical analysis, and recommendations, including preparation and compaction of subgrades and proposed fill areas, and recommendations for bridge abutments and associated retaining wall fills, per the RFP. AECOM will submit an electronic copy of the geotechnical investigation report to the City for review. We assume one (1) round of review for this task.

Stage 3

If needed, geotechnical support will be provided during the LOMR preparation phase. We have budgeted a total of five (5) support hours for this.

Phase 3

Submit LOMR for FEMA Review

AECOM will prepare all application forms and documents required for the approval of the associated LOMR document, including the MT-2 Form, hydraulic computations, certified topographic maps, applicable fees, and any items required to satisfy any National Flood Insurance Program regulatory requirements. Applicable MT-2 forms include Form 1 - Overview and Concurrence; Form 2 - Riverine Hydrology and Hydraulics, and Form 3 - Riverine Structures (Section C: Bridge/Culvert). Hydraulic computations will include:

- Obtaining the Current Effective Model used to establish base flood elevations on the effective Flood Insurance Rate Map (FIRM).
- Reproduce Current Effective Model to produce and run a Duplicate Effective Model to use as a base for determining impacts of the revised hydrology and proposed project on the floodplain.
- Preparing and running a Corrected Effective Model to model existing conditions (excluding any man-made physical changes since the date of the effective model) that differ from that reflected in the Duplicate Effective Model including the revised hydrology changing the base flood from 12,000 to 6,000 cfs. Topography updated for post-project conditions of recent LOMRs will be utilized to the extent that it reflects existing conditions and will be supplemented with new topography if necessary.
- An Existing or Pre-Project Conditions Model will be prepared by modifying the Corrected Effective Model to reflect any modifications that have occurred within the floodplain since the date of the Current Effective Model. No modifications are expected to be necessary, so the Existing Condition Model is expected to be identical to the Corrected Effective Model.
- A Revised or Post-Project Conditions Model will be prepared by modifying the Existing or Pre-Project Conditions Model to reflect revised or post-project conditions. If the Revised or Post-Project Conditions Model shows some impact to the floodplain as a result of the project it would be necessary to obtain a Conditional Letter of Map Revision (CLOMR) from FEMA prior to construction of the Project and then when As-built drawings of construction are available a Letter of Map Revision can be obtained. It is anticipated that the project will have minimal encroachment into the Existing or Pre-Project Conditions Model floodplain, resulting in a No-Rise Certification by the City and therefore a CLOMR will not be necessary and a LOMR can be obtained without submittal of the Post-Project Conditions Model. A Revised Condition Model that only reflects the change in hydrology (the same model as the Corrected Effective Model) will be submitted.

AECOM will submit an electronic copy of the LOMR application package to the City for review. We assume one (1) round of review. AECOM will then incorporate comments from the City, submit the LOMR application package to FEMA, and coordinate with FEMA to obtain approval of the map revision and LOMR.

Right-of-Way Engineering (ROW)

Coast will assist AECOM with ROW engineering to support the project. Relevant legal descriptions and plats will be generated for ROW engineering purposes.

- Generate a maximum of 12 legal descriptions and plats per client requirements for ROW acquisition purposes.
- Acquire approximately 17 Preliminary Title Reports for the properties impacted and plot appropriate easements as they might affect the area of the proposed Trail development. The Preliminary Title Reports will be acquired through the City's Real Property Agent (rate of \$400/each title report).

Coast will prepare a survey drawing in accordance with standard acceptable surveying practices and in with all applicable and appropriate requirements of the State of California. All Coast's work performed on this project will be done under the direct supervision of a Professional Surveyor licensed in California. We will submit electronic files of the final survey drawing to the City in Autodesk Civil 3D 2019 format, including an interactive surface model and specific survey point layers. We assume one (1) round of review for this task. AECOM has assigned a liaison for this task to ensure efficient coordination between our team and the City.

Please note that this scope does not include a cost for any Survey Monument recovery, re-establishment, or document filings that may be required by California State Law due to the construction of proposed improvements on this project. A separate proposal for this work shall be submitted if requested.

Submit PES for Caltrans Review

Following the City's review and comment on the PES Draft, AECOM will revise and incorporate comments, as appropriate. AECOM will submit the PES for Caltrans' review. It is anticipated that City staff will assist in obtaining Caltrans' approval and in resolving comments and questions to streamline this effort. We assume two (2) rounds of review from Caltrans.

IS/MND Public Review Draft, 30-Day Public Review Period, and Review/Response to Comments and Any Resulting Revisions

AECOM will submit the revised Draft IS/MND (Printcheck Draft IS/MND) for a final review to the City prior to circulating the document for public review. AECOM will print ten (10) hard copies and prepare one electronic copy of the Draft IS/MND for distribution (including Appendices). Additionally, AECOM will prepare the required Notice of Completion (NOC) for review and approval by the City. AECOM will use a mailing list provided by the City to distribute the Draft IS/MND as part of the 30-day public review period. The City's mailing list is anticipated to include other responsible public agencies. AECOM will then file the NOI, NOC, and the Draft IS/MND with the State Clearinghouse. Printing and mailing charges are included in the cost estimate. We assume one (1) round of review for the Printcheck Draft IS/MND.

We will organize written comments received during the public review period into five categories: Federal, State, Local, Organization, and Individuals. To assist the reader in referencing comments and responses, we will number each specific comment, referring to a statement or paragraph in the corresponding letter. AECOM will review comments received during the Draft IS/MND comment period and respond to those that raise an environmental issue. Based upon our understanding of this project, the level of controversy is considered to be low. The proposed schedule and budget assume receipt of no more than ten (10) comment letters of 1 to 3 pages each.

Phase 4

LOMR

AECOM will submit the Final LOMR.

Final IS/MND

An Administrative Final IS/MND, Responses to Comments, and MMRP will be prepared in a manner consistent with the City's process and format requirements. It is assumed that the Administrative Final IS/MND will include an introductory chapter, enumerated list of all persons, organizations, and public agencies commenting on the Draft IS/MND, copies of the written comments received on the Draft IS/MND, responses to all environmental issues raised in the review process, MMRP, and Errata revisions to the Draft IS/MND based on the responses (as necessary). An electronic copy of the Administrative Final IS/MND will be submitted to the City for review and approval. It should be noted that AECOM's cost estimate does not include the receipt of detailed/extensive comments from attorneys or special interest groups. Upon receipt of comments on the Administrative Final IS/MND, AECOM will incorporate the requested revisions into the document and prepare the Final IS/MND. AECOM will print thirty-five (35) hard copies and prepare one electronic copy of the Final IS/MND (including Appendices). We assume one (1) round of review for the Final IS/MND.

PES

AECOM will submit the Final PES.

Other

All outstanding submittal review comments and all project files will be submitted to the City. This will include an organized Administrative Record of activities conducted. AECOM will submit an electronic copy of this record.

Hourly Labor Rates

	Principal-in-Charge	Project Manager	Senior Planner	Principal Geologist	Senior Project Engineer	Staff Engineer	Project Engineer	Senior Biologist Planner	Staff Biologist	Senior Archaeologist	Archaeologist	Environmental Planner	Geologist	Staff Archaeologist	Technical Editor	GIS Specialist/Graphic Artist	Word Processor	Total Hours	Total Labor	
Hourly Rate	\$220.60	\$178.01	\$165.06	\$250.00	\$195.00	\$130.00	\$180.01	\$167.97	\$104.93	\$175.04	\$125.00	\$120.00	\$90.02	\$90.00	\$105.00	\$115.00	\$85.01	-	-	
Task																				
Project Kick-Off Meeting		4										4						8	\$1,192.04	
Phase 1																				
Hydraulic Analysis		4			24	80										24	3	135	\$18,807.07	
Survey Requirements (Sub Cost Shown Below)		4			24													28	\$5,392.04	
Phase 2																				
Preliminary WQMP		2			40	22										4	2	70	\$11,646.04	
Air Quality, GHG, and Energy (Sub Cost Shown Below)		1										5						6	\$778.01	
Biological Study (NES-MI)		2						50	15						2	8	1	78	\$11,543.23	
Noise/Vibration (Sub Cost Shown Below)		1										3						4	\$538.01	
Section 106		2								5	16			14	4	2	1	44	\$5,226.21	
Community Impact Study		2	4									54			1		1	62	\$7,686.27	
Section 4(f) Evaluation		2	8									70				10	4	94	\$11,566.54	
Wetlands Study		2						48	16						2	16	2	86	\$12,317.24	
Floodplains Study		4			24	100									2	24	8	162	\$22,042.13	
PES Draft		2	4									48			1	4	1	60	\$7,426.27	
IS/MND Screencheck Draft (Includes AB 52 Support)	2	22	8					10	2	1	6	78			4	4	2	139	\$18,902.47	
Geotechnical Requirements (Data Collection to Begin in Aug)		2		3	6	83	38						208			24	4	368	\$41,730.60	
Phase 3																				
Submit LOMR for FEMA Review (includes geotech support)		16			24	80										24	4	148	\$21,028.20	
Right-of-Way Engineering (sub cost shown below)		4			24													28	\$5,392.04	
Submit PES for Caltrans Review (assumes two reviews)		4										12				2		18	\$2,382.04	
IS/MND Public Review Draft (Printcheck)	1	10	3			1		3			2	44			2	2	6	74	\$9,609.84	
Phase 4																				
Final LOMR					4													1	5	\$865.01
Final IS/MND	1	10	8									28			2			4	53	\$7,231.22
Final PES		2										4						1	7	\$921.03
All Final Work/Administrative Record		10	4									40							54	\$7,240.34
Meetings/Project Management and Coordination	8	114	20									28							170	\$28,719.14
Total	12	226	59	3	170	366	38	111	33	6	24	418	208	14	20	148	45	1901	\$260,183.05	

Printing	
Final Technical Studies (2 hard copies of each)	\$500.00
IS/MND for public review (10 hard copies)	\$500.00
Final IS/MND (35 copies)	\$1,750.00
LOMR Printing	\$300.00
Misc. Printing	\$400.00
Total	\$3,450.00

Distribution	
Tech Study & IS/MND	\$250.00
PES & Final IS/MND	\$80.00
LOMR Distribution	\$100.00
Misc. Distribution	\$200.00
Total	\$630.00

Other Direct Costs	
SCCIC Records Search	\$1,100.00
FEMA Data Fee	\$395.00
FEMA LOMR Fee Bridge, Culvert, Channel, Hydrology, or Combination Thereof	\$8,250.00
Mileage	\$300.00
Geo (drill supplies/disposal/trucks/permits)	\$8,342.00
Total	\$18,387.00

Subconsultants	
Coast Surveying, Inc (DBE)	\$56,580.00
TAHA (DBE)	\$17,526.88
Tri-County Drilling (DBE)	\$11,460.00
AP Engineering and Testing (DBE)	\$11,416.00
GeoVision Geophysical Services, Inc	\$2,167.42
Total	\$99,150.30

Total Cost	
Labor	\$260,183.05
Printing	\$3,450.00
Distribution	\$630.00
Other Direct Costs	\$18,387.00
Subconsultants	\$99,151.30
Total	\$381,800.35

Percent DBE	25%
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**AP Laboratory
Laboratory Test Cost Estimate for Proposals**

Laboratory Test	Test Standard	AP Lab Cost Per Unit	Number of Tests*	Total Cost
Index Tests				
Water Content	ASTM D2216	\$ 12.00	20	\$240
Total Unit Weight with Water Content	ASTM D7263	\$ 20.00	20	\$400
Liquid and Plastic Limits - Multipoint	ASTM D4318	\$ 100.00	10	\$1,000
Sample Processing (hourly)	ASTM D421	-		
Sieve Analysis, Std. Sieve Set, with Wet Wash	ASTM D6913	\$ 150.00	13	\$1,950
Combined Sieve and Hydrometer Analysis	ASTM D422, D7928 with D6913	\$ 135.00		
Hydrometer Analysis Only	ASTM D422, D7928	\$ 135.00		
Double Hydrometer Analysis	ASTM D4221	-		
Percent Passing No. 200 Sieve (wash)	ASTM D1140	\$ 65.00	10	\$650
Specific Gravity of Material Passing No. 4 Sieve	ASTM D854	\$ 65.00	7	\$455
Bulk Specific Gravity (Chunk Density)	ASTM C127	\$ 85.00		
Modified Proctor - 4-inch Mold with Plot	ASTM D1557 (Method A & B)	\$ 155.00		
Modified Proctor - 6-inch Mold with Plot	ASTM D1557 (Method C)	\$ 170.00		
Modified Proctor - Single Check Point	ASTM D1557	-		
Chemical Analysis - CalTrans	CTM 417, 422, 643	\$ 144.00	4	\$576
California Bearing Ratio (CBR) - 3-point	ASTM D1883	\$ 420.00		
R-value	ASTM D2844	\$ 240.00	5	\$1,200
Pinhole	ASTM D4647	-		

Laboratory Test	Test Standard	AP Lab Cost Per Unit	Number of Tests*	Total Cost
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Engineering Properties Tests

Flex-Wall Permeameter (Hydraulic Conductivity)	ASTM D5084 (one effective stress)	\$ 180.00		
	ASTM D5084 (additional effective stress)	\$ 80.00		
Incremental Consolidation (up to 10 Loads)	ASTM D2435	\$ 175.00	7	\$1,225.00
Additional Load Increments		\$ 105.00		
One-Dimensional Swell or Collapse of Soil	ASTM D4546	\$ 98.00		
Additional Load Increment (up to 16 tsf and 24 hrs)				
Expansion Index	ASTM D4829	\$ 98.00		

Static Strength Tests

Direct Shear Series - CD, 3 specimens	ASTM D3080	\$ 275.00	7	\$1,925.00
Torsional Ring Shear - 3 Point Residual Stress	ASTM D6467	-		
Torsional Ring Shear - Fully Softened Condition, 1 Peak Stress	ASTM D7608			
Unconfined Compressive Strength of Soil	ASTM D2166	\$ 115.00	7	\$805.00
Unconfined Compressive Strength of Rock Core Specimens	ASTM D7012	\$ 275.00		
Unconsolidated-Undrained Triaxial (UU)	ASTM D2850			

Laboratory Test	Test Standard	AP Lab Cost Per Unit	Number of Tests*	Total Cost
Consolidated-Isotropically Undrained Triaxial (ICU)	ASTM D4767	\$ 330.00	3	\$990.00
Consolidated-Drained Triaxial (CD)	USBR 5755			
Tube Sample Extrusion (without engineering testing)				
Specimen Fabrication (remolding)				

Sampling Materials & Field Equipment

Sample Liners (6-inch SS)				
Sand Cone Kit (per day)	ASTM D1556			
Double-Ring Infiltrometer (per day)	ASTM D3385			
Point Load	ASTM D5731			

Total Cost = \$11,416

Coast Surveying, Inc.

Santiago Creek Trail Survey Hours	Survey Manager	Project Surveyor	Survey Analyst	Party Chief	Chainman	Cost Estimate
Rate	\$ 177.59	\$ 154.09	\$ 124.05	\$ 141.31	\$ 127.13	
Control		4		12	12	\$ 3,837.64
Design Survey	2		40	40	40	\$ 16,054.78
RW		24				\$ 3,698.16
Legals & Plats		48	72			\$ 16,327.92
Calc Parcels (Per legals)		24				\$ 3,698.16
Research		8				\$ 1,232.72
QA/QC						
Analyze & Plot Esmts from PTR		32				\$ 4,930.88
Total	2	140	112	52	52	\$ 49,780.26

ODC						
Preliminary Title Reports(17+/-)						\$ 6,800.00
Total	0	0	0	0	0	\$ 6,800.00
Grand Total						\$ 56,580

Geovision Geophysical Services

COST ESTIMATE

Item	Description	Qty	Unit	Unit Price	Total
1	Utility Locating (2 person crew)	1	Day	\$2,167.42	\$ 2,167.42
				TOTAL	\$ 2,167.42

REVISED COST ESTIMATE

Personnel and Title	Hourly Rate	Hours	Amount
Air Quality			
Sam Silverman, Project Manager	\$148.44	4	\$593.76
Anders Sutherland, Senior Air Quality Modeler	\$96.94	16	\$1,551.04
Blaire Frei, Junior Air Quality Modeler	\$68.00	40	\$2,720.00
Henry Haprov, GIS Analyst	\$52.47	4	\$209.88
Air Quality Subtotal			\$5,074.68
Greenhouse Gas Emissions			
Sam Silverman, Project Manager	\$148.44	4	\$593.76
Anders Sutherland, Senior Air Quality Modeler	\$96.94	8	\$775.52
Blaire Frei, Junior Air Quality Modeler	\$68.00	40	\$2,720.00
Henry Haprov, GIS Analyst	\$52.47	1	\$52.47
Greenhouse Gas Emissions Subtotal			\$4,141.75
Energy Resources			
Sam Silverman, Project Manager	\$148.44	4	\$593.76
Anders Sutherland, Senior Air Quality Modeler	\$96.94	4	\$775.52
Blaire Frei, Junior Air Quality Modeler	\$68.00	40	\$2,720.00
Henry Haprov, GIS Analyst	\$52.47	1	\$52.47
Energy Resources Subtotal			\$3,753.99
Noise			
Sam Silverman, Project Manager	\$148.44	8	\$1,187.52
Kieran Bartholow, Noise Specialist	\$68.00	48	\$3,264.00
Henry Haprov, GIS Analyst	\$52.47	2	\$104.94
Noise Subtotal			\$4,556.46
TOTAL			\$17,526.88



TRI-COUNTY DRILLING, INC.

9631 CANDIDA STREET, SAN DIEGO, CA 92126 LICENSE#547737
PH: (858) 271-0099 FAX: (858) 271-0233

QUOTE FOR DRILLING SERVICES

JOB NAME: Santiago Creek Bike Trail

ADDRESS: Orange, California

Q-12353w-rev-20

Date: 7/15/2020

Company: Aecom

Contact: Matt Skakun

Phone Number: 949-257-5686

Email: matt.skakun@aecom.com

ITEM	DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL
1	Move On/Move Off (Diedrich D-120 All Terrain ATV Rig)	1	EA	\$1,200.00	\$1,200.00
2	Drill five borings to 15' BGS using hollow stem auger drilling methods. Obtain SPT and Mod Cal samples at 2.5' intervals. Place cuttings in drums and store at staging area. Backfill borings with a Portland cement/Bentonite grout mixture.	2	DAY	\$3,560.00	\$7,120.00
3	Service Truck	2	DAY	\$200.00	\$400.00
4	Bentonite Grout	7	EA	\$28.00	\$196.00
5	Portland Cement	28	EA	\$28.00	\$784.00
6	Per Diem (two man crew)	2	DAY	\$370.00	\$740.00
7	Drums	8	EA	\$65.00	\$520.00
8	Surcharge for each additional insured named on TCD insurance policy.	2	EA	\$250.00	\$500.00
	Assumptions: Client to provide all permits, day time work hours, drive up access to each drill site, traffic control as needed.				
TOTAL:					\$11,460.00

NOTES:

- Prevailing wage rates ARE included.
- There will be a \$250.00 surcharge for each additional insured named on TCD insurance policy.
- Client to provide traffic control, utility location/mark-out services, and determine the location of all borings/wells
- Client to name Tri-County Drilling, Inc. on utility mark out services (USA) ticket.
- Pricing does not include any services, materials, or alternate methods not specifically described above.
- Should conditions such as cobbles, gravel, caving, buried debris, or cemented zones be encountered, costs in addition to those presented in this proposal may be incurred.
- Invoices will be submitted upon completion of work or at 30-day intervals. All invoices are due and payable within 30 days of invoice date. A fee of 1 ½% per month plus any fees incurred for collection of past due invoices will be added to the invoice amount.

Agreed to By: _____

Company Name: _____

Date: _____

The data presented herein is proprietary and is not to be reproduced, distributed or used in any manner without express written permission from Tri-County Drilling, Inc. Above price range for services is an Estimate Only and is subject to change after 60 days. NOTE: A 4-hour cancellation fee will be charged for jobs cancelled 48 hours or less before job date. All time in excess of 8 hours in a given day will be charged at an additional \$65.00 per hour.

EXHIBIT 10-01 CONSULTANT PROPOSAL DBE COMMITMENT

1. Local Agency: City of Orange 2. Contract DBE Goal: 18%
 3. Project Description: Santiago Creek Multipurpose Trail Extension
 4. Project Location: Cannon Street to Santiago Oaks Regional Park
 5. Consultant's Name: AECOM Technical Services, Inc. 6. Prime Certified DBE:

7. Description of Work, Service, or Materials Supplied	8. DBE Certification Number	9. DBE Contact Information	10. DBE %
Coast Surveying, Inc.	2128	Nick Coates, 15031 Parkway Loop, Suite B, Tustin, CA 92780 714-918-6266 Nick.Coates@coastsurvey.com	14%
Terry A. Hayes Associates, Inc.	40312	Sam Silverman, 3535 Hayden Avenue, Suite 350, Culver City, CA 90232 310-839-4200 ext 110 ssilverman@webtaha.com	5%
Tri-County Drilling, Inc.	13283	William B. Peterson, 9631 Candida St. San Diego, CA 92126 858-271-0099 billp@tcdrilling.com	3%
AP Engineering and Testing, Inc.	33877	Justin Phukunhaphan, 2607 Pomona Boulevard Pomona, CA 91768 909-869-6316	3%
Local Agency to Complete this Section			
17. Local Agency Contract Number: _____ 18. Federal-Aid Project Number: _____ 19. Proposed Contract Execution Date: _____ 20. Consultant's Ranking after Evaluation: _____ Local Agency certifies that all DBE certifications are valid and information on this form is complete and accurate. _____ _____ _____		11. TOTAL CLAIMED DBE PARTICIPATION	25 %
		IMPORTANT: Identify all DBE firms being claimed for credit, regardless of tier. Written confirmation of each listed DBE is required. <div style="display: flex; justify-content: space-between;"> <div style="width: 60%;">  _____ 12. Preparer's Signature William Hoose, AICP _____ 14. Preparer's Name Associate Vice President _____ 16. Preparer's Title </div> <div style="width: 35%;"> _____ 13. Date 08/24/2020 _____ 15. Phone 714-567-2421 </div> </div>	

DISTRIBUTION: Original – Included with consultant's proposal to local agency.

ADA Notice: For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

EXHIBIT 10-O2 CONSULTANT CONTRACT DBE COMMITMENT

1. Local Agency: City of Orange 2. Contract DBE Goal: 18%
 3. Project Description: Santiago Creek Multipurpose Trail Extension
 4. Project Location: Cannon Street to Santiago Oaks Regional Park
 5. Consultant's Name: AECOM Technical Services, Inc. 6. Prime Certified DBE: 7. Total Contract Award Amount: \$381,800.35
 8. Total Dollar Amount for **ALL** Subconsultants: \$99,150.30 9. Total Number of **ALL** Subconsultants: 5

10. Description of Work, Service, or Materials Supplied	11. DBE Certification Number	12. DBE Contact Information	13. DBE Dollar Amount
Surveying and Right-of-Way Engineering	2128	Nick Coates, 15031 Parkway Loop, Suite B, Tustin, CA 92780 714-918-6266 Nick.Coates@coastsurvey.com	\$56,580.00
Air Quality, Greenhouse Gas Emissions, and Energy	40312	Sam Silverman, 3535 Hayden Avenue, Suite 350, Culver City, CA 90232 310-839-4200 ext 110 ssilverman@webtaha.com	\$17,526.88
Drilling	13283	William B. Peterson, 9631 Candida St. San Diego, CA 92126 858-271-0099 billp@tcdrilling.com	\$11,460.00
Laboratory Testing	33877	Justin Phukunhaphan, 2607 Pomona Boulevard Pomona, CA 91768 909-869-6316	\$11,416.00
Utilities	N/A	Mark Riches, 1124 Olympic Drive, Corona, CA 92881-3390 818-734-6609 mriches@geovision.com	N/A
Local Agency to Complete this Section			
20. Local Agency Contract Number: _____		14. TOTAL CLAIMED DBE PARTICIPATION	\$ 96,982.88
21. Federal-Aid Project Number: _____			25 %
22. Contract Execution Date: _____		IMPORTANT: Identify all DBE firms being claimed for credit, regardless of tier. Written confirmation of each listed DBE is required.	
Local Agency certifies that all DBE certifications are valid and information on this form is complete and accurate.		 15. Preparer's Signature _____ 16. Date <u>08/27/2020</u> <u>William Hoose, AICP</u> 17. Preparer's Name _____ 18. Phone <u>714-567-2421</u> <u>Associate Vice President</u> 19. Preparer's Title _____	
23. Local Agency Representative's Signature _____	24. Date _____		
25. Local Agency Representative's Name _____	26. Phone _____		
27. Local Agency Representative's Title _____			

DISTRIBUTION: 1. Original – Local Agency
 2. Copy – Caltrans District Local Assistance Engineer (DLAE). Failure to submit to DLAE within 30 days of contract execution may result in de-obligation of federal funds on contract.

ADA Notice: For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

EXHIBIT “B”

FISCAL, FEDERAL AND OTHER PROVISIONS

1. PERFORMANCE PERIOD

This Agreement shall go into effect on the Effective Date and Contractor shall commence work within ten (10) days thereafter. The Agreement shall end on (December 31, 2022), unless extended by mutual agreement of the parties.

2. TERMINATION

- A. Upon termination, City shall be entitled to all work, including but not limited to, reports, investigations, appraisals, inventories, studies, analyses, drawings and data estimates performed to that date, whether completed or not.
- B. City may temporarily suspend this AGREEMENT, at no additional cost to City, provided that Contractor is given written notice of temporary suspension. If City gives such notice of temporary suspension, Contractor shall immediately suspend its activities under this Agreement. A temporary suspension may be issued concurrent with a notice of termination.
- C. Notwithstanding any provisions of this Agreement, Contractor shall not be relieved of liability to City for damages sustained by City by virtue of any breach of this Agreement by Contractor, and City may withhold any payments due to Contractor until such time as the exact amount of damages, if any, due City from Contractor is determined.

3. COST PRINCIPLES AND ADMINISTRATIVE REQUIREMENTS

- A. Contractor agrees that 48 CFR Part 31, Contract Cost Principles and Procedures, shall be used to determine the allowability of individual terms of cost.
- B. Contractor also agrees to comply with federal procedures in accordance with 2 CFR Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.
- C. Any costs for which payment has been made to Contractor that are determined by subsequent audit to be unallowable under 48 CFR Part 31 or 2 CFR Part 200 are subject to repayment by Contractor to City.
- D. When a Contractor or subcontractor is a non-profit organization or an institution of higher education, the cost principles for Title 2 CFR Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards shall apply.

4. AUDIT REVIEW PROCEDURES

- A. Contractor and subcontractor Agreements, including cost proposals and Indirect Cost Rates (ICR), may be subject to audits or reviews. If selected for audit the document will be reviewed to verify compliance with 48 CFR Part 31 and other related laws and regulations. The document shall be adjusted by Contractor and approved by City's Project Manager to conform to the audit or review recommendations.
- B. Neither the pendency of an audit dispute nor its consideration by City will excuse Contractor from full and timely performance, in accordance with the terms of this Agreement.

5. SUBCONTRACTING

- A. Any subcontract entered into as a result of this Agreement, shall contain all the provisions stipulated in this entire Agreement to be applicable to subcontractors unless otherwise noted.
- B. Contractor shall pay its subcontractors within fifteen (15) calendar days from receipt of each payment made to Contractor by City.
- C. Any substitution of subcontractors must be approved in writing in advance by the City's Project Manager.

6. CONFLICT OF INTEREST

- A. Contractor shall disclose any financial, business, or other relationship with City that may have an impact upon the outcome of this Agreement or any ensuing City construction project. Contractor shall also list current clients who may have a financial interest in the outcome of this Agreement or any ensuing City construction project which will follow.
- B. Contractor shall disclose to City any actual, apparent, or potential conflicts of interest that may exist relative to the services to be provided pursuant to this Agreement. Contractor shall advise City of any actual, apparent or potential conflicts of interest that may develop subsequent to the date of execution of this Agreement. Contractor further agrees to complete any statements of economic interest if required by either City ordinance or state law.
- C. Contractor hereby certifies that it does not now have nor shall it acquire any financial or business interest that would conflict with the performance of services under this Agreement.

7. REBATES, KICKBACKS OR OTHER UNLAWFUL CONSIDERATION

Contractor warrants that this Agreement was not obtained or secured through rebates, kickbacks or other unlawful consideration either promised or paid to any City employee. For breach or violation of this warranty, City shall have the right, in its discretion, to terminate this Agreement without liability, to pay only for the value of the work actually performed, or to deduct from this Agreement price or otherwise recover the full amount of such rebate, kickback or other unlawful consideration.

8. DEBARMENT AND SUSPENSION CERTIFICATION

- A. Contractor's signature affixed herein shall constitute a certification under penalty of perjury under the laws of the State of California, that the Contractor or any person associated therewith in the capacity of owner, partner, director, officer or manager:

1. Is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency;
 2. Has not been suspended, debarred, voluntarily excluded, or determined ineligible by any federal agency within the past three (3) years;
 3. Does not have a proposed debarment pending; and
 4. Has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three (3) years.
- B. Any exceptions to this certification must be disclosed to City. Exceptions will not necessarily result in denial of recommendation for award, but will be considered in determining responsibility. Disclosures must indicate the party to whom the exceptions apply, the initiating agency, and the dates of agency action.
- C. Exceptions to the Federal Government Excluded Parties List System maintained by the U.S. General Services Administration are to be determined by FHWA.

9. **DISADVANTAGED BUSINESS ENTERPRISES (DBE) PARTICIPATION**

- A. This Agreement is subject to 49 CFR Part 26, "Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs." Contractor shall assist City in a good faith effort to achieve California's statewide overall DBE goal.
- B. The goal for DBE participation for this Agreement is **18%**. Participation by DBE Contractor or subcontractors shall be in accordance with information contained in Exhibit 10-O1: Consultant Proposal DBE Commitment , or in Exhibit 10-O2: Consultant Contract DBE Commitment attached hereto and incorporated as part of the Agreement. If a DBE subcontractor is unable to perform, Contractor must make a good faith effort to replace it with another DBE subcontractor, if the goal is not otherwise met.
- C. Contractor can meet the DBE participation goal by either documenting commitments to DBEs to meet the Agreement goal, or by documenting adequate good faith efforts to meet the Agreement goal. An adequate good faith effort means that Contractor must show that it took all necessary and reasonable steps to achieve a DBE goal that, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to meet the DBE goal. If Contractor has not met the DBE goal, complete and submit Exhibit 15-H: DBE Information – Good Faith Efforts to document efforts to meet the goal. Refer to 49 CFR Part 26 for guidance regarding evaluation of good faith efforts to meet the DBE goal.
- D. Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by Contractor to carry out these requirements is a material breach of this Agreement.
- E. A DBE firm may be terminated only with prior written approval from City and only for the reasons specified in 49 CFR §26.53(f). Prior to requesting City consent for the termination, Contractor must meet the procedural requirements specified in 49 CFR §26.53(f). If a DBE subcontractor is unable to perform, Contractor must make a good faith effort to replace it with another DBE subcontractor, if the goal is not otherwise met.

- F. Contractor shall not be entitled to any payment for such work or material unless it is performed or supplied by the listed DBE or by other forces (including those of Contractor) pursuant to prior written authorization of City's Project Manager.
- G. A DBE is only eligible to be counted toward the Agreement goal if it performs a commercially useful function (CUF). A DBE performs a CUF when it is responsible for execution of the work of the Agreement and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a CUF, the DBE must also be responsible, with respect to materials and supplies used on the Agreement, for negotiating price, determining quality and quantity, ordering the material and installing (where applicable), and paying for the material itself. To determine whether a DBE is performing a CUF, evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the Agreement is commensurate with the work it is actually performing, and other relevant factors.
- H. A DBE does not perform a CUF if its role is limited to that of an extra participant in a transaction, Agreement, or project through which funds are passed in order to obtain the appearance of DBE participation. In determining whether a DBE is such an extra participant, examine similar transactions, particularly those in which DBEs do not participate.
- I. If a DBE does not perform or exercise responsibility for at least thirty percent (30%) of the total cost of its Agreement with its own work force, or the DBE subcontracts a greater portion of the work of the Agreement than would be expected on the basis of normal industry practice for the type of work involved, it will be presumed that it is not performing a CUF.
- J. Contractor shall maintain records of materials purchased or supplied from all subcontracts entered into with certified DBEs. The records shall show the name and business address of each DBE or vendor and the total dollar amount actually paid each DBE or vendor, regardless of tier. The records shall show the date of payment and the total dollar figure paid to all firms. DBE prime Contractors shall also show the date of work performed by their own forces along with the corresponding dollar value of the work.
- K. Upon completion of the Agreement, a summary of these records shall be prepared and submitted on the form entitled, Exhibit 17-F: Final Report-Utilization of Disadvantaged Business Enterprise (DBE) First-Tier Subconsultants, certified correct by Contractor or Contractor's authorized representative and shall be furnished to the City's Project Manager with the final invoice. Failure to provide the summary of DBE payments with the final invoice will result in twenty-five percent (25%) of the dollar value of the invoice being withheld from payment until the form is submitted. The amount will be returned to Contractor when a satisfactory "Final Report-Utilization of Disadvantaged Business Enterprises (DBE), First-Tier Subconsultants" is submitted to the City's Project Manager.
- L. If a DBE subcontractor is decertified during the life of the Agreement, the decertified subcontractor shall notify Contractor in writing with the date of decertification. If a subcontractor becomes a certified DBE during the life of the Agreement, the subcontractor shall notify Contractor in writing with the date of certification. Any changes should be reported to City's Project Manager within thirty (30) calendar days.
- M. After submitting an invoice for reimbursement that includes a payment to a DBE, but no later than the 10th of the following month, the prime contractor shall complete and email Exhibit 9-

F: Disadvantaged Business Enterprise Running Tally of Payments to business.support.unit@dot.ca.gov with a copy to City.

N. Any subcontract entered into as a result of this Agreement shall contain all of the provisions of this section.



Agenda Item

City Council

Item #: 3.12.

9/8/2020

File #: 20-119

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Boyd, Fire Chief

1. SUBJECT

First Amendment to Agreement with ESO Solutions, Inc. for Records Management System (RMS) software support and services.

2. SUMMARY

City and Contractor entered into an Application Hosting and Technology Support Services Agreement (Agreement No. 6258) dated as of September 1, 2015, which is incorporated herein by this reference (the "Original Agreement"). Xerox Government Systems, LLC has assigned the Original Agreement to ESO Solutions, Inc. (henceforth, "Contractor"), and City consents to this assignment. The City and Contractor desire to amend the Original Agreement to modify, amend and supplement certain portions of the Original Agreement by extending the term by one year.

3. RECOMMENDED ACTION

Approve the amendment to agreement with ESO Solutions, Inc. for RMS software support and services; and authorize the Mayor and City Clerk to execute the amendment to agreement on behalf of the City.

4. FISCAL IMPACT

The total expenditure for this agreement is \$29,418 and will be funded through:

General (100)	\$15,000
Emergency Medical Transport (125)	<u>14,418</u>
Total:	\$29,418

5. STRATEGIC PLAN GOALS

Goal 1: Provide for a safe community

b. Provide and maintain infrastructure necessary to ensure the safety of the public.

6. DISCUSSION AND BACKGROUND

The Orange City Fire Department is required to maintain records of everything from incident reporting to fire prevention and training. For the past five years, the Fire Department has utilized an application called Firehouse RMS for its records management software. Firehouse RMS was originally owned by Xerox Government Systems, LLC and was bought out by ESO Solutions, Inc. in 2018. Firehouse

RMS is a comprehensive records management software that supports iOS field applications. This is vital in our pursuit to streamline our processes, move to a paperless workflow, and foster more productivity while reducing costs by minimizing the duplication of effort. The Fire Department is at the end of a five-year agreement and is looking to amend the Original Agreement with ESO Solutions, Inc. and extend the agreement for one year. The Fire Department is in the process of looking at other records management systems and will be going out to bid for FY 2021-2022 and beyond.

7. ATTACHMENTS

- First Amendment to Application Hosting and Technology Support Services Agreement



Agenda Item

City Council

Item #: 3.12.

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7. ATTACHMENTS

- First Amendment to Application Hosting and Technology Support Services Agreement

**FIRST AMENDMENT
TO
APPLICATION HOSTING AND
TECHNOLOGY SUPPORT SERVICES AGREEMENT**

THIS FIRST AMENDMENT TO APPLICATION HOSTING AND TECHNOLOGY SUPPORT SERVICES AGREEMENT (the “First Amendment”) is made and entered into as of _____, 2020, by and between the CITY OF ORANGE, a municipal corporation (“City”), and ESO SOLUTIONS, INC., a Texas corporation, assignee of Xerox Government Systems, LLC, (“Contractor”), with reference to the following:

A. City and Contractor entered into an Application Hosting and Technology Support Services Agreement (Agreement No. 6258) dated as of September 1, 2015, which is incorporated herein by this reference (the “Original Agreement”); and

B. Xerox Government Systems, LLC has assigned the Original Agreement to ESO Solutions, Inc. (henceforth, “Contractor”), and City consents to this assignment; and

B. City and Contractor desire to amend the Original Agreement to modify, amend and supplement certain portions of the Original Agreement by extending the term, modifying the services, and increasing the compensation.

NOW, THEREFORE, the parties hereby agree as follows:

Section 1. **Defined Terms.** Except as otherwise defined herein, all capitalized terms used herein shall have the meanings set forth for such terms in the Original Agreement.

Section 2. **Cross-References.** City and Contractor agree that all references in this First Amendment are deemed and construed to refer to the Original Agreement, as implemented by this First Amendment.

Section 3. **Revised Term.** Section 2.0 of the Original Agreement, Term, is hereby revised to reflect a termination date of August 30, 2021.

Section 4. **Revised Services.** Section 3.0, Exhibit A, of the Original Agreement, Services, is hereby amended, modified and supplemented to include the services described on Exhibit A attached hereto and incorporated herein by this reference.

Section 5. **Revised Compensation.** Section 8.1 of the Original Agreement, Charges, is hereby revised to include compensation for the additional services to be rendered pursuant to Exhibit A of this First Amendment in an amount not to exceed TWENTY-NINE THOUSAND FOUR HUNDRED EIGHTEEN DOLLARS and 00/100 (\$29,418.00).

Section 6. **Revised Notice.** Section 15.7 of the Original Agreement, Notices, is hereby revised to reflect the following notices:

If to Customer, to:

City of Orange
300 E. Chapman Ave.
Orange, CA 92866
Attn: Rosie Flores, Plan Examiner

If to ESO, to:

ESO Solutions, Inc.
9020 N. Capital of Texas Highway
Austin, TX 78759
Attn: Marilee Murphy, Account Manager

Section 7. **Integration.** This First Amendment amends, as set forth herein, the Original Agreement and, except as specifically amended hereby, the Original Agreement shall remain in full force and effect. To the extent that there is any conflict or inconsistency between the terms and provisions of this First Amendment and the terms and provisions of the Original Agreement, the terms and provisions of this First Amendment shall control and govern the rights and obligations of the parties.

[Remainder of page intentionally left blank; signatures on next page]

IN WITNESS of this Agreement, the parties enter into this Agreement on the year and day first above written.

“CONTRACTOR”

“CITY”

ESO SOLUTIONS, INC., a Texas corporation

CITY OF ORANGE, a municipal corporation

*By: _____

By: _____

Printed Name: _____

Mark A. Murphy, Mayor

Title: _____

*By: _____

ATTEST:

Printed Name: _____

Title: _____

Pamela Coleman, City Clerk

APPROVED AS TO FORM:

Mary E. Binning
Senior Assistant City Attorney

***NOTE:** If Contractor is a corporation, the City requires the following signature(s):
-- (1) the Chairman of the Board, the President or a Vice-President, **AND** (2) the Secretary, the Chief Financial Officer, the Treasurer, an Assistant Secretary or an Assistant Treasurer. If only one corporate officer exists or one corporate officer holds more than one corporate office, please so indicate. **OR**
-- The corporate officer named in a corporate resolution as authorized to enter into this Agreement. A copy of the corporate resolution, certified by the Secretary close in time to the execution of the Agreement, must be provided to the City.

EXHIBIT “A”

SUPPLEMENTAL SCOPE OF SERVICES

[Behind this page.]



Agenda Item

City Council

Item #: 3.13.

9/8/2020

File #: 20-122

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Boyd, Fire Chief

1. SUBJECT

2020 Emergency Services Orange County Operational Area Agreement of the County of Orange and Political Subdivisions.

2. SUMMARY

Approval of the 2020 Orange County Operational Area Agreement will replace the existing Orange County Operational Area Agreement with a reorganized agreement that addresses agency relationships, jurisdictional responsibilities, and legislated mandates before, during, and after major emergencies.

3. RECOMMENDED ACTION

Approve the 2020 Orange County Operational Area Agreement of the County of Orange and Political Subdivisions and authorize the Mayor and the City Clerk to execute on behalf of the City.

4. FISCAL IMPACT

None.

5. STRATEGIC PLAN GOALS

Goal 1: Provide for a safe community

b. Provide and maintain infrastructure necessary to ensure the safety of the public.

6. DISCUSSION AND BACKGROUND

The Orange County (OC) Operational Area (OA) Agreement formally creates and organizes the OC OA as required by the Standardized Emergency Management System (SEMS), Title 19 California Code of Regulations Section 2409, et seq. The OC OA was created, and the OC OA Agreement was approved, by the OC Board of Supervisors (Board) on November 17, 1995. The OC OA Agreement, developed through a collaborative process with all affected organizations and jurisdictions, has guided how OC jurisdictions coordinate emergency planning and response activities.

The OA is overseen by an Executive Board with representatives from each emergency response discipline. The OA Executive Board meets on a quarterly basis, and is responsible for the development, establishment and implementation of the policies of the OA. In 2017, the OA Executive

Board identified the need to update the OA Agreement to better reflect current best practices and update outdated information. To accomplish this task, the Sheriff-Coroner Department (Sheriff), Emergency Management Division, which serves as staff to the OA Executive Board, formed a collaborative, multi-jurisdictional OA Agreement Revision Working Group to complete a comprehensive review and revision of the document. The revised OC OA Agreement produced by this process is now ready for final approval by the Board to be formally adopted by the County of Orange. Once adopted by the Board, the OC OA Agreement will be presented to the multiple jurisdictions that are part of the OA, for adoption by the respective governing bodies. The new OC OA Agreement will become effective six months after the document is approved by the County of Orange and one other OA jurisdiction.

The new OC OA Agreement draft developed by the OC OA Agreement Revision Working Group has structural and content changes from the original 1995 document. Agreement sections are reorganized to make the document easier to understand and reference, and the document is reformatted to more closely align with the Emergency Management Division's plan document style guide. A complete crosswalk of structural changes is available on request from the Emergency Management Division.

The major content changes are outlined below:

New OA Executive Board Members

Five new OA Executive Board seats are added to the body to more diversely represent the jurisdictions of the OA. The new seats are designated for:

- The County Executive Officer
- The OC Social Services Agency Director
- The OA Water/Wastewater Mutual Aid Coordinator
- A representative selected jointly from the OC Community College Districts
- The OC Transportation Authority Chief Executive Officer

OC Emergency Management Organization (OCEMO) Update

Since the 1995 OC OA Agreement was approved, OCEMO has transitioned to a simpler model than was outlined in the original document. Several changes are made in the new OC OA Agreement draft to reflect the current operational practices of OCEMO and ensure alignment with the new OCEMO bylaws approved in 2018. Another change is the removal of the OCEMO Representative Board, which has not been in use for a decade or more. The new draft also provides clarity on the nature of the administrative support provided to OCEMO by the County of Orange.

OA Coordinator Staffing

The 1995 OC OA Agreement specifically outlined which agencies are responsible for staffing the Operational Area Coordinator (OAC) position. At the time of approval, this staffing arrangement aligned with the staffing of the Director of Emergency Services (DES) position and was meant to outline additional responsibilities for the DES during an OA-wide incident. Since approval, the County Ordinance that defines staffing for the DES role was updated by Board Resolution #01-212 on July

17, 2001 created a conflict with the original OAC staffing arrangement. To rectify this conflict and to prevent similar issues in the future, the language in the updated draft is streamlined to reference the County Ordinance and Resolution rather than separately defining OAC staffing.

OA Finance

The New OC OA Agreement includes a significant reworking of language related to OA finances: grant funding and administration. Relevant language once contained in Addendum Two (See Addendums section below) is now incorporated in the main body of the OC OA Agreement. Language referencing specific grant programs is replaced with broader language that reflects the shifting nature of grant funding and the challenges of grant administration. The new language also addresses lessons learned related to the financial aspects of mutual aid and disaster recovery.

Addendums

The 1995 OC OA Agreement has three addendums that addressed various issues brought forth during the development of the original document. Addendum One clarifies roles and responsibilities for the OA, the OA Executive Board and the OAC. Addendum Two includes documents related to the administration of the Emergency Management Assistance Program grant that no longer exists. Relevant portions of these two addendums are incorporated into the main body of the new OC OA Agreement draft as appropriate. Addendum Three is the OA Mutual Aid Plan. This critical document will become an attachment to the Unified County of Orange and OC OA Emergency Operations Plan. This will put the Mutual Aid Plan on a more defined schedule of review and revision.

Naming and Terminology Changes

Several name changes are introduced in the New OC OA Agreement draft to clarify the differences between the various bodies and positions created by the document.

7. ATTACHMENTS

- Orange County Operational Area Agreement of the County of Orange and Political Subdivisions (January 2020)



Agenda Item

City Council

Item #: 3.13.

9/8/2020

File #: 20-122

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THRU: Rick Otto, City Manager

FROM: Christopher Boyd, Fire Chief

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- Orange County Operational Area Agreement of the County of Orange and Political Subdivisions (January 2020)

Orange County Operational Area Agreement



of the County of Orange
and Political Subdivisions

January 2020

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I. Recitals

**OPERATIONAL AREA AGREEMENT
OF THE COUNTY OF ORANGE AND POLITICAL SUBDIVISIONS**

THIS AGREEMENT is entered into this 19th day of May, 2020 which date is enumerated for purpose of reference only, by and between the County of Orange, hereinafter referred to as County, and all other Political Subdivisions within Orange County, as defined in Government Code Section 8557 (b) of the California Emergency Services Act, hereinafter referred to as Subdivisions, collectively hereafter referred to as the Parties.

WITNESSETH:

WHEREAS, it is the intent of the Parties hereto to coordinate prevention, preparedness, response, recovery and mitigation efforts for the safety of persons and property from the effects of natural, human-caused, or war-caused disasters, hereinafter referred to as emergencies, as required by the California Emergency Services Act and the Standardized Emergency Management System (SEMS) Regulations, Title 19 California Code of Regulations Sections 2400 et seq.; and

WHEREAS, the purpose of an Operational Area, as defined in Government Code Section 8605 and Title 19 California Code of Regulations Sections 2403 and 2409, is to manage and coordinate information, resources, and priorities among the local governments within the geographic area of the County, and to serve as the coordination and communication link between the local government level and the regional level of the State; and to use multi-agency or inter-agency coordination to facilitate decisions for overall operational area level emergency response activities; and

WHEREAS, this Agreement is intended to provide for the continued management of the Operational Area; cooperative and mutual handling of duties and responsibilities of the Operational Area Lead Agency; coordination of the emergency functions of the Operational Area with all other public agencies, corporations, organizations, and affected private persons within the Operational Area; and the preparation and implementation of plans for the protection of persons and property within the Operational Area in the event of an emergency; and

WHEREAS, in accordance with the requirements of California laws and regulations the County previously adopted Orange County Codified Ordinances, section 3-1-5 and Resolutions 81-1104 and 95-870 and intends to adopt an updated resolution for this Agreement to support emergency management planning and coordination of all political subdivisions within the Orange County geographic area as required by State law; and

WHEREAS, Orange County Board of Supervisors Resolution 05-144 adopted the National Incident Management System (NIMS) for the Orange County Operational Area which sets many of the same objectives as the Standardized Emergency Management System;

NOW THEREFORE, the Parties hereto agree as follows:

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Section One. Operational Area Establishment

1.1 Operational Area Established

The entire geographic area of Orange County constitutes an Operational Area (OA) for the purposes of coordinating the prevention, preparedness, response, recovery and mitigation efforts for the safety of persons and property from the effects of natural, human-caused or war caused disasters, hereinafter referred to as emergencies. All local governments should cooperate in organizing an effective OA, but the OA authority and responsibility is not affected by the non-participation of any local government. The County of Orange shall be the Operational Area Lead Agency as specified in Title 19 California Code of Regulations Section 2409(d).

1.2 Local Authority

In the event of an actual or threatened emergency, each jurisdiction shall retain the authority provided for by law respecting its jurisdiction. No body created by this Agreement can bind Parties to legal or financial obligations.

Section Two. Operational Area Council, Executive Board and Subcommittees

2.1 Operational Area Signatory Council

All political subdivisions within the geographic area of Orange County, California are organized into the OA, regardless of signatory status.¹ The OA Signatory Council, hereinafter referred to as the Council, is hereby created to include the signature Parties to this Agreement. The Parties acknowledge that the Council is not a separate legal entity and that it is not their intention to form a joint powers authority.

2.1.1 Membership

By approval and execution of this Agreement, all Subdivisions in the County of Orange, including cities, school districts, community college districts, special districts, joint powers authorities, and the County, are members of the Council. Each signature party shall designate annually in writing to the Orange County Sheriff's Department Emergency Management Division, hereinafter referred to as county emergency management, one primary and one alternate representative of its governing body to serve on the Council.

2.1.2 Responsibilities

It is not the intent of this Agreement that there be regular meetings of the Council. In routine matters and day-to-day decision-making, the OA Executive Board (as described in Section 2.2) will represent the interests of the OA. However, the Council shall have authority over the major policy issues of the OA, as determined by the Executive Board, including adoption of any amendments to this Agreement or adoption of any fees to support OA coordination activities. Council members will receive information regarding major OA policy issues from the Executive Board, when necessary, for consideration at their respective governing body meetings. Furthermore, whenever a majority of the Council determine that an issue should be brought before the Council, it shall be done irrespective of whether the Executive Board has identified it as a major policy issue.

2.1.3 Representatives Meeting

The representatives of the Council may meet as necessary as determined by the Executive Board or as requested by a majority of the members of the Council. Should it be necessary for the Council to meet, each member of the Council shall be entitled to one vote. The representatives present shall, by majority vote, select a Chair Pro Tem for that meeting from among the representatives present. A majority of all Council member representatives shall constitute a quorum for the transaction of business relating to the OA. Unless otherwise provided herein, a vote of the majority of those present and qualified to vote shall be sufficient for the adoption of any motion, resolution, or order and to take any other action deemed appropriate to further the

¹ Title 19 California Code of Regulations Section 2409

objectives of the OA. Voting will be conducted in accordance with Robert's Rules of Order. All meetings will be noticed and conducted in accordance with the Brown Act.

2.2 Operational Area Executive Board

2.2.1 Membership

The Council shall have an OA Executive Board, hereinafter referred to as the Executive Board, consisting of sixteen voting members. The Executive Board includes representatives from the County Board of Supervisors, public safety agencies and Mutual Aid Coordinators, key County departments, and OA jurisdictions. Individuals will only serve as a voting member in one role for any single meeting and for purposes of determining quorum.

Executive Board Members

1. The Chair of the Orange County Board of Supervisors
2. The County Executive Officer
3. The OA Law Enforcement Mutual Aid Coordinator, the Orange County Sheriff
4. The OA Fire & Rescue Mutual Aid Coordinator, as selected by the Orange County Fire Chiefs Association
5. The OA Public Works Mutual Aid Coordinator, the Orange County Public Works Director
6. The OA Health Care Mutual Aid Coordinator, the Orange County Health Care Agency Director
7. The OA Water/Wastewater Mutual Aid Coordinator
8. The Orange County Social Services Agency Director
9. A representative selected jointly from the Orange County City Managers Association
10. A representative from the Orange County Chiefs of Police and Sheriff's Association
11. A representative from the Orange County Fire Chiefs Association
12. A representative from the Orange County City Engineers and Public Works Directors Association
13. A representative from Independent Special Districts of Orange County
14. The Orange County Superintendent of Schools, representing Orange County K-12 School Districts
15. A representative selected jointly from Orange County Community College Districts
16. The Orange County Transportation Authority Chief Executive Officer

Terms, Alternates and Voting

Executive Board members subject to being "selected," which are enumerated above as numbers 4, 9-13 and 15, shall be appointed by their respective agency, jurisdiction or organizations annually and shall serve at the discretion of their organization for one year. Each jurisdiction, agency or organization shall also designate three alternate representatives. Individuals appointed to the Executive Board can be the same or different than those identified in Section 2.1.1 as a

Orange County Operational Area Agreement

member jurisdiction's Council primary or alternate representative. In no circumstances shall one individual occupy more than one Executive Board position or count as more than one member for purposes of determining quorum.

Each Executive Board member, or alternate in the absence of the voting member for whom he/she is the designated alternate, shall be entitled to one vote. A majority of the Executive Board (9 members) shall constitute a quorum for the transaction of business relating to the OA. Unless otherwise provided herein, a vote of the majority of those present and qualified to vote shall be sufficient for the adoption of any motion, resolution or order and to take any other action deemed appropriate to achieve the objectives of the OA. Voting will be conducted in accordance with Robert's Rules of Order. The OA Executive Board is a Brown Act meeting and is noticed and conducted as such.

Operational Area Executive Board Chair and Vice-Chair

The Chair and Vice Chair shall be elected annually by the Executive Board. In the absence of both the Chair and the Vice Chair, the members of the Executive Board present shall, by majority vote, select one of the members present to act as Chair Pro Tem.

Meetings

The Executive Board shall meet quarterly or as designated by the Executive Board Chair.

2.2.2 Responsibilities

The Executive Board shall have oversight of the actions of the OA Manager (as described in Section 4.2) in the daily operations and administration of the OA. The Executive Board's oversight authority shall include directing the development, establishment, and implementation of the policies of the OA, and keeping the Council informed of its actions. The Executive Board shall determine which major policy issues of the OA require Council approval and shall seek such approval.

Policy and Operational Area Emergency Operations Plan

The Executive Board will establish OA policy, review and approve the OA Emergency Operations Plan (EOP) and Annexes, and maintain these documents as required by SEMS and NIMS.

Mutual Aid Plans and Agreements

The Executive Board shall review proposals of emergency mutual aid plans and agreements and make recommendations on endorsement of such proposals to governing boards of Subdivisions.

Laws, Rules, Legislation and Regulation

The Executive Board shall review and may recommend for action or adoption by Subdivisions, emergency and mutual aid plans, agreements, ordinances, resolutions, and any rules and regulations necessary to implement such plans and agreements. The Executive Board may also

study, review, and make recommendations on State and Federal legislation and policy as appropriate, and on matters referred to the Executive Board in writing by Council members.

Operational Area Executive Board Emergency Advisory Capacity

The Executive Board may be convened by the Chair or the OA Coordinator, as described in Section 4.1, to review a potential or actual emergency situation and make and receive appropriate recommendations from the OA Coordinator and Council members to facilitate a coordinated OA response.

2.2.3 Subcommittees and Working Groups

The Executive Board may establish standing and ad hoc subcommittees and working groups to complete its work and to ensure communication and coordination between all interested persons or groups. Subcommittees and working groups shall elect a Chairperson and provide appropriate staff support from their participants. The OA Manager shall provide coordination between these subcommittees and the Executive Board only.

2.3 Orange County Emergency Management Organization

There is hereby established a standing subcommittee to the Executive Board, the Orange County Emergency Management Organization, hereinafter referred to as OCEMO. OCEMO is a collaboration and coordination body tasked with developing the plans, procedures, and associated documents necessary for a robust Operational Area emergency management program. The County and all Subdivisions shall be expected to participate in OCEMO, to the maximum extent possible, with the understanding that the cooperative maintenance of the OA EOP, policies and procedures, training and exercises is necessary to ensure that the OA EOP, policies, procedures, training and exercises meet the emergency needs of the Subdivisions, County, and OA.

2.3.1 Membership

The entire OCEMO body ("Members at Large") consists of three groups of representatives involved in some capacity of an emergency management function, as defined below and in the OCEMO Bylaws.

Signatory Members

Staff members with primary emergency management responsibilities from signatory agencies to this agreement are considered Signatory Members. Each signatory jurisdiction shall identify a primary and secondary representative who shall have the right to vote on behalf of the jurisdiction. To ensure compliance with the Brown Act, no more than eight OCEMO members who are also voting members of the OA Executive Board shall be present at any OCEMO meeting.

Orange County Operational Area Agreement

Collaborative Members

Representatives of other government, non-profit, or private agencies that are not signatories to this agreement and are not currently represented by a Signatory or Collaborative Member, but are considered to have a significant role in OA planning, response and recovery processes are considered Collaborative Members. Collaborative members must be approved by Signatory Members and have limited voting rights as outlined in the OCCEMO Bylaws.

Associate Members

Other representatives of organizations interested in participating in OCCEMO activities, and who may provide input into the OA EOP, annexes, and supporting Standard Operating Procedures (SOPs) are considered Associate Members. Associate members have no voting rights.

2.3.2 Responsibilities

As a subcommittee to the Executive Board, the responsibilities of OCCEMO are to meet the following objectives as they relate to disaster and emergency prevention, preparedness, response, recovery and mitigation within the OA:

Operational Area Plans, Annexes, and Standard Operating Procedures

- Participate in revisions and updates of the OA EOP and associated Annexes and SOPs developed and maintained by county emergency management staff as described in Section 3.2. Once completed, plans and the associated Annexes reviewed by OCCEMO shall be forwarded to the OA Executive Board for approval.

Training and Exercises

- Coordinate training and exercises for the OA, to include after action discussions, lessons learned and professional development.

Public Education and Outreach

- Coordinate the development of public education and whole community emergency preparedness programs.

Legislation

- Review and report on legislation impacting emergency plans and programs, and propose concepts for new legislation for consideration by the Executive Board.

Other

- Other duties as assigned by the Executive Board.

2.3.3 OCCEMO Leadership

The OCCEMO Leadership shall consist of the OCCEMO Chairperson, First Vice Chairperson and Second Vice Chairperson, elected in accord with the OCCEMO Bylaws, the OA Manager and the

immediate past Chairperson. Any Signatory or Collaborative Member shall be eligible to serve as a candidate for OCEMO Chairperson, First Vice Chairperson, and Second Vice Chairperson as outlined in the OCEMO Bylaws.

2.3.4 Organization and Procedures

OCEMO will maintain and approve Bylaws. The Bylaws will define, at a minimum, OCEMO purpose, membership, leadership duties, elections, voting procedures, official meeting frequency, and the process for amending the Bylaws. The Bylaws shall in all instances be consistent with this Agreement.

OCEMO will review the Bylaws, as needed. Any amendments to the Bylaws will be approved by OCEMO Signatory Members, as detailed in the OCEMO Bylaws.

If OCEMO identifies the need for additional Subcommittees or working groups, OCEMO members participating in that subcommittee or working group shall provide staff support.

2.3.5 Administrative Support

The County shall provide administrative support to OCEMO as follows:

- Attend all OCEMO and OCEMO Leadership meetings
- Maintain a contact list of the primary and alternate representatives of each OCEMO member
- Organize and manage OCEMO Leadership elections and votes on other issues
- Notify members of their appointment to office or subcommittees
- Create and distribute OCEMO meeting agendas
- Take and transmit OCEMO meeting minutes
- Maintain official OCEMO records, including agendas and minutes, in compliance with County record retention policies.

Section Three. Responsibilities

3.1 Operational Area Jurisdiction Responsibilities

Subdivisions of the OA have the responsibilities as set forth below:

Participation

Actively participate as a member jurisdiction in the Council, Executive Board (if designated), and subcommittees such as OCEMO.

Cooperation

Promote cooperation among all Subdivisions in order to improve the overall OA emergency management program.

Emergency Management Program

Develop an emergency management program to provide for the needs of the Subdivision, which shall be complementary to and compatible and coordinated with the needs of the OA in the event of an emergency.

Emergency Plan and Organization

Develop and maintain an EOP and organization to provide for the emergency needs of the Subdivision according to SEMS Regulations and NIMS, and coordinate with and, where able, support other Subdivisions, the County, and the OA Emergency Operations Center (EOC).

Procedures

Develop Subdivision procedures that outline the steps necessary to satisfy responsibilities as a member jurisdiction of the OA.

Training and Exercises

Maintain a thorough knowledge of the Parties' and OA's EOPs and ensure that the supporting services and key personnel are properly trained and organized to meet all of their responsibilities in the event of an emergency. Conduct regular exercises and participate in regional exercises, when offered.

Emergency Assistance

Parties shall offer assistance to other jurisdictions and secondary and relief support to the OA within the limits of capabilities and according to applicable mutual aid agreements. Parties should participate in mutual aid agreements wherever possible.

Resource Lists

Maintain current resource listings of staff, facilities, equipment and supplies available in the jurisdiction for use in the event of an emergency.

Orange County Operational Area Agreement

Critical Points of Contact

Identify 24-hour or other critical points-of-contact for the Subdivision that may be used by the OA EOC during emergency operations. If the points-of-contact are individuals, identify a primary and at least three alternates for each. Inform county emergency management staff when critical points-of-contact change or are updated.

Disaster Recovery and Financial Reimbursement

Subdivisions have ultimate responsibility for their own recovery program and will work directly with FEMA and Cal OES throughout the cost recovery process. Each Subdivision is individually responsible for developing, submitting, and receiving their own emergency aid, loans or grants from any source including local, state, and federal governments. Each is individually responsible for the timeliness, accuracy, and compliance of its own expenditures submitted for reimbursement through such mechanisms.

3.2 County-Specific Responsibilities

The County acts as the OA Lead Agency. The OA Lead Agency has the following responsibilities to the OA in addition to those responsibilities specified under Section 3.1 of this Agreement:

24-Hour Contact Point

The County will serve as the 24-hour contact point for the OA and act as lead in activating the OA EOC, hereinafter referred to as OA EOC.

Operational Area Emergency Operations Center

The County EOC and Alternate EOC (as designated) shall serve as the OA EOC. The OA EOC shall exist as a dedicated essential facility and be capable of serving as the central point for:

- coordinating information and resources with OA subdivisions
- coordinating all levels of government as a component of Orange County's Multiagency Coordination System (MACS)
- coordinating with other OAs
- reporting information to and coordinating with the California Office of Emergency Services (Cal OES) Southern Region EOC

County emergency management staff shall be responsible for ensuring the OA EOC is maintained in a state of constant readiness, in accord with the FEMA Emergency Operations Center Assessment Checklist and ASTM E2668 – Standard Guide for Emergency Operations Center Development, or subsequent standards if revised.

Initial EOC Activation Staffing

The County shall provide initial OA EOC activation staff. Subdivisions with available resources may provide secondary and relief OA EOC staffing.

Orange County Operational Area Agreement

Disaster Recovery and Financial Reimbursement

The County shall be responsible for coordinating the formal recovery process through Cal OES and FEMA and will assist with:

- Coordinating initial OA disaster recovery
- Scheduling damage assessment site visits
- Other duties as outlined in the Recovery Annex to the OA EOP

Operational Area Emergency Operations Plan and Annexes

County emergency management staff shall be responsible for coordinating with the Orange County Emergency Management Organization to maintain and revise the OA EOP, annexes and SOPs as directed by the Executive Board.

Operational Area Executive Board Support

County emergency management staff shall provide support to the Executive Board for agendas and minutes for meetings and coordinating follow-up only.

Subcommittee and Working Group Support

County emergency management staff shall provide support to Executive Board subcommittees and working groups.

Section Four. Operational Area Coordinator and Operational Area Manager

4.1 Operational Area Coordinator

By this Agreement, the Council creates and recognizes the position of an OA Coordinator, hereinafter referred to as the Coordinator. During an emergency the OA Coordinator position will be filled by the Orange County Director of Emergency Services, as specified by Section 3-1-6 of the Orange County Code of Ordinances and County Board of Supervisors Resolution 12-036, as presently existing or as hereafter amended.

4.1.1 Powers and Duties

The Coordinator shall direct and coordinate the OA during times of emergency. In addition to his/her responsibilities as Director of Emergency Services, the Coordinator shall have the additional duties and powers, as described below and in the OA EOP:

Direction and Coordination

Serve as key decision-maker in the OA EOC, providing direction and coordination necessary to accomplish the purposes of this Agreement and responsibilities of the OA Lead as specified in Title 19 California Code of Regulations Section 2409(e).

Operational Area Representative

Represent the OA in all dealings with the public or private agencies on matters pertaining to emergencies as defined in Section 3-1-2 of the Orange County Code of Ordinances.

4.2 Operational Area Manager

By this Agreement, the Council creates and recognizes the position of an OA Manager. The OA Manager shall be the County Emergency Manager as specified in Section 3-1-6 of the Orange County Code of Ordinances and County Board of Supervisors Resolution 12-036, as presently existing or as hereafter amended.

4.2.1 Powers and Duties

The OA Manager shall have the following powers and duties:

Administration of Operational Area Agreement

On a day-to-day basis, ensure County-specific responsibilities detailed in Section 3.2 are met.

Staff to the Operational Area Executive Board

Serve as staff to the Executive Board, maintain close liaison with the Executive Board, and coordinate all activities of assigned OA staff with the Executive Board.

Orange County Operational Area Agreement

Daily Coordination and Assistance

Direct the daily coordination and cooperation between the county emergency management staff, Subdivisions, and Executive Board Subcommittees, including OCEMO. Resolve questions of authority and responsibility that may arise between them, and work closely with and assist the Executive Board, as required.

Notification of Emergency Operations Center Activation

Notify the Board of Supervisors, the Executive Board, and OCEMO of an OA EOC activation as soon as practical, and keep the Executive Board and Board of Supervisors informed on all aspects of a current emergency situation as soon as information becomes available.

OCEMO Support

Serve on OCEMO Leadership. Provide support to OCEMO for agendas, minutes and administrative support only. Staff support to OCEMO subcommittees shall be provided by OCEMO members.

Budget and Staffing

Develop an annual operating budget and staffing recommendations, and monitor the expenditures at the direction of the Executive Board.

After Action Reports

Coordinate with OCEMO for the development of after action reports for the Executive Board following activations of the OA EOC.

Resource Coordination

Act as the coordination point between Subdivisions and the Cal OES on a day-to-day basis for Emergency Management Mutual Aid (EMMA) resource requests, in accordance with the State of California Emergency Management Mutual Aid Plan. The OA Manager may also coordinate other OA mutual aid requests, as appropriate.

Section Five. Operational Area Response Systems

5.1 Operational Area Emergency Operations Plan

Under the direction of the Executive Board, county emergency management staff shall be responsible for maintaining the OA EOP, which shall provide for the effective mobilization of all OA resources, both public and private, to meet any condition constituting an emergency; and shall provide for the organization, powers and duties, and staff of the OA emergency response organization. This responsibility is inclusive of the EOP and any associated Annexes and SOPs.

5.1.1 Compliance

The OA Emergency Operations Plan shall comply with applicable local, state and federal planning criteria, including NIMS and SEMS.

5.1.2 Functional Assignments

The OA EOP shall include the functions assigned to the mutual aid organizations, County agencies/departments and Subdivisions. It shall be the responsibility of agency/department heads and Subdivisions to appoint staff who shall report to the OA EOC and carry out the assigned duties as appropriate.

5.1.3 Approval

Updates and revisions to the OA EOP and annexes will be effective on approval by the Executive Board. SOPs and other support documents may be updated on an ongoing basis by county emergency management staff as long as changes are consistent with approved plans and annexes.

5.2 Operational Area Emergency Operations Center

5.2.1 Location

The primary and dedicated County EOC located at 2644 Santiago Canyon Rd., Silverado, California, or alternate as designated, shall serve as the OA EOC. Communication connection to the OA EOC shall be the responsibility of each Subdivision and Mutual Aid Coordinator or their representative.

5.2.2 Required Activation

Activation of the OA EOC is required under the conditions defined by SEMS, Title 19 California Code of Regulations Section 2409(f), the Orange County OA EOP and associated Annexes.

5.2.3 Staff for the Operational Area Emergency Operations Center

The County shall provide initial OA EOC activation staff. Subdivisions with available resources shall provide secondary and relief OA EOC staffing. Emergency management or other mutual aid shall be used to staff the OA EOC as necessary. The County declares its willingness to provide a staff member to an impacted Subdivision's EOC or Incident Command Post to act as an OA coordination point, if desired by the Subdivision and as personnel availability and safety concerns allow.

Section Six. Operational Area Finance

6.1 Operational Area Expenses and Revenues

Operational Area Administrative Expenses

This Agreement recognizes that there are day-to-day costs associated with OA administration and emergency management activities; these costs are separate from County-specific emergency management activities. The County shall provide administrative staffing for the OA to carry out the duties as delineated in Section 3.2 and Section 4 of this Agreement; however, the County shall not be solely responsible for the costs of administering the OA.

The County Board of Supervisors has the over-arching authority and responsibility to approve the county emergency management budget that supports both County and OA emergency management activities.

To offset costs of the OA, the Executive Board shall be responsible for the acquisition and distribution of federal, state, and business or private foundation emergency management grant funds. For emergency management grant funds made available to the OA for distribution among the Subdivisions, the Executive Board will review and approve proposed funding allocation methods. Their review will take into consideration recommendations from OCEMO, acting in their role as subcommittee to the Executive Board. To offset administrative costs, a percentage of such grants may be allotted to the OA before apportionment among the subdivisions. If funding becomes available with a short application period that does not allow for OCEMO, Executive Board, and County Board of Supervisors pre-approval, then approval will be sought retroactively through the ratification process set forth by the County Board of Supervisors.

The County or any Subdivision may fund through general or special funds any services, supplies, or programs that they separately or jointly determine are necessary to comply with laws or regulations, or that serve the purposes of emergency prevention, preparedness, response, recovery and mitigation on an OA level.

Costs of Operational Area during Emergency Response and Recovery

During emergencies, all OA jurisdictions shall be expected to participate to the maximum extent possible, according to mutual aid and other agreements, with the understanding that during an emergency, the priorities are life safety, property, and the environment (in that order), regardless of which jurisdiction is impacted. This Agreement incorporates by reference the reimbursement concepts of the Emergency Management Assistance Compact, the California Disaster and Civil Defense Master Mutual Aid Agreement, and the State of California Emergency Management Mutual Aid Plan. Expenditures made in connection with such emergency activities required by this Agreement, the California Emergency Services Act and/or SEMS, including mutual aid activities,

Orange County Operational Area Agreement

shall be deemed conclusively to be for the direct protection and benefit of the persons and property in the OA.

In deciding the level of OA response and resource commitment during emergencies, the County and Subdivisions agree to operate according to the EOP and supporting documents defined in Section 5.1 of this Agreement.

Financial Reimbursement and Recovery Following Emergencies

The County and each Subdivision are each individually responsible for developing, submitting, and receiving their own emergency aid, loans or grants from any source including local, state, and federal governments. Each is individually responsible for the timeliness, accuracy, and compliance of its own expenditures submitted for reimbursement through such mechanisms.

Section Seven. Operational Area Agreement Administration

7.1 Existing Agreements

Nothing contained in this Agreement shall be construed as superseding or modifying any existing agreements, including mutual aid agreements, except for superseding the existing OPERATIONAL AREA AGREEMENT OF THE COUNTY OF ORANGE AND POLITICAL SUBDIVISIONS dated October 3, 1995, and addenda; and nothing herein shall be construed as preventing any Party from entering into or modifying mutual aid or other emergency response agreements.

7.2 Effective Date

This Agreement shall become effective six months after approval and execution by the County Board of Supervisors and at least one Subdivision. Any Subdivision in Orange County may become a Party hereto by executing this Agreement. Notice shall be provided to the County upon a Subdivision's execution of this Agreement.

7.3 Withdrawal

Any Party may withdraw from this Agreement by providing written notice to county emergency management staff. Said notice shall be given 30 days before withdrawal from this Agreement.

7.4 Indemnification

Each Party shall defend, indemnify, and hold harmless the other Parties, and their officers, agents, employees and representatives from any and all losses, liability, damages, claims, suits, actions, administrative proceedings, demands, and litigation, and all expenses and costs relating directly to the negligent or otherwise wrongful acts or omissions of the indemnitor, its officers, agents, employees, or representatives arising out of or incidental to performance under this Agreement. No Party assumes liability for the acts or omissions of persons other than that Party's respective officers, agents, employees or representatives.

7.5 Counterparts

This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, and all of which shall constitute one and the same instrument.

7.6 Interpretation

Save to the extent that the context or the express provisions of this Agreement otherwise require:

- Headings and sub-headings are for ease of reference only and shall not be taken into consideration in the interpretation or construction of this Agreement;
- All references to Parts, Sections, and Paragraphs are references to Parts, Sections and Paragraphs contained herein;

Orange County Operational Area Agreement

- All references to any ordinance, resolution, law, regulation or guidance shall include references to any ordinance, resolution, law, regulation or guidance which amends, extends, consolidates or replaces the same or which has been amended, extended, consolidated, supplemented, substituted, novated, replaced, or assigned by the same and shall include, without limitation, any instrument, proclamation, bylaw, directive, decision, regulation, rule, order, notice, codes of practice, code of conduct, rule of court, instrument or delegated or other subordinate legislation thereto;
- The words “herein”, “hereto” and “hereunder” refer to this Agreement as a whole and not to the particular Section, or Paragraph in which such word may be used;
- Any reference to a public organization or representative shall be deemed to include a reference to any successor to such public organization or representative or any organization or entity or representative which has taken over the functions or responsibilities of such public organization or representative.

7.7 Ambiguities

In the case of any ambiguity or discrepancy:

- Between the provisions in this Agreement and the provisions of any underlying Executive Order, law, or regulation, the provisions of underlying Executive Order, law, or regulations will be incorporated by approval of the Executive Board and written notice shall be provided to all Parties.
- Between the provisions in this Agreement and the provisions of any underlying mutual aid agreement or EOP, the provisions of this Agreement shall prevail until such time as the OA Executive Board considers the matter and notice of proposed resolution to such issues are provided to all Parties.

7.8 Amendment

This Agreement may not be amended or modified except in a writing executed by a majority of all signature Parties as defined by Section 2.1 of this Agreement.

OPERATIONAL AREA AGREEMENT
OF THE COUNTY OF ORANGE AND POLITICAL SUBDIVISIONS

DATED: 5/19/20

County of Orange

(City or Jurisdiction)

BY Michelle Steel

Michelle Steel, Chairwoman

County of Orange

ATTEST:

By: Robin Stieler
Robin Stieler, Clerk of the Board
County of Orange



Date 5/19/20

NOTICE TO COUNTY OF ORANGE TO BE GIVEN TO:

City/Jurisdiction

Donna Boston

Name

County of Orange

City/Jurisdiction

2644 Santiago Canyon Road

Address

Silverado, CA 92676

City/State/Zip

714-628-7154

FAX Number

APPROVED AS TO FORM:

Wendy J Phillips
Wendy Phillips, Senior Deputy County Counsel

County of Orange

Dated 5/26/20

Orange County Operational Area Agreement

ATTEST:

By: _____

Date _____

NOTICE TO _____ TO BE GIVEN TO:

City/Jurisdiction

Name

City/Jurisdiction

Address

Chapter 3 City/State/Zip

FAX Number

APPROVED AS TO FORM:

Wendy J. Phyllis

Senior Deputy County Counsel

Orange County

Dated *2/26/20*

**OPERATIONAL AREA AGREEMENT
OF THE COUNTY OF ORANGE AND POLITICAL SUBDIVISIONS**

DATED: _____

City of Orange
(City or Jurisdiction)

BY _____

Mark A. Murphy, Mayor

City of Orange

ATTEST:

By: _____

Pamela Coleman, City Clerk

City of Orange

Date _____

NOTICE TO CITY OF ORANGE TO BE GIVEN TO:
City/Jurisdiction

Fire Chief
Name

City of Orange
City/Jurisdiction

176 S. Grand Street
Address

Orange, CA 92866
City/State/Zip

714-744-6035
FAX Number

APPROVED AS TO FORM:

Mary E. Binning, Senior Assistant City Attorney

City of Orange

Dated _____



Agenda Item

City Council

Item #: 3.14.

9/8/2020

File #: 20-057

TO: Honorable Mayor and Members of the City Council
THRU: Rick Otto, City Manager
FROM: Bonnie Hagan, Assistant City Manager / Community Services Director

1. SUBJECT

Appropriation of Senior Mobility Program funds in the amount of \$3,218.44.

2. SUMMARY

The appropriation of Measure M2 sales tax revenue in the amount of \$3,218.44 received through the Senior Mobility Program administered by the Orange County Transportation Authority for the Senior Transportation Program.

3. RECOMMENDED ACTION

Authorize the appropriation of \$3,218.44 from the Traffic Improvement Measure M2 unreserved fund balance to the following expenditure accounts:

\$ 754.13	263.7041.51780.20385	Senior Transportation Grant 18-19
\$2,464.31	263.7041.51780.20412	Senior Transportation Grant 19-20

4. FISCAL IMPACT

The total appropriation is funded by revenue received from the Orange County Transportation Authority.

5. STRATEGIC PLAN GOALS

Goal 3: Enhance and promote quality of life in the community

a: Refurbish, maintain, develop and/or expand public use places and spaces..

6. DISCUSSION AND BACKGROUND

The City entered into an agreement with Orange Elderly Services (OES) to administer the Senior Transportation Program using Measure M2 sales tax revenue funds, which the City receives from the Orange County Transportation Authority (OCTA) through the Senior Mobility Program (SMP). The City budgets for approximately \$120,000 in annual Measure M2 revenues and expenditures for this program. Any additional amount received or earned in interest must be appropriated through City Council action and all funds are required to be spent within three years of receipt. In Fiscal Year 2019-2020, the City received a total of \$122,464.31 in revenue and interest, \$2,464.31 over the budgeted amount. Additionally, the City earned a total of \$754.13 in interest for funds received and appropriated the previous fiscal year. Therefore, a total of \$3,218.44 in SMP revenue and interest needs to be appropriated in order to spend the funds within the three-year period.

7. ATTACHMENTS

- None



Agenda Item

City Council

Item #: 3.14.

9/8/2020

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THRU: Rick Otto, City Manager

FROM: Bonnie Hagan, Assistant City Manager / Community Services Director

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7. ATTACHMENTS

- None



Agenda Item

City Council

Item #: 3.15.

9/8/2020

File #: 20-084

TO: Honorable Mayor and Members of the City Council

FROM: Rick Otto, City Manager

1. SUBJECT

Appropriation of \$1,729,404 in Coronavirus Aid, Relief, and Economic Security Act funds.

2. SUMMARY

Appropriation of \$1,729,404 in Coronavirus Aid, Relief, and Economic Security funds from the State of California to reimburse the City for eligible expenses incurred while addressing the COVID-19 public health emergency.

3. RECOMMENDED ACTION

1. Accept into the City's revenue budget a \$1,729,404 grant from the State of California for the Coronavirus Aid, Relief, and Economic Security Act, into revenue account number 100.0000.45150.30154 General Fund - CARES Grant State Reimbursement.
2. Authorize the appropriation of \$1,729,404 into the following expenditure account numbers for General Fund - CARES Grant State Reimbursement:

\$ 588,000 100.3021.50001.30154

\$1,141,404 100.4021.50001.30154

4. FISCAL IMPACT

The total appropriations for this grant are funded by the additional revenue received from the State of California.

5. STRATEGIC PLAN GOALS

Goal 2: Be a fiscally healthy community

e: Create an environment to attract, retain, and expand economic opportunities.

6. DISCUSSION AND BACKGROUND

The Coronavirus Aid, Relief, and Economic Security Act (CARES Act) was signed into law on March 27, 2020 and includes funds to reimburse local governments for costs related to the COVID-19 crisis. Costs are reimbursable if they are:

- Necessary expenditures due to the COVID-19 public health emergency
- Not accounted for in the most recently approved budget

- Incurred between March 1, 2020 and December 30, 2020

The State of California received \$500 million in funds through the CARES Act and is distributing funds to cities based on population. The City's share of the \$500 million is \$1,729,404 and will be used to reimburse the City for eligible expenses incurred in its response to the COVID-19 public health emergency.

The City has also received the following CARES Act funds: \$1.3 million in FY 20 from the County of Orange (County) for COVID related expenses, and \$3.4 million for small business assistance from the County, both of which have been expended; and approximately \$230,000 in FY 21 from the County for senior meal gap programs.

7. ATTACHMENTS

- None.



Agenda Item

City Council

Item #: 3.15.

9/8/2020

File #: 20-084

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7. ATTACHMENTS

- None.



Agenda Item

City Council

Item #: 3.16.

9/8/2020

File #: 20-123

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Boyd, Fire Chief

1. SUBJECT

Appropriation of \$24,681 in State of California Office of Emergency Services funding received.

2. SUMMARY

Costs for strike team and individual overhead deployments represent non-budgeted expenditures for the Fire Department. These costs are reimbursed by the State of California Office of Emergency Services at a later date. Staff is requesting that funds be appropriated into the appropriate expenditure accounts for Fiscal Year 2020-2021.

3. RECOMMENDED ACTION

1. Accept into the City's revenue budget \$24,681 in strike team reimbursement funds from State of California Office of Emergency Services, into revenue account number 100.3024.48212.40222 - Saddleridge Fire.
2. Authorize the appropriation of \$24,681 into expenditure account number 100.3024.50221.40222, General Fund - Overtime-Safety.

4. FISCAL IMPACT

The total appropriation for this reimbursement are funded by the additional revenue received from the State of California Office of Emergency Services.

5. STRATEGIC PLAN GOALS

Goal 1: Provide for a safe community

- a. Provide staffing and resources to deliver services that ensure public safety.

6. DISCUSSION AND BACKGROUND

The Fire Department is a party to a state-level agreement with The California State Office of Emergency Services (Cal-OES) to provide fire and emergency assistance to state and federal fire agencies. This agreement is managed by Cal-OES and referred to as the California Fire Assistance Agreement (CFAA). Under this agreement, Orange City Fire Department generally provides resources two different ways: Strike Teams and Individual Overhead.

Strike team deployments involve an Engine Company or Battalion Chief or Deputy Chief responding

with their vehicle as part of a multi-agency team to an incident. Individual Overhead resources respond to fill a specific role for an incident, such as Safety Officer or Line Emergency Medical Technician (EMT).

Following the return from one of these incidents, reimbursement paperwork and invoices are submitted to Cal-OES. The Fire Department recently received a reimbursement payment for the Saddleridge Fire for \$24,681. Staff is requesting that funds be appropriated into the appropriate expenditure accounts for Fiscal Year 2020-2021. The additional funds will reimburse Fire Department overtime and travel expenditures incurred during these incidents.

7. ATTACHMENTS

None.



Agenda Item

City Council

Item #: 3.16.

9/8/2020

File #: 20-123

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Boyd, Fire Chief

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5. STRATEGIC PLAN GOALS

Goal 1: Provide for a safe community

- a. Provide staffing and resources to deliver services that ensure public safety.

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The Fire Department is a party to a state-level agreement with The California State Office of Emergency Services (Cal-OES) to provide fire and emergency assistance to state and federal fire agencies. This agreement is managed by Cal-OES and referred to as the California Fire Assistance Agreement (CFAA). Under this agreement, Orange City Fire Department generally provides resources two different ways: Strike Teams and Individual Overhead.

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7. ATTACHMENTS

None.



Agenda Item

City Council

Item #: 3.17.

9/8/2020

File #: 20-124

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Boyd, Fire Chief

1. SUBJECT

Appropriation of \$24,950 in designated continuing education funding received from the Rancho Santiago Community College District.

2. SUMMARY

Rancho Santiago Community College District (Santa Ana College) partners with the Orange City Fire Department to provide reimbursement for mandatory training hours performed by staff. Staff is requesting acceptance of \$24,950 in revenue and its appropriation into the Fiscal Year 2020-2021 budget.

3. RECOMMENDED ACTION

1. Accept into the City's revenue budget \$24,950 in continuing education funds from Rancho Santiago Community College District into revenue account number 100.3023.48210.20234, General Fund - Santa Ana College Fire Training.
2. Authorize the appropriation of \$24,950 into expenditure account number 100.3023.51840.20234, General Fund - Santa Ana College Fire Training.

4. FISCAL IMPACT

The total appropriation for this reimbursement is funded by the additional revenue received from the Rancho Santiago Community College District.

5. STRATEGIC PLAN GOALS

- Goal 2: Be a fiscally healthy community
- a. Analyze future fiscal needs and potential revenue opportunities.

6. DISCUSSION AND BACKGROUND

The Orange City Fire Department (Fire) safety personnel are required to attend a minimum of 20 hours of training per month. Training is directed either by outside subject matter experts, or by Orange City Fire captains who have obtained 1A or 1B certification.

Rancho Santiago Community College District, Santa Ana College (College), receives state funds to administer this training and can redirect a portion of the funds to fire departments that enroll their personnel as students at the College. Fire is a party to an agreement whereby the College pays the Department \$3.50 per firefighter for each hour of training the firefighter attends. Such funds may be

used for Fire Department training expenses and other operational needs.

Training curriculum sponsored by Santa Ana College is chosen based on the guidelines set forth by the California Community Colleges Chancellor's Office (CCCCO). Curriculum is divided into several different courses that are required by Cal-OSHA and designed for large group instruction. The Fire Department utilizes subject matter experts to conduct the training to address the required material. Training hours are recorded and the total number of hours are then calculated each semester by the Fire Department's Training Captain and submitted as an invoice to Santa Ana College.

Funds received from Santa Ana College give the Fire Department the ability to pay for outside instructors when the department does not have a subject matter expert for required training. They also fund improved training aids, books, materials and equipment, as well as assisting with other operational needs beyond the Fire Department's available fiscal year budget.

The Fire Department recently received a check for \$24,950 from Rancho Santiago Community College District, which need to be appropriated into the Fire Department's budget.

7. ATTACHMENTS

None.



Agenda Item

City Council

Item #: 3.17.

9/8/2020

File #: 20-124

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Boyd, Fire Chief

1. SUBJECT

Appropriation of \$24,950 in designated continuing education funding received from the Rancho Santiago Community College District.

2. SUMMARY

Rancho Santiago Community College District (Santa Ana College) partners with the Orange City Fire Department to provide reimbursement for mandatory training hours performed by staff. Staff is requesting acceptance of \$24,950 in revenue and its appropriation into the Fiscal Year 2020-2021 budget.

3. RECOMMENDED ACTION

1. Accept into the City's revenue budget \$24,950 in continuing education funds from Rancho Santiago Community College District into revenue account number 100.3023.48210.20234, General Fund - Santa Ana College Fire Training.
2. Authorize the appropriation of \$24,950 into expenditure account number 100.3023.51840.20234, General Fund - Santa Ana College Fire Training.

4. FISCAL IMPACT

The total appropriation for this reimbursement is funded by the additional revenue received from the Rancho Santiago Community College District.

5. STRATEGIC PLAN GOALS

Goal 2: Be a fiscally healthy community

- a. Analyze future fiscal needs and potential revenue opportunities.

6. DISCUSSION AND BACKGROUND

The Orange City Fire Department (Fire) safety personnel are required to attend a minimum of 20 hours of training per month. Training is directed either by outside subject matter experts, or by Orange City Fire captains who have obtained 1A or 1B certification.

Rancho Santiago Community College District, Santa Ana College (College), receives state funds to administer this training and can redirect a portion of the funds to fire departments that enroll their personnel as students at the College. Fire is a party to an agreement whereby the College pays the Department \$3.50 per firefighter for each hour of training the firefighter attends. Such funds may be

used for Fire Department training expenses and other operational needs.

Training curriculum sponsored by Santa Ana College is chosen based on the guidelines set forth by the California Community Colleges Chancellor's Office (CCCCO). Curriculum is divided into several different courses that are required by Cal-OSHA and designed for large group instruction. The Fire Department utilizes subject matter experts to conduct the training to address the required material. Training hours are recorded and the total number of hours are then calculated each semester by the Fire Department's Training Captain and submitted as an invoice to Santa Ana College.

Funds received from Santa Ana College give the Fire Department the ability to pay for outside instructors when the department does not have a subject matter expert for required training. They also fund improved training aids, books, materials and equipment, as well as assisting with other operational needs beyond the Fire Department's available fiscal year budget.

The Fire Department recently received a check for \$24,950 from Rancho Santiago Community College District, which need to be appropriated into the Fire Department's budget.

7. ATTACHMENTS

None.



Agenda Item

City Council

Item #: 3.18.

9/8/2020

File #: 20-090

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Cash, Public Works Director

1. SUBJECT

Final Acceptance of Bid No. 189-40, Annual Pipeline Renewal Project; and authorization to file Notice of Completion.

2. SUMMARY

The City of Orange has entered into a contract with T.E. Roberts, Inc. for the construction of the Annual Pipeline Renewal Project. The scope of work consisted of installation of approximately 7,800 feet of new water mains, new water meters, lateral services, fire hydrants, valves, fittings and other appurtenances in accordance with current water standards. The project has been completed in July 2020 to the satisfaction of the Public Works Department, Water Division.

3. RECOMMENDED ACTION

Accept as complete Bid No. 189-40; Annual Pipeline Renewal Project; and authorize staff to file Notice of Completion with the County Recorder.

4. ATTACHMENTS

- Notice of Completion and Acceptance



Agenda Item

City Council

Item #: 3.18.

9/8/2020

File #: 20-090

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Cash, Public Works Director

1. SUBJECT

Final Acceptance of Bid No. 189-40, Annual Pipeline Renewal Project; and authorization to file Notice of Completion.

2. SUMMARY

The City of Orange has entered into a contract with T.E. Roberts, Inc. for the construction of the Annual Pipeline Renewal Project. The scope of work consisted of installation of approximately 7,800 feet of new water mains, new water meters, lateral services, fire hydrants, valves, fittings and other appurtenances in accordance with current water standards. The project has been completed in July 2020 to the satisfaction of the Public Works Department, Water Division.

3. RECOMMENDED ACTION

Accept as complete Bid No. 189-40; Annual Pipeline Renewal Project; and authorize staff to file Notice of Completion with the County Recorder.

4. ATTACHMENTS

- Notice of Completion and Acceptance

RECORDING REQUESTED BY AND
WHEN RECORDED MAIL TO:

City of Orange
300 East Chapman Avenue
Orange, California 92866
Attention: City Clerk

[Space above this line for Recorder's use only.]

THIS DOCUMENT IS RECORDED AT THE REQUEST AND FOR THE BENEFIT OF THE CITY OF ORANGE AND IS EXEMPT FROM THE PAYMENT OF A RECORDING FEE PURSUANT TO GOVERNMENT CODE SECTIONS 6103 AND 27383.

NOTICE OF COMPLETION AND ACCEPTANCE

NOTICE IS HEREBY GIVEN that work on that certain public work and improvements known as "Annual Pipeline Renewal Project (Bid No. 189-40; W-691)" (herein referred to as the "Project"), for the owner, the City of Orange, a municipal corporation (herein referred to as the "City"), whose address is 300 E. Chapman Avenue, Orange, CA 92866, was completed and accepted by the City Council of the City of Orange on September 8, 2020 at a regular meeting of its members, at which a quorum was present and acting throughout. The Contractor who performed (or caused to be performed) said public work and improvements was T.E. Roberts, Inc., a California Corporation, with its principal office at 306 West Katella Avenue, in the City of Orange, State of California.

The name of the surety on the Labor and Material Bond for the Project is Travelers Casualty and Surety Company of America (Bond# 107151251) in the amount of \$2,210,985.00.

DATED as of the 8th day of September, 2020.

CITY OF ORANGE, a municipal corporation

By: _____

Mark A. Murphy
Mayor of the City of Orange

STATE OF CALIFORNIA
COUNTY OF ORANGE

I, Mark A. Murphy, Mayor of the City of Orange, state that I have read the foregoing document, know the contents thereof, and that the facts therein stated are true of my own knowledge. I hereby declare under penalty of perjury that the foregoing is true and correct.

DATED as of the 8th day of September, 2020 at Orange, California.

Mark A. Murphy, Mayor of the City of Orange

I, Pamela Coleman, City Clerk for the City of Orange, hereby attest that Mark A Murphy is known to me to be the Mayor of the City of Orange and known to me to be the person who executed the within instrument on behalf of said municipal corporation, and acknowledged to me that the City of Orange executed the same.

Pamela Coleman, City Clerk of the City of Orange



Agenda Item

City Council

Item #: 3.19.

9/8/2020

File #: 20-092

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Cash, Public Works Director

1. SUBJECT

Final Acceptance of Bid No. 190-29, Council Chambers Remodel Project, Phase 2; and authorization to file Notice of Completion.

2. SUMMARY

On May 12, 2020, the City of Orange entered into a contract with New Dimension General Construction Inc., to expand the existing dais in preparation for a seven-member City Council. The improvements consisted of extending the back wall, the dais platform, and constructing new concrete steps on both sides. The project also remodeled the lower and upper podium, and installed new wood veneer and carpet to match the existing improvements. The AV system was also upgraded, along with the installation of electronic nameplates under separate contracts. The work was completed to the satisfaction of the Public Works Department.

3. RECOMMENDED ACTION

Accept Bid No. 190-29; SP-4129, Council Chambers Remodel Project, Phase 2 as complete; and authorize staff to file Notice of Completion with the County Recorder.

4. ATTACHMENTS

- Notice of Completion and Acceptance



Agenda Item

City Council

Item #: 3.19.

9/8/2020

File #: 20-092

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Cash, Public Works Director

1. SUBJECT

Final Acceptance of Bid No. 190-29, Council Chambers Remodel Project, Phase 2; and authorization to file Notice of Completion.

2. SUMMARY

On May 12, 2020, the City of Orange entered into a contract with New Dimension General Construction Inc., to expand the existing dais in preparation for a seven-member City Council. The improvements consisted of extending the back wall, the dais platform, and constructing new concrete steps on both sides. The project also remodeled the lower and upper podium, and installed new wood veneer and carpet to match the existing improvements. The AV system was also upgraded, along with the installation of electronic nameplates under separate contracts. The work was completed to the satisfaction of the Public Works Department.

3. RECOMMENDED ACTION

Accept Bid No. 190-29; SP-4129, Council Chambers Remodel Project, Phase 2 as complete; and authorize staff to file Notice of Completion with the County Recorder.

4. ATTACHMENTS

- Notice of Completion and Acceptance

RECORDING REQUESTED BY AND
WHEN RECORDED MAIL TO:

City of Orange
300 East Chapman Avenue
Orange, California 92866
Attention: City Clerk

[Space above this line for Recorder's use only.]

THIS DOCUMENT IS RECORDED AT THE
REQUEST AND FOR THE BENEFIT OF THE CITY
OF ORANGE AND IS EXEMPT FROM THE
PAYMENT OF A RECORDING FEE PURSUANT
TO GOVERNMENT CODE SECTIONS 6103 AND
27383.

NOTICE OF COMPLETION AND ACCEPTANCE

NOTICE IS HEREBY GIVEN that work on that certain public work and improvements known as "Council Chambers Remodel Project, Phase 2 (SP-4129)" (herein referred to as the "Project"), for the owner, the City of Orange, a municipal corporation (herein referred to as the "City"), whose address is 300 E. Chapman Avenue, Orange, CA 92866, was completed and accepted by the City Council of the City of Orange on September 8, 2020 at a regular meeting of its members, at which a quorum was present and acting throughout. The Project is at 300 E. Chapman Avenue in the City of Orange, State of California. The contractor who performed (or caused to be performed) said public work and improvements were New Dimension General Construction, a California corporation, with its principal office at 5753 E, Santa Ana Canyon Rd., Ste. G-627 Anaheim Hills, State of California.

The name of the surety on the Labor and Material Bond for the Project is The Ohio Casualty Insurance Company of, New Hampshire (Bond No. 24243379) in the amount of \$22,897.40.

DATED as of the 8th day of September 2020.

CITY OF ORANGE, a municipal corporation

By: _____
Mark A. Murphy, Mayor, City of Orange

STATE OF CALIFORNIA
COUNTY OF ORANGE

I, Mark A. Murphy, Mayor of the City of Orange, state that I have read the foregoing document know the contents thereof, and that the facts therein stated are true of my own knowledge. I hereby declare under penalty of perjury that the foregoing is true and correct.

DATED as of the 8th day of September 2020 at Orange, California.

Mark A. Murphy, Mayor, City of Orange

I, Pamela Coleman, City Clerk for the City of Orange, hereby attest that Mark A. Murphy is known to me to be the Mayor of the City of Orange and known to me to be the person who executed the within instrument on behalf of said municipal corporation, and acknowledged to me that the City of Orange executed the same.

Pamela Coleman, City Clerk, City of Orange



Agenda Item

City Council

Item #: 3.20.

9/8/2020

File #: 20-093

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Cash, Public Works Director
Christopher Boyd, Fire Chief

1. SUBJECT

Approval of plans and specifications for Fire Station No. 1 and Headquarters; and authorization to advertise Bid No. 20-21.07.

2. SUMMARY

Plans and specifications have been completed and the project is ready to be advertised for bids. The total estimated construction cost including bid alternates, 10% for contingencies and 5% for construction engineering is \$31,107,120.

3. RECOMMENDED ACTION

Approve plans and specifications and authorize advertising for bids for Fire Station No. 1 and Headquarters SP-4071.

4. FISCAL IMPACT

The total expenditure for this project is \$31,107,120 and will be funded in Fire Station No. 1 (20400) through Reimbursable Capital Projects (550).

5. STRATEGIC PLAN GOALS

Goal 1: Provide for a safe community

b: Provide and maintain infrastructure necessary to ensure the safety of the public.

Goal 4: Provide outstanding public service

b: Provide facilities and services to meet customer expectations.

6. DISCUSSION AND BACKGROUND

The City plans to build a new Fire Station No. 1 and Headquarters to be located on City-owned property at the southeast corner of the intersection of Water Street and Chapman Avenue, at 105 South Water Street. In addition to the new facility, the project will be retrofitting an existing storage building at 145 South Water Street to store reserve apparatus vehicles and other disaster equipment. The project will also be constructing a parking lot for staff on a portion of 180 S. Water Street.

The City Council previously awarded a contract for the Architectural and Engineering Design

Services on May 14, 2019 to WLC Architects, Inc. City staff has been working diligently along with the Consultant in the preparation of the environmental documents and the design bid package and the project is ready to be advertised for bids.

This new facility has been designed to accommodate both Fire Station No. 1 and Fire Headquarters for total of 27,927 square feet of space. Fire Headquarters is comprised of Fire Department management, operations, administration, and Fire Marshal staff. The architecture of the Fire Station No. 1 and Headquarters has been designed to reflect the Spanish Revival style found throughout the Old Towne Orange Historic District.

The City Council previously authorized the sale of \$34 million of lease revenue bonds per Resolution No. 11246, adopted June 9, 2020. These funds will serve to fund the construction of the new facility and any excess funds will be used to fund other City facilities projects.

The bid proposal has been broken down into four lump sum categories and construction cost are estimated as follows:

Fire Station No. 1 and Headquarters facility	\$24,402,000
Retrofitting of existing warehouse	447,055
Westerly parking lot	438,090
Traffic signal and street improvements	<u>582,351</u>
	\$25,869,496

In consideration of the available funding and the volatility in construction costs that have been experienced this past year, the project will be bid with the following items as bid alternates, should favorable bids be received:

Construction of Carport Structures	\$519,075
Remove and Reconstruct the interior Concrete Slab of the Reserved Apparatus Bay per plan	\$64,000
Installation of Solar Panels (Base bid includes conduit work and any requirements by the CBC for a Solar Ready building)	\$480,000+

The total construction dollar amount including 10% contingency is estimated at \$29,625,828.

Due to the magnitude and importance of the project, staff has requested proposals for construction management, testing, and environmental compliance with expertise in constructing Fire Station facilities. Proposals will be evaluated and presented to Council in October 2020. It is estimated that construction management costs will be approximately \$1.5 million.

California Environmental Quality Act (CEQA) compliance for the project will be satisfied with the adoption of MND 1862-18, Resolution No. 11264, by City Council on September 08, 2020.

Specifications and cost estimates are available for review in the Public Works Department.

7. ATTACHMENTS

- Location Map



Agenda Item

City Council

Item #: 3.20.

9/8/2020

File #: 20-093

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Cash, Public Works Director
Christopher Boyd, Fire Chief

1. SUBJECT

Approval of plans and specifications for Fire Station No. 1 and Headquarters; and authorization to advertise Bid No. 20-21.07.

2. SUMMARY

Plans and specifications have been completed and the project is ready to be advertised for bids. The total estimated construction cost including bid alternates, 10% for contingencies and 5% for construction engineering is \$31,107,120.

3. RECOMMENDED ACTION

Approve plans and specifications and authorize advertising for bids for Fire Station No. 1 and Headquarters SP-4071.

4. FISCAL IMPACT

The total expenditure for this project is \$31,107,120 and will be funded in Fire Station No. 1 (20400) through Reimbursable Capital Projects (550).

5. STRATEGIC PLAN GOALS

Goal 1: Provide for a safe community

b: Provide and maintain infrastructure necessary to ensure the safety of the public.

Goal 4: Provide outstanding public service

b: Provide facilities and services to meet customer expectations.

6. DISCUSSION AND BACKGROUND

The City plans to build a new Fire Station No. 1 and Headquarters to be located on City-owned property at the southeast corner of the intersection of Water Street and Chapman Avenue, at 105 South Water Street. In addition to the new facility, the project will be retrofitting an existing storage building at 145 South Water Street to store reserve apparatus vehicles and other disaster equipment. The project will also be constructing a parking lot for staff on a portion of 180 S. Water Street.

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This new facility has been designed to accommodate both Fire Station No. 1 and Fire Headquarters for total of 27,927 square feet of space. Fire Headquarters is comprised of Fire Department management, operations, administration, and Fire Marshal staff. The architecture of the Fire Station No. 1 and Headquarters has been designed to reflect the Spanish Revival style found throughout the Old Towne Orange Historic District.

The City Council previously authorized the sale of \$34 million of lease revenue bonds per Resolution No. 11246, adopted June 9, 2020. These funds will serve to fund the construction of the new facility and any excess funds will be used to fund other City facilities projects.

The bid proposal has been broken down into four lump sum categories and construction cost are estimated as follows:

Fire Station No. 1 and Headquarters facility	\$24,402,000
Retrofitting of existing warehouse	447,055
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Traffic signal and street improvements	<u>582,351</u>
	\$25,869,496

In consideration of the available funding and the volatility in construction costs that have been experienced this past year, the project will be bid with the following items as bid alternates, should favorable bids be received:

Construction of Carport Structures	\$519,075
Remove and Reconstruct the interior Concrete Slab of the Reserved Apparatus Bay per plan	\$64,000
Installation of Solar Panels (Base bid includes conduit work and any requirements by the CBC for a Solar Ready building)	\$480,000+

The total construction dollar amount including 10% contingency is estimated at \$29,625,828.

Due to the magnitude and importance of the project, staff has requested proposals for construction management, testing, and environmental compliance with expertise in constructing Fire Station facilities. Proposals will be evaluated and presented to Council in October 2020. It is estimated that construction management costs will be approximately \$1.5 million.

California Environmental Quality Act (CEQA) compliance for the project will be satisfied with the adoption of MND 1862-18, Resolution No. 11264, by City Council on September 08, 2020.

Specifications and cost estimates are available for review in the Public Works Department.

7. ATTACHMENTS

- Location Map

RFP No. 20-21.12

Fire Station 1 and Fire Headquarters; SP-4071





Agenda Item

City Council

Item #: 3.21.

9/8/2020

File #: 20-095

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Cash, Public Works Director

1. SUBJECT

Final Acceptance of Bid No. 190-10, SP-4099, Plaza Parking Lot Improvements; and authorization to file Notice of Completion.

2. SUMMARY

The work in general consisted of the construction of four trash enclosures surrounding The Plaza to accommodate current and future solid waste capacity for each quadrant. Each enclosure will house a 30 yard compactor as well as provide areas for recyclables and organic waste for compliance with AB 341 - Mandatory Commercial Recycling and AB 1826 - Mandatory Commercial Organics Recycling.

The City of Orange entered into a contract with Aid Builders, Inc. The work was completed to the satisfaction of the Public Works Department.

3. RECOMMENDED ACTION

Accept Plaza Parking Lot Improvements project as complete; and authorize staff to file Notice of Completion with the County Recorder.

4. ATTACHMENTS

- Notice of Completion and Acceptance



Agenda Item

City Council

Item #: 3.21.

9/8/2020

File #: 20-095

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Cash, Public Works Director

1. SUBJECT

Final Acceptance of Bid No. 190-10, SP-4099, Plaza Parking Lot Improvements; and authorization to file Notice of Completion.

2. SUMMARY

The work in general consisted of the construction of four trash enclosures surrounding The Plaza to accommodate current and future solid waste capacity for each quadrant. Each enclosure will house a 30 yard compactor as well as provide areas for recyclables and organic waste for compliance with AB 341 - Mandatory Commercial Recycling and AB 1826 - Mandatory Commercial Organics Recycling.

The City of Orange entered into a contract with Aid Builders, Inc. The work was completed to the satisfaction of the Public Works Department.

3. RECOMMENDED ACTION

Accept Plaza Parking Lot Improvements project as complete; and authorize staff to file Notice of Completion with the County Recorder.

4. ATTACHMENTS

- Notice of Completion and Acceptance

RECORDING REQUESTED BY AND
WHEN RECORDED MAIL TO:

City of Orange
300 East Chapman Avenue
Orange, California 92866
Attention: City Clerk

[Space above this line for Recorder's use only.]

THIS DOCUMENT IS RECORDED AT THE REQUEST AND FOR THE BENEFIT OF THE CITY OF ORANGE AND IS EXEMPT FROM THE PAYMENT OF A RECORDING FEE PURSUANT TO GOVERNMENT CODE SECTIONS 6103 AND 27383.

NOTICE OF COMPLETION AND ACCEPTANCE

NOTICE IS HEREBY GIVEN that work on that certain public work and improvements known as "Plaza Parking Lot Improvements Project (Bid No. 190-10; SP-4099)" (herein referred to as the "Project"), for the owner, the City of Orange, a municipal corporation (herein referred to as the "City"), whose address is 300 E. Chapman Avenue, Orange, CA 92866, was completed and accepted by the City Council of the City of Orange on September 8, 2020 at a regular meeting of its members, at which a quorum was present and acting throughout. The Project is at various locations surrounding The Plaza in the City of Orange, State of California. The contractor who performed (or caused to be performed) said public work and improvements was Aid Builders, Inc., a California corporation, with its principal office at 10605 Bloomfield Street, Los Alamitos, State of California.

The name of the surety on the Labor and Material Bond for the Project is Philadelphia Indemnity Insurance Company, Pennsylvania (Bond No. PB03081700415) in the amount of \$323,528.00

DATED as of the 8th day of September 2020. CITY OF ORANGE, a municipal corporation

By: _____
Mark A. Murphy, Mayor, City of Orange

STATE OF CALIFORNIA
COUNTY OF ORANGE

I, Mark A. Murphy, Mayor of the City of Orange, state that I have read the foregoing document know the contents thereof, and that the facts therein stated are true of my own knowledge. I hereby declare under penalty of perjury that the foregoing is true and correct.

DATED as of the 8th day of September 2020 at Orange, California.

Mark A. Murphy, Mayor, City of Orange

I, Pamela Coleman, City Clerk for the City of Orange, hereby attest that Mark A. Murphy is known to me to be the Mayor of the City of Orange and known to me to be the person who executed the within instrument on behalf of said municipal corporation, and acknowledged to me that the City of Orange executed the same.

Pamela Coleman, City Clerk, City of Orange



Agenda Item

City Council

Item #: 3.22.

9/8/2020

File #: 20-067

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Ryan E. Lumm, Assistant City Attorney

1. SUBJECT

Claim(s) for Damages.

2. SUMMARY

Five claims have been received and investigated by the City Attorney's Office and/or the Risk Manager with the involved departments.

3. RECOMMENDED ACTION

Deny the following claim(s) and refer to City Attorney and Claims Adjuster:

1. C.M. (minor) by and through his father Guillermo Mendoza
2. Rochelle Lyon
3. Alfred Mendez
4. Sandra Mendez
5. AAA a/s/o Hirotoshi Yonezawa

4. FISCAL IMPACT

None.

5. STRATEGIC PLAN GOALS

Goal 2: Be a fiscally healthy community

a: Expend fiscal resources responsibly.

6. DISCUSSION AND BACKGROUND

1. Claim for damages from C.M. (minor) by and through his father Guillermo Mendoza alleging personal injury when C.M. was struck by a vehicle while crossing the street.
2. Claim for damages from Rochelle Lyon alleging personal injury when she tripped and fell on a sidewalk.
3. Claim for damages from Alfred Mendez alleging property damage and personal injury when he fell off a motorcycle on an uneven portion of the 91 freeway.
4. Claim for damages from Sandra Mendez alleging property damage and personal injury when she fell off a motorcycle on an uneven portion of the 91 freeway.
5. Claim for damages from AAA a/s/o Hirotoshi Yonezawa alleging property damage due

to a traffic collision with a city of Lake Forest fire truck.

7. ATTACHMENTS

- None.



Agenda Item

City Council

Item #: 3.22.

9/8/2020

File #: 20-067

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Ryan E. Lumm, Assistant City Attorney

1. SUBJECT

Claim(s) for Damages.

2. SUMMARY

Five claims have been received and investigated by the City Attorney's Office and/or the Risk Manager with the involved departments.

3. RECOMMENDED ACTION

Deny the following claim(s) and refer to City Attorney and Claims Adjuster:

1. C.M. (minor) by and through his father Guillermo Mendoza
2. Rochelle Lyon
3. Alfred Mendez
4. Sandra Mendez
5. AAA a/s/o Hirotoshi Yonezawa

4. FISCAL IMPACT

None.

5. STRATEGIC PLAN GOALS

Goal 2: Be a fiscally healthy community

- a: Expend fiscal resources responsibly.

6. DISCUSSION AND BACKGROUND

1. Claim for damages from C.M. (minor) by and through his father Guillermo Mendoza alleging personal injury when C.M. was struck by a vehicle while crossing the street.
2. Claim for damages from Rochelle Lyon alleging personal injury when she tripped and fell on a sidewalk.
3. Claim for damages from Alfred Mendez alleging property damage and personal injury when he fell off a motorcycle on an uneven portion of the 91 freeway.
4. Claim for damages from Sandra Mendez alleging property damage and personal injury when she fell off a motorcycle on an uneven portion of the 91 freeway.
5. Claim for damages from AAA a/s/o Hirotoshi Yonezawa alleging property damage due

to a traffic collision with a city of Lake Forest fire truck.

7. ATTACHMENTS

- None.



Agenda Item

City Council

Item #: 3.23.

9/8/2020

File #: 20-018

TO: Honorable Mayor and Members of the City Council
THRU: Rick Otto, City Manager
FROM: William Crouch, Community Development Director

1. SUBJECT

Historic Preservation Agreements (Mills Act Contracts) for fifteen qualified historic properties.

2. SUMMARY

The Community Development Department Historic Preservation Program received fifteen applications for new Mills Act Contracts in the Old Towne and Eichler Historic Districts for the Spring 2020 application period. Staff recommends approval and execution of the contracts.

3. RECOMMENDED ACTION

Approve fifteen Mills Act Contracts between the City of Orange and the identified property owners for the preservation and rehabilitation of qualified historic properties, and authorize the Mayor and City Clerk to execute on behalf of the City.

4. FISCAL IMPACT

The City may incur a total reduction of property tax of approximately \$10,441 per year. The actual amount of the property tax reduction under each Mills Act Contract will be determined by the Orange County Office of the Assessor, using a predetermined income-based approach to assessment, considering area rental rates and maintenance costs.

The \$1,000 application fee for each contract offsets the cost of staff review, property inspection, and this public meeting. The \$30 annual fee offsets ongoing costs of administration of the contracts. Rehabilitation will generate additional revenues from building permit fees, and the local economy will benefit from specialized work in historic preservation by local building contractors and material suppliers.

5. STRATEGIC PLAN GOALS

Goal 5: Recognize, promote and preserve Orange's rich heritage

b. Expand and strengthen processes and practices related to the protection of cultural resources.

6. DISCUSSION AND BACKGROUND

The purpose of the Mills Act Program is to leverage property tax savings to support private investment in the preservation of historic properties.

Mills Act applications for fifteen qualified historic properties were received prior to the March 1, 2020 application deadline. Six properties are within the Old Towne Historic District and eight properties are in the Eichler Historic Districts. One property, 2056 N. Shaffer Street, is located outside of historic district boundaries. It has been surveyed and identified as a potentially significant historic property at the local level as an outlying farmstead property with high historic integrity. Therefore, it is eligible to participate in the Mills Act Program as it meets the definition of a “qualified historic property” representative of early development in Orange.

Staff reviewed the applications and met with each property owner at the historic property to review the proposed Rehabilitation Plan (Exhibit D) attached to the Mills Act Contract. Each Rehabilitation Plan has been tailored to the preservation needs of the specific historic property and has been determined to meet the Mills Act Program requirements and to be in conformance with the relevant design standards for the historic districts. The investment by property owners in these fifteen historic properties totals more than \$1,071,475 over ten years.

Each Mills Act property owner agrees to complete the work described in the Rehabilitation Plan. Additional contract conditions include:

- 1 Preserve and rehabilitate the historic property and its character-defining features in conformance with adopted rules and regulations.
- 2 Meet City of Orange Historic Property Maintenance Standards for all buildings, structures, yards and other improvements on the property.
- 3 Agree to property inspections once every five years of the contract term and/or when work is completed to determine compliance with terms of the contract.
- 4 File annual status reports on progress of improvements and repairs and/or any changed conditions of the property.
- 5 Provide a ten-year update of proposed rehabilitation and repair items, 90 days prior to the tenth contract anniversary.
- 6 Meet all other contract terms and conditions as specified in the Historic Property Preservation Agreement.

A summary of each application is provided in the Attachments to the Staff Report.

7. ATTACHMENTS

- Table Summary of Fifteen Mills Act Applications
- Mills Act Contract No. 333.0-20 with photograph
- Mills Act Contract No. 334.0-20 with photograph
- Mills Act Contract No. 335.0-20 with photograph
- Mills Act Contract No. 336.0-20 with photograph
- Mills Act Contract No. 337.0-20 with photograph
- Mills Act Contract No. 338.0-20 with photograph

- Mills Act Contract No. 339.0-20 with photograph
- Mills Act Contract No. 340.0-20 with photograph
- Mills Act Contract No. 341.0-20 with photograph
- Mills Act Contract No. 342.0-20 with photograph
- Mills Act Contract No. 343.0-20 with photograph
- Mills Act Contract No. 344.0-20 with photograph
- Mills Act Contract No. 345.0-20 with photograph
- Mills Act Contract No. 346.0-20 with photograph
- Mills Act Contract No. 347.0-20 with photograph



Agenda Item

City Council

Item #: 3.23.

9/8/2020

File #: 20-018

TO: Honorable Mayor and Members of the City Council
THRU: Rick Otto, City Manager
FROM: William Crouch, Community Development Director

1. SUBJECT

Historic Preservation Agreements (Mills Act Contracts) for fifteen qualified historic properties.

2. SUMMARY

The Community Development Department Historic Preservation Program received fifteen applications for new Mills Act Contracts in the Old Towne and Eichler Historic Districts for the Spring 2020 application period. Staff recommends approval and execution of the contracts.

3. RECOMMENDED ACTION

Approve fifteen Mills Act Contracts between the City of Orange and the identified property owners for the preservation and rehabilitation of qualified historic properties, and authorize the Mayor and City Clerk to execute on behalf of the City.

4. FISCAL IMPACT

The City may incur a total reduction of property tax of approximately \$10,441 per year. The actual amount of the property tax reduction under each Mills Act Contract will be determined by the Orange County Office of the Assessor, using a predetermined income-based approach to assessment, considering area rental rates and maintenance costs.

The \$1,000 application fee for each contract offsets the cost of staff review, property inspection, and this public meeting. The \$30 annual fee offsets ongoing costs of administration of the contracts. Rehabilitation will generate additional revenues from building permit fees, and the local economy will benefit from specialized work in historic preservation by local building contractors and material suppliers.

5. STRATEGIC PLAN GOALS

Goal 5: Recognize, promote and preserve Orange's rich heritage

b. Expand and strengthen processes and practices related to the protection of cultural resources.

6. DISCUSSION AND BACKGROUND

The purpose of the Mills Act Program is to leverage property tax savings to support private investment in the preservation of historic properties.

Mills Act applications for fifteen qualified historic properties were received prior to the March 1, 2020 application deadline. Six properties are within the Old Towne Historic District and eight properties are in the Eichler Historic Districts. One property, 2056 N. Shaffer Street, is located outside of historic district boundaries. It has been surveyed and identified as a potentially significant historic property at the local level as an outlying farmstead property with high historic integrity. Therefore, it is eligible to participate in the Mills Act Program as it meets the definition of a “qualified historic property” representative of early development in Orange.

Staff reviewed the applications and met with each property owner at the historic property to review the proposed Rehabilitation Plan (Exhibit D) attached to the Mills Act Contract. Each Rehabilitation Plan has been tailored to the preservation needs of the specific historic property and has been determined to meet the Mills Act Program requirements and to be in conformance with the relevant design standards for the historic districts. The investment by property owners in these fifteen historic properties totals more than \$1,071,475 over ten years.

Each Mills Act property owner agrees to complete the work described in the Rehabilitation Plan. Additional contract conditions include:

- 1 Preserve and rehabilitate the historic property and its character-defining features in conformance with adopted rules and regulations.
- 2 Meet City of Orange Historic Property Maintenance Standards for all buildings, structures, yards and other improvements on the property.
- 3 Agree to property inspections once every five years of the contract term and/or when work is completed to determine compliance with terms of the contract.
- 4 File annual status reports on progress of improvements and repairs and/or any changed conditions of the property.
- 5 Provide a ten-year update of proposed rehabilitation and repair items, 90 days prior to the tenth contract anniversary.
- 6 Meet all other contract terms and conditions as specified in the Historic Property Preservation Agreement.

A summary of each application is provided in the Attachments to the Staff Report.

7. ATTACHMENTS

- Table Summary of Fifteen Mills Act Applications
- Mills Act Contract No. 333.0-20 with photograph
- Mills Act Contract No. 334.0-20 with photograph
- Mills Act Contract No. 335.0-20 with photograph
- Mills Act Contract No. 336.0-20 with photograph
- Mills Act Contract No. 337.0-20 with photograph
- Mills Act Contract No. 338.0-20 with photograph

- Mills Act Contract No. 339.0-20 with photograph
- Mills Act Contract No. 340.0-20 with photograph
- Mills Act Contract No. 341.0-20 with photograph
- Mills Act Contract No. 342.0-20 with photograph
- Mills Act Contract No. 343.0-20 with photograph
- Mills Act Contract No. 344.0-20 with photograph
- Mills Act Contract No. 345.0-20 with photograph
- Mills Act Contract No. 346.0-20 with photograph
- Mills Act Contract No. 347.0-20 with photograph

Summary of Mills Act Applications

Spring 2020

Contract No.	Property Address	Historic District	Property Owners	Estimate for Rehabilitation Plan	Property Tax Savings over 10 Years	Annual Property Tax Reduction to City
MAC-333.0-20	604 E. Maple Ave.	Old Towne	Chad Lefteris and Sherry Mendenhall	\$72,785	\$61,059	\$829
MAC-334.0-20	1814 N. Woodside St.	Eichler Fairmeadow	Timothy Shields and Poh Geok Chew	\$118,250	\$35,326	\$480
MAC-335.0-20	1065 N. Granada Dr.	Eichler Fairhill	James and Bethany Nixon	\$110,453	\$78,603	\$1,067
MAC-336.0-20	5128 E. Elsinore Ave.	Eichler Fairhill	Jeffery and Kacy Trenchel	\$48,000	\$41,759	\$567
MAC-337.0-20	2056 N. Shaffer St.	N/A	Dan Pawlovich and Maya Tuttle	\$138,300	\$93,103	\$1,264
MAC-338.0-20	1830 N. Winlock St.	Eichler Fairmeadow	Shane and Yvonne Trulin	\$52,000	\$51,488	\$699
MAC-339.0-20	883 S. Oakwood St.	Eichler Fairhaven	Rolly DeVore	\$52,072	\$53,024	\$720
MAC-340.0-20	165 S. Batavia St.	Old Towne	Walker and Elizabeth Holloman	\$35,300	\$35,049	\$476
MAC-341.0-20	5123 E. Elsinore Ave.	Eichler Fairhill	Buddhika Hathotuwegama	\$88,800	\$83,448	\$1,133

Summary of Mills Act Applications

Spring 2020

Contract No.	Property Address	Historic District	Property Owners	Estimate for Rehabilitation Plan	Property Tax Savings over 10 Years	Annual Property Tax Reduction to City
MAC-342.0-20	852 S. Oakwood St.	Eichler Fairhaven	Andrew Barmeyer and Kim Bashford	\$71,875	\$71,727	\$974
MAC-343.0-20	1081 N. Granada Dr.	Eichler Fairhill	Paul Coleman and Elisabeth Lucas	\$81,020	\$61,254	\$832
MAC-344.0-20	317 N. Cleveland St.	Old Towne	EJM Capital LLC	\$65,120	\$15,000	\$204
MAC-345.0-20	271 S. Grand St.	Old Towne	Micha Investment Corporation	\$52,200	\$47,596	\$646
MAC-346.0-20	169 N. Harwood St.	Old Towne	EJM Capital LLC	\$48,000	\$34,106	\$463
MAC-347.0-20	545 E. Jefferson Ave.	Old Towne	Micha, Rettenmaier, Brown & Lacey, a California Partnership	\$37,300	\$6,420	\$87

RECORDING REQUESTED BY
AND, WHEN RECORDED,
MAIL TO:

City Clerk
City of Orange
300 E. Chapman Avenue
Orange, California, 92866

Exempt from recording fees pursuant to
Gov. Code Sections 6103 and 27383

Property Address: 604 E. Maple Avenue
APN: 386-072-01
Mills Act Contract Number: 333.0-20

**HISTORIC PROPERTY PRESERVATION AGREEMENT
(MILLS ACT CONTRACT)**

THIS HISTORIC PROPERTY PRESERVATION AGREEMENT (“Agreement”) is made and entered into as of the date of execution by the City (“Effective Date”), by and between the CITY OF ORANGE, a municipal corporation (“City”), and Chad Thurman Lefteris, an unmarried man and Sherry Ann Mendenhall, an unmarried woman as joint tenants (“Owner”), with reference to the following:

RECITALS

WHEREAS, the Mills Act (Government Code Section 50280 *et seq.*) provides cities with the opportunity to contract with owners of qualified historical properties whereby the owner promises to preserve and rehabilitate the property in return for a potential reduced property tax assessment; and

WHEREAS, the City of Orange has established Historic Districts consisting of the Plaza Historic District, listed in the National Register of Historic Places; the Old Towne Orange Historic District, listed in the National Register of Historic Places; the local Old Towne Orange Historic District, designated by the Orange City Council; and the local Eichler Fairhaven, Fairhills, and Fairmeadow Historic Districts, designated by the Orange City Council; and the City desires to promote the character, quality of life, and historic features of said Districts to its citizens and visitors; and

WHEREAS, the City is dedicated to the protection and stabilization of property values through maintaining and upgrading its older housing stock, through the use of incentives such as the Mills Act; and

WHEREAS, the Mills Act also has beneficial effects on City businesses, economic stability and community pride by preserving important neighborhood historic resources; and

WHEREAS, the use of the Mills Act will fulfill one of the goals of the City’s 2010 General Plan Cultural Resources Element; specifically,

“Provide incentives and expand education efforts for historic preservation” (Goal 3.0, CR-22); and

WHEREAS, Owner possesses fee simple title in and to that certain real property, together with associated structures and improvements thereon, located at 604 E. Maple Avenue in the City of Orange, County of Orange, State of California, having Assessor’s Parcel Number 386-072-01 and more specifically described in Exhibit A, which exhibit is attached hereto and made a part hereof (“Historic Property”); and

WHEREAS, the Historic Property is a qualified historical property under the Mills Act in that it is privately owned property which is not exempt from property taxation and is either: individually designated or is a contributing property within a designated district which is listed in the National Register of Historic Places, California Register of Historical Resources or Register of Historical Landmarks, California Points of Historical Interest, or is a contributing property in a locally designated historic district; and

WHEREAS, Owner, in consideration for abiding by the terms of this Agreement shall be entitled to a reassessment of valuation of the Historic Property and any corresponding reduction in property taxes pursuant to the provisions of the California Revenue and Taxation Code; and

WHEREAS, it is the City’s expectation that the Owner will use the property tax savings accrued under this Agreement for improvements to the “Historic Property” (as defined below). To that end, as a condition of renewal, the City will require a revised schedule of improvements every ten years showing a plan for improvements commensurate with the tax savings; and

WHEREAS, the City and Owner for their mutual benefit, now desire to enter into this Agreement to limit the use of the Historic Property to prevent inappropriate alterations, to ensure that characteristics of historic significance are preserved and maintained in an exemplary manner, and to carry out the purposes of Article 12 (commencing with Section 50280) of Chapter 1, Part 1, Division 1 of Title 5 of the California Government Code and Article 1.9 (commencing with Section 439) of Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code.

AGREEMENT

NOW, THEREFORE, both Owner and City, in consideration of the mutual promises, covenants and conditions contained herein and the substantial public benefits to be derived therefrom, do hereby agree as follows:

1. **APPLICABLE LAWS.** This Agreement is made pursuant to California Government Code Sections 50280 through 50290 and Article 1.9 (commencing with Section 439) of Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code and is subject to all of the provisions of those statutes. To the extent any of the provisions in this Agreement are inconsistent with the aforementioned provisions of the Government and Revenue and Taxation Codes, they are superseded by those Code Sections.

2. **ASSESSMENT OF VALUATION.** Property tax relief afforded to Owner pursuant to Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code will be determined solely by the Orange County Office of the Assessor. City makes no representations regarding the actual tax savings any person may realize by entering into this Agreement.
3. **PRESERVATION OF PROPERTY.** Owner agrees to preserve and maintain the Historic Property and its character defining features. Character defining features include, but are not necessarily limited to, the general architectural form, style, materials, design, scale, details, mass, roofline and other aspects of the appearance of the exterior of the Historic Property. For purposes of identification of the Historic Property, the City's Official Historic Property Inventory Form (DPR 523) is attached as Exhibit E.

The *Secretary of the Interior's Standards for Rehabilitation* (Exhibit B) and City's minimum maintenance standards (Exhibit C), attached hereto and incorporated herein by reference, shall constitute the minimum standards and conditions for preservation and rehabilitation of the Historic Property, and shall apply to the Historic Property throughout the term of this Agreement. Owner shall, where necessary, rehabilitate the Historic Property to conform to the rules and regulations of the Office of Historic Preservation of the California Department of Parks and Recreation, the *Secretary of the Interior's Standards for Rehabilitation*, the California Historical Building Code, and the City of Orange's Historic Preservation Design Standards for Old Towne and Eichler Design Standards.

As consideration for the City to enter into this Agreement, the Owner agrees, at its own cost and expense, to complete, or cause to be completed, the work or improvements described in Exhibit D within the times established therefore in Exhibit D. The Owner shall secure any and all permits which may be required by the City or any other governmental agency affected by the construction of the work or improvements. The Owner accepts responsibility for and shall be responsible for identification of and compliance with all applicable laws pertaining to the construction and installation of the work or improvements described on Exhibit D and the contract or contracts pertaining thereto. The Owner will neither seek to hold nor hold the City liable for, and will hold the City harmless with respect to, any consequences of any failure by the Owner to correctly determine the applicability of any such requirements to any contract he/she/they enter into.

In addition to the foregoing, the Owner hereby agrees to and will comply with all applicable local, state, and federal statutes, regulations, rules, codes (including building codes), ordinances, and other requirements of governmental authorities now or hereafter in effect ("Applicable Laws") pertaining to the use of the Historic Property. Owner must give the City immediate written notice on Owner's becoming aware that the use or condition of the Historic Property is in violation of any Applicable Laws.

4. **INSPECTIONS AND ANNUAL REPORTING.** Owner agrees to permit the examination, by prior appointment, of the interior and exterior of the Historic Property by the City at a minimum every five (5) years during the Agreement term to determine Owner's compliance with the terms and provisions of this Agreement. Owner agrees to provide the City with a report as to the status of the Historic Property annually within thirty (30) days following each anniversary of the

Effective Date of this Agreement. The annual report shall provide substantiation reasonably satisfactory to the City's Historic Preservation Planner or in his/her absence the Director of Community Development that Owner has completed the work required by Exhibit D for the twelve month period preceding each anniversary of this Agreement, and whether the Historic Property has undergone any changed conditions, and whether Owner has received any public funds from other sources designated for the preservation or maintenance of the Historic Property and from whom such funds have been received.

5. **PAYMENT OF ANNUAL FEE.** The Owner shall pay the City an annual fee to cover administrative costs associated with this Agreement including but not limited to the reasonable cost of monitoring the Historic Property, performing required inspections, and enforcement of the Agreement. Said fee shall be payable to the City of Orange and shall be remitted to the Planning Division upon demand and prior to any required inspection. The amount of the annual inspection fee shall be established by the City and may be revised from time to time, which fee shall be set forth in the City's Master Schedule of Fees and Charges. Failure to pay the required fee within 45 days of the due date will be considered a willful breach of this Agreement and may result in cancellation of the Agreement in accordance with the cancellation terms detailed below.
6. **TERM.** The term of this Agreement is for a period of ten (10) years. The initial term of this Agreement shall be from September 8, 2020 to and including September 8, 2030.
7. **AUTOMATIC RENEWAL.** On each yearly anniversary of the Effective Date of this Agreement ("renewal date"), one year shall be added automatically to the initial term of this Agreement, unless notice of non-renewal is given as provided in this Agreement.
8. **EFFECT OF OUTSIDE FUNDS.** If Owner receives funds designated for the preservation or maintenance of the Historic Property from any other public agency, this Agreement shall not be renewed except upon the vote of the City Council.
9. **NOTICE OF NONRENEWAL.** If in any year either the Owner or City desires not to renew this Agreement, that party shall serve written notice of nonrenewal to the other party in advance of the annual renewal date. Unless the notice is served by Owner to City at least ninety (90) days, or by City to Owner at least sixty (60) days prior to the renewal date, one year shall automatically be added to the term of the Agreement. Within fifteen (15) days of receipt by Owner of a notice of nonrenewal from the City, Owner may make a written protest. Upon receipt of such a protest the City Council shall set a hearing prior to the expiration of the renewal date of this Agreement or toll the renewal date until such hearing can reasonably held. Owner may furnish the City Council with any information which the Owner deems relevant; and shall furnish the City Council with any information it may require. At any time prior to the renewal date, City may withdraw its notice of nonrenewal.
10. **EFFECT OF NOTICE NOT TO RENEW.** If in any year either party serves notice of intent not to renew this Agreement, this Agreement shall remain in effect for the balance of the period remaining since the original execution date if not yet renewed, or the last renewal date of the Agreement, as the case may be.

11. **UPDATE OF IMPROVEMENT SCHEDULE.** At least ninety (90) days prior to the tenth (10th) anniversary of the Effective Date of this Agreement, and ninety (90) days prior to every tenth (10th) anniversary thereafter, Owner shall provide City with an updated schedule of rehabilitation maintenance items for the City's review and approval. Such updated schedule shall contain a list of proposed improvements and/or revisions to be accomplished during the next succeeding ten (10) years of the Agreement and a schedule for the construction of such improvements. Within thirty (30) days after the City's receipt of said updated schedule, the City's Director of Community Development shall either approve or disapprove such proposed schedule of proposed improvements, or shall respond in writing by stating what further information, if any, the City reasonably requires in order to determine the request complete and determine whether or not to grant the requested approval. Upon receipt of such a response, the Owner shall promptly furnish to the City such further information as may be reasonably requested.

From time to time, at the request of the City's Director of Community Development (or his/her authorized representative), the Owner shall meet and confer with the City's Planner for Historic Preservation or in his/her absence the Director of Community Development (or his/her designee) regarding matters arising hereunder with respect to the work and improvements and the progress in constructing the same.

12. **INDEPENDENT ADVICE OF COUNSEL.** The Owner, and each of them, represent and declare that in executing this Agreement he/she/they have relied solely upon his/her/their own judgment, belief and knowledge, and the advice and recommendations of his/her/their own independently selected counsel, concerning the nature, extent and duration of his/her/their rights and claims, and that he/she/they have not been influenced to any extent whatsoever in executing the same by the City or by any person representing the City.

13. **ENFORCEMENT OF AGREEMENT.** If the City determines the owner has breached any of the conditions of the Agreement provided for or has allowed the property to deteriorate to the point it no longer meets the standards for a qualified historical property, the City shall either cancel the Agreement or bring any action in court necessary to enforce the Agreement including, but not limited to an action to enforce the Agreement by specific performance to cure, correct or remedy any breach of the terms of this Agreement, to recover damages for any breach, or to obtain any other remedy consistent with the purpose of this Agreement. In the event of a default under the provisions of this Agreement by Owner, City shall give written notice to Owner specifying the alleged grounds for the default. Said notice shall be given by registered or certified mail addressed to the address stated in this Agreement. If such violation(s) is not corrected to the reasonable satisfaction of the City within thirty (30) days from the receipt of the notice of violation, or within such reasonable time as may be required to cure the breach or default, provided that acts to cure, correct or remedy such breach or default are commenced within thirty (30) days and thereafter diligently pursued to completion, then City may, without further notice, institute legal action.

Except as otherwise expressly stated in this Agreement, the rights and remedies of the City are cumulative, and the exercise by the City of one or more of such rights or remedies shall not preclude the exercise by it, at the same or different times, of any other rights or remedies for the same default or any other default by the Owner. Any failure or delay by the City in asserting any

of its right and remedies as to a breach of any of the covenants, conditions or agreements set forth herein shall not operate as a waiver of such breach or of any such rights or remedies, or deprive the City of its right to institute and maintain any actions or proceedings which it may deem necessary to protect, assert or enforce such rights or remedies. A waiver by the City of a breach shall not be construed as a waiver of any succeeding breach of the same or other covenants, conditions or agreements set forth in this Agreement.

14. CANCELLATION. In lieu of bringing an action to enforce the Agreement City may cancel this Agreement if City determines Owner has breached any of the conditions or covenants of this Agreement or has allowed the Historic Property to deteriorate to the point that it no longer meets the standards for a qualified historical property. City may also cancel this Agreement if it determines Owner has failed to rehabilitate the Historic Property in the manner specified in this Agreement.
15. NOTICE OF CANCELLATION. This Agreement cannot be canceled until after City has given notice and has held a public hearing as required by Government Code Section 50285. Notice of the hearing shall be mailed to the last known address of each owner of property within 300 feet of the Historic Property and shall be published in accordance with Government Code Section 6061.
16. CANCELLATION FEE. If City cancels this Agreement in accordance with Section 15 above, Owner shall pay a cancellation fee of twelve and one-half percent (12-1/2%) of the current fair market value of the Historic Property at the time of cancellation. The current fair market value shall be determined by the County Assessor as though the Historic Property were free of the restriction on the Historic Property imposed pursuant to this Agreement. The cancellation fee shall be paid to the County Auditor at such time and in such manner as the County Auditor shall prescribe.
17. NOTICES. All notices required by or provided for in the Agreement shall be given in writing and may be mailed or delivered in person at the address of the respective parties as specified below or at any other address as may be later specified by the parties. Deposit of notice in the mail, postage prepaid, shall be deemed receipt of the notice.

City of Orange
Attn.: City Clerk
300 E. Chapman Avenue
Orange, CA 92866

Chad T. Lefteris and Sherry A. Mendenhall
604 E. Maple Avenue
Orange, CA 92866

18. NO COMPENSATION. Owner shall not receive any payment from the City in consideration of the obligations imposed under this Agreement. The Owner acknowledges and agrees that the consideration for the execution of this Agreement is the substantial public benefit to be derived therefrom and the advantage that will accrue to Owner as a result of the effect upon the assessed value of the Historic Property on account of the restrictions on the use and preservation of the Historic Property.

19. **REMEDY IF AGREEMENT HELD NOT ENFORCEABLE.** In the event it is finally determined this Agreement does not constitute an enforceable restriction within the meaning of the applicable provisions of the California Government Code and the California Revenue and Taxation Code, except for an unenforceability arising from the cancellation or nonrenewal of this Agreement, then this Agreement shall be null and void and without further effect and the Historic Property subject to this Agreement shall from that time be free from any restriction whatsoever under this Agreement without any payment or further act of the parties to this Agreement.

20. **ACQUISITION OF PROPERTY BY EMINENT DOMAIN; CANCELLATION OF CONTRACT; INAPPLICABILITY TO DETERMINATION OF VALUE.** In the event that the Historic Property is acquired in whole or part by eminent domain or other acquisition by any entity authorized to exercise the power of eminent domain, and the acquisition is determined by the City to frustrate the purpose of the Agreement, the Agreement shall be canceled and no fee shall be imposed under Section 17, above. The Agreement shall be deemed null and void for all purposes of determining the value of the Historic Property so acquired.

If, subsequent to the filing of an action in eminent domain, the proposed condemnation is abandoned by the condemning agency, the restrictions on the use of the Historic Property included in this Agreement shall, without further agreement of the parties, be reinstated and the terms of this Agreement shall continue in full force and effect.

21. **EFFECT OF AGREEMENT.** None of the terms, provisions or conditions of this Agreement shall be deemed to create a partnership between the parties hereto and any of their heirs, successors or assigns, nor shall such terms, provisions or conditions cause the parties hereto to be considered joint venturers or members of any joint enterprise.

22. **SUCCESSORS AND ASSIGNS.** This Agreement is binding upon and shall inure to the benefit of all successors in interest of the Owner, regardless of the tax exempt status of any subsequent owner. A successor in interest shall have the same rights and obligations under this Agreement as the original owner who entered into this Agreement.

23. **REQUIREMENTS RELATED TO TRANSFER OF HISTORIC PROPERTY.** In the event of any sale, transfer, assignment or conveyance of the Historic Property ("Transfer"), the Owner agrees that, at least thirty (30) days prior to such Transfer, it shall give written notice to the City of such proposed Transfer, including the name(s) of the transferee(s). In addition, the Owner and the proposed transferee(s) shall enter into and deliver to the City through the escrow for the Transfer of the Historic Property an assignment and assumption agreement in a form satisfactory to the City's Attorney or such other evidence as may be satisfactory to the City that the transferee(s) has (have) assumed the Owner's obligations set forth in this Agreement. Upon the Transfer of the Historic Property and the assumption of the obligations hereunder by the transferee(s), the Owner's liability for performance shall be terminated as to any obligation to be performed hereunder after the date of such Transfer.

24. **RECORDATION.** City shall record a copy of this Agreement with the Office of the County Recorder of the County of Orange.

25. AMENDMENTS. This Agreement may be amended, in whole or in part, only by a written and recorded instrument executed by the parties hereto, except that the Director of Community Development is authorized to amend the list of required projects in Exhibit D.
26. COUNTERPARTS. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original and all of which shall constitute one and the same agreement with the same effect as if all parties had signed the same signature page. Any signature page of this Agreement may be detached from any counterpart of this Agreement and re-attached to any other counterpart of this Agreement identical in form hereto but having attached to it one or more additional signature pages.
27. ADMINISTRATION. This Agreement shall be administered by the City's Director of Community Development (or his/her designated representative) following approval of this Agreement by the City. The City shall maintain authority of this Agreement through the City's Director of Community Development (or his/her authorized representative). The City's Director of Community Development shall have the authority to issue interpretations, waive provisions and enter into amendments of this Agreement on behalf of the City so long as such actions do not change the uses permitted on the Historic Property or the purpose of this Agreement. Such amendments may include extensions of time or amendments to the projects specified in Exhibit D. All other waivers or amendments shall require the written approval and consent of the City Council.

[Remainder of page intentionally left blank; signatures on next page]

IN WITNESS WHEREOF, the City and the Owner have executed this Agreement.

“OWNER”

Dated: _____, 2020

Chad Thurman Lefteris

Dated: _____, 2020

Sherry Ann Mendenhall

“CITY”

CITY OF ORANGE, a municipal corporation

Dated: _____, 2020

By: _____
Mark A. Murphy
Mayor

ATTEST:

APPROVED AS TO FORM:

Pamela Coleman
City Clerk

Mary E. Binning
Senior Assistant City Attorney

ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of _____

On _____ before me, _____,
a Notary Public in and for the State of California, personally appeared _____

_____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

EXHIBIT "A"

LEGAL DESCRIPTION OF HISTORIC PROPERTY

REAL PROPERTY IN THE CITY OF ORANGE, COUNTY OF ORANGE, STATE OF CALIFORNIA, DESCRIBED AS:

Lot 36 of the Henry Grotes Addition in the City of Orange, County of Orange, State of California, as per map recorded in Book 2, Page 85 of Miscellaneous Maps, in the office of the Counter Recorder of said Orange County.

[APN 386-072-01]

EXHIBIT "B"

SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION

1. Every reasonable effort shall be made to provide a compatible use for a property, which requires a minimal alteration of the building structure, or site and its environment, or to use a property for its originally intended purpose.
2. The distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.
3. All buildings, structures, and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.
4. Changes which may have taken place in the course of time are evidence of the history and development of a building, structure or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.
5. Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure or site shall be treated with sensitivity.
6. Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.
7. The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.
8. Every reasonable effort shall be made to protect and preserve archeological resources affected by, or adjacent to, any project.
9. Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with the size, scale, color, material and character of the property, neighborhood or environment.
10. Wherever possible, new additions or alterations to structures shall be done in such a manner that, if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.

EXHIBIT “C”

CITY OF ORANGE HISTORIC PROPERTY **MAINTENANCE STANDARDS**

All buildings, structures, yards and other improvements shall be maintained in a manner which does not detract from the appearance of the immediate neighborhood. The following conditions are prohibited:

1. Dilapidated, deteriorating, or unrepaired structures, such as: fences, roofs, doors, walls and windows.
2. Publicly visible storage of scrap lumber, junk, trash or debris.
3. Publicly visible storage of abandoned, discarded or unused objects or equipment, such as automobiles, automobile parts, furniture, stoves, refrigerators, cans, containers or similar items.
4. Stagnant water or excavations, including pools or spas.
5. Any device, decoration, design, structure or vegetation that is unsightly by reason of its height, condition, or its inappropriate location.

EXHIBIT “D”

REHABILITATION/MAINTENANCE SCOPE OF WORK

[Attached.]

EXHIBIT "D"

REHABILITATION/MAINTENANCE SCOPE OF WORK

604 E. Maple Avenue

Priority	Description of Work	Cost Estimate	Completion Date
1.	Remove knob and tube wiring and replace with new wiring to meet current California Building Code requirements.	\$9,700	2019
2.	Repair and refinish of original red oak hardwood floors in original living and bedroom areas.	\$16,685	2019
3.	Repair roof tiles at two locations with seven matching replacement tiles.	\$500	2019
4.	Exterior stucco repair, including repaint of stucco and trim on house to match existing on north, west, and south elevations.	\$9,000	2019
5.	Refinish original closet built-in cabinets and drawers.	\$500	2019
6.	Repair of interior plaster walls.	\$580	2019
7.	Repair original window trim/casing	\$1340	2019
8.	Termite remediation and repair at kitchen/dining room and master bedroom areas as recommended in termite report dated June 12, 2019.	\$1480	2019
9.	Repair/refinish original front door, sidelight windows, and carriage porch door.	\$4200	2020
10.	Repair cracked mortar and brick surround on fireplace.	\$600	2022
11.	Replace sewer main line and repair plumbing systems as recommended by licensed plumber.	\$12,000	2025
12.	Maintenance and repair of double hung sash windows, including glazing, painting, and sash weights.	\$1200	2025
13.	Reinforce south foundation wall, including hairline crack repair, and seismic retrofit for entire house foundation in consultation with a licensed structural engineer.	\$15,000	2029
TOTAL		\$72,785	

EXHIBIT “E”

HISTORIC PROPERTY INVENTORY FORM (DPR 523)

[Attached.]

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # 30-159478
HRI # 038844
Trinomial ORA
NRHP Status Code 1D

Other Listings:

Review Code: _____

Reviewer: _____

Date: _____

Page 1 of 3

*Resource Name or #:
(Assigned by Recorder)

MAPLE_E_604__APN_386-072-01

P1. Other Identifier: _____

*P2. Location: Not for Publication Unrestricted

*a. County: Orange and (P2b and P2c or P2d. Attach a location map as necessary.)

*b. USGS 7.5' Quad: _____ Date: _____ T _____ ; R _____ ; 1/4 of _____ 1/4 of Sec _____ ; B.M. _____

c. Address: 604 - E MAPLE AVE, # _____ City: Orange Zip: 92866

d. UTM: (Give more than one for large and/or linear resources) Zone _____ ' _____ mE/ _____ mN

e. Other Locational Data: _____

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries. Continues on Pg.3.)

Materials: Frame - Stucco or plaster

A single-story house built on an L-plan with stucco facades and gable roof with adobe tiles. Entry is at the apex of the ell and sheltered by a small, adobe tiled hood. An ornamental chimney is present on the side of the house.

*P3b. Resource Attributes: (HP2)--Single family property
(List attributes and codes)

*P4. Resources Present: Building Structure Object Site Element of District District Other (Isolates, etc.)



P5b. Description of Photo: 2005
(View, date, accession #)

*P6. Date Constructed/ Age and Source:

1931

Historic Prehistoric Both

*P7. Owner and Address:

*P8: Recorded by: (Name, affiliation, and address)

D. Gest, P. LaValley, D. Matsumoto

Chattel Architecture
13417 Ventura Blvd.
Sherman Oaks, CA 91423

*P9. Date Recorded:

March, 2005

*P10. Survey Type: (Describe)

Reconnaissance

*P11. Report Citation: (Cite survey report and other sources, or enter "none.")

Orange County Assessor Records (2005). Chattel Architecture (2005) Historic Resources Survey. AEGIS (1991) Historic Building Inventory Update. Heritage Orange County, Inc. (1982) Orange Historic Survey.

*Attachments: NONE Location Map Continuation Sheet(s) Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List): _____

DPR 523A (1/95)

*Required Information

Page 2 of 3

*Resource Name or #: MAPLE_E_604__APN_386-072-01
(Assigned by Recorder)

B1. Historic Name: Unknown

B2. Common Name: _____

B3. Original Use: RES

B4. Present Use: RES

*B5. Architectural Style: Spanish Colonial Revival

*B6. Construction History: (Construction date, alterations, and date of alterations) Date of Construction: 1931 Historic Prehistoric Both

*B7. Moved? No Yes Unknown Date: _____ Original Location: _____

*B8. Related Features: _____

*B9. Architect or Builder: Unknown

*B10. Significance: Theme: Architecture Area: City of Orange Property Type: Residence

Period of Significance: Old Towne: Interwar Development (c. 1921 - 1941) Applicable Criteria: AC

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity. Continues on Pg.4.)

Structural Integrity: Good Condition - Minor and reversible or appropriate changes to original structure.

Site Integrity: _____

Opportunities: _____

B11. Additional Resource Attributes: (List attributes and codes) _____

*B12. References:

Orange Daily News.

B13. Remarks: (Continues on Pg.3.)

Status change since 1991 Survey: None.

(Sketch Map with North arrow required.)

*B14. Evaluator: Robert Chattel

*Date of Evaluation: September, 2005

(This space reserved for official comments.)

DPR 523B (1/95)

*Required Information

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # 30-159478
HRI # 038844
Trinomial ORA

Page 3 of 3

*Resource Name or #:
(Assigned by Recorder)

MAPLE_E_604__APN_386-072-01

Recorded by:

D. Gest, P. LaValley, D. Matsumoto
Chattel Architecture
13417 Ventura Blvd.
Sherman Oaks, CA 91423

Date Recorded: March, 2005

Continuation Update

Years Surveyed: 1982, 1991, 2005

Description of Photo: 1991

Listed in National Register: 1997

General Plan: LDR # of Buildings: 1

Planning Zone: R-2-6 # of Stories: 1

Lot Acre: 0.2118 # of Units: 1

Principal Building Sqft: 1819

B6. Construction History (Continued from Pg.2):

B13. Remarks (Continued from Pg.2):

P3a. Description (Continued from Pg.1):





RECORDING REQUESTED BY
AND, WHEN RECORDED,
MAIL TO:

City Clerk
City of Orange
300 E. Chapman Avenue
Orange, California, 92866

Exempt from recording fees pursuant to
Gov. Code Sections 6103 and 27383

Property Address: 1814 N. Woodside Street
APN: 374-215-14
Mills Act Contract Number: 334.0-20

**HISTORIC PROPERTY PRESERVATION AGREEMENT
(MILLS ACT CONTRACT)**

THIS HISTORIC PROPERTY PRESERVATION AGREEMENT (“Agreement”) is made and entered into as of the date of execution by the City (“Effective Date”), by and between the CITY OF ORANGE, a municipal corporation (“City”), and Timothy Shields and Po Geok Chew, husband and wife as joint tenants (“Owner”), with reference to the following:

RECITALS

WHEREAS, the Mills Act (Government Code Section 50280 *et seq.*) provides cities with the opportunity to contract with owners of qualified historical properties whereby the owner promises to preserve and rehabilitate the property in return for a potential reduced property tax assessment; and

WHEREAS, the City of Orange has established Historic Districts consisting of the Plaza Historic District, listed in the National Register of Historic Places; the Old Towne Orange Historic District, listed in the National Register of Historic Places; the local Old Towne Orange Historic District, designated by the Orange City Council; and the local Eichler Fairhaven, Fairhills, and Fairmeadow Historic Districts, designated by the Orange City Council; and the City desires to promote the character, quality of life, and historic features of said Districts to its citizens and visitors; and

WHEREAS, the City is dedicated to the protection and stabilization of property values through maintaining and upgrading its older housing stock, through the use of incentives such as the Mills Act; and

WHEREAS, the Mills Act also has beneficial effects on City businesses, economic stability and community pride by preserving important neighborhood historic resources; and

WHEREAS, the use of the Mills Act will fulfill one of the goals of the City’s 2010 General Plan Cultural Resources Element; specifically,

“Provide incentives and expand education efforts for historic preservation” (Goal 3.0, CR-22); and

WHEREAS, Owner possesses fee simple title in and to that certain real property, together with associated structures and improvements thereon, located at 1814 N. Woodside Street in the City of Orange, County of Orange, State of California, having Assessor’s Parcel Number 374-215-14 and more specifically described in Exhibit A, which exhibit is attached hereto and made a part hereof (“Historic Property”); and

WHEREAS, the Historic Property is a qualified historical property under the Mills Act in that it is privately owned property which is not exempt from property taxation and is either: individually designated or is a contributing property within a designated district which is listed in the National Register of Historic Places, California Register of Historical Resources or Register of Historical Landmarks, California Points of Historical Interest, or is a contributing property in a locally designated historic district; and

WHEREAS, Owner, in consideration for abiding by the terms of this Agreement shall be entitled to a reassessment of valuation of the Historic Property and any corresponding reduction in property taxes pursuant to the provisions of the California Revenue and Taxation Code; and

WHEREAS, it is the City’s expectation that the Owner will use the property tax savings accrued under this Agreement for improvements to the “Historic Property” (as defined below). To that end, as a condition of renewal, the City will require a revised schedule of improvements every ten years showing a plan for improvements commensurate with the tax savings; and

WHEREAS, the City and Owner for their mutual benefit, now desire to enter into this Agreement to limit the use of the Historic Property to prevent inappropriate alterations, to ensure that characteristics of historic significance are preserved and maintained in an exemplary manner, and to carry out the purposes of Article 12 (commencing with Section 50280) of Chapter 1, Part 1, Division 1 of Title 5 of the California Government Code and Article 1.9 (commencing with Section 439) of Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code.

AGREEMENT

NOW, THEREFORE, both Owner and City, in consideration of the mutual promises, covenants and conditions contained herein and the substantial public benefits to be derived therefrom, do hereby agree as follows:

1. **APPLICABLE LAWS.** This Agreement is made pursuant to California Government Code Sections 50280 through 50290 and Article 1.9 (commencing with Section 439) of Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code and is subject to all of the provisions of those statutes. To the extent any of the provisions in this Agreement are inconsistent with the aforementioned provisions of the Government and Revenue and Taxation Codes, they are superseded by those Code Sections.

2. **ASSESSMENT OF VALUATION.** Property tax relief afforded to Owner pursuant to Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code will be determined solely by the Orange County Office of the Assessor. City makes no representations regarding the actual tax savings any person may realize by entering into this Agreement.
3. **PRESERVATION OF PROPERTY.** Owner agrees to preserve and maintain the Historic Property and its character defining features. Character defining features include, but are not necessarily limited to, the general architectural form, style, materials, design, scale, details, mass, roofline and other aspects of the appearance of the exterior of the Historic Property. For purposes of identification of the Historic Property, the City's Official Historic Property Inventory Form (DPR 523) is attached as Exhibit E.

The *Secretary of the Interior's Standards for Rehabilitation* (Exhibit B) and City's minimum maintenance standards (Exhibit C), attached hereto and incorporated herein by reference, shall constitute the minimum standards and conditions for preservation and rehabilitation of the Historic Property, and shall apply to the Historic Property throughout the term of this Agreement. Owner shall, where necessary, rehabilitate the Historic Property to conform to the rules and regulations of the Office of Historic Preservation of the California Department of Parks and Recreation, the *Secretary of the Interior's Standards for Rehabilitation*, the California Historical Building Code, and the City of Orange's Historic Preservation Design Standards for Old Towne and Eichler Design Standards.

As consideration for the City to enter into this Agreement, the Owner agrees, at its own cost and expense, to complete, or cause to be completed, the work or improvements described in Exhibit D within the times established therefore in Exhibit D. The Owner shall secure any and all permits which may be required by the City or any other governmental agency affected by the construction of the work or improvements. The Owner accepts responsibility for and shall be responsible for identification of and compliance with all applicable laws pertaining to the construction and installation of the work or improvements described on Exhibit D and the contract or contracts pertaining thereto. The Owner will neither seek to hold nor hold the City liable for, and will hold the City harmless with respect to, any consequences of any failure by the Owner to correctly determine the applicability of any such requirements to any contract he/she/they enter into.

In addition to the foregoing, the Owner hereby agrees to and will comply with all applicable local, state, and federal statutes, regulations, rules, codes (including building codes), ordinances, and other requirements of governmental authorities now or hereafter in effect ("Applicable Laws") pertaining to the use of the Historic Property. Owner must give the City immediate written notice on Owner's becoming aware that the use or condition of the Historic Property is in violation of any Applicable Laws.

4. **INSPECTIONS AND ANNUAL REPORTING.** Owner agrees to permit the examination, by prior appointment, of the interior and exterior of the Historic Property by the City at a minimum every five (5) years during the Agreement term to determine Owner's compliance with the terms and provisions of this Agreement. Owner agrees to provide the City with a report as to the status of the Historic Property annually within thirty (30) days following each anniversary of the

Effective Date of this Agreement. The annual report shall provide substantiation reasonably satisfactory to the City's Historic Preservation Planner or in his/her absence the Director of Community Development that Owner has completed the work required by Exhibit D for the twelve month period preceding each anniversary of this Agreement, and whether the Historic Property has undergone any changed conditions, and whether Owner has received any public funds from other sources designated for the preservation or maintenance of the Historic Property and from whom such funds have been received.

5. **PAYMENT OF ANNUAL FEE.** The Owner shall pay the City an annual fee to cover administrative costs associated with this Agreement including but not limited to the reasonable cost of monitoring the Historic Property, performing required inspections, and enforcement of the Agreement. Said fee shall be payable to the City of Orange and shall be remitted to the Planning Division upon demand and prior to any required inspection. The amount of the annual inspection fee shall be established by the City and may be revised from time to time, which fee shall be set forth in the City's Master Schedule of Fees and Charges. Failure to pay the required fee within 45 days of the due date will be considered a willful breach of this Agreement and may result in cancellation of the Agreement in accordance with the cancellation terms detailed below.
6. **TERM.** The term of this Agreement is for a period of ten (10) years. The initial term of this Agreement shall be from September 8, 2020 to and including September 8, 2030.
7. **AUTOMATIC RENEWAL.** On each yearly anniversary of the Effective Date of this Agreement ("renewal date"), one year shall be added automatically to the initial term of this Agreement, unless notice of non-renewal is given as provided in this Agreement.
8. **EFFECT OF OUTSIDE FUNDS.** If Owner receives funds designated for the preservation or maintenance of the Historic Property from any other public agency, this Agreement shall not be renewed except upon the vote of the City Council.
9. **NOTICE OF NONRENEWAL.** If in any year either the Owner or City desires not to renew this Agreement, that party shall serve written notice of nonrenewal to the other party in advance of the annual renewal date. Unless the notice is served by Owner to City at least ninety (90) days, or by City to Owner at least sixty (60) days prior to the renewal date, one year shall automatically be added to the term of the Agreement. Within fifteen (15) days of receipt by Owner of a notice of nonrenewal from the City, Owner may make a written protest. Upon receipt of such a protest the City Council shall set a hearing prior to the expiration of the renewal date of this Agreement or toll the renewal date until such hearing can reasonably held. Owner may furnish the City Council with any information which the Owner deems relevant; and shall furnish the City Council with any information it may require. At any time prior to the renewal date, City may withdraw its notice of nonrenewal.
10. **EFFECT OF NOTICE NOT TO RENEW.** If in any year either party serves notice of intent not to renew this Agreement, this Agreement shall remain in effect for the balance of the period remaining since the original execution date if not yet renewed, or the last renewal date of the Agreement, as the case may be.

11. **UPDATE OF IMPROVEMENT SCHEDULE.** At least ninety (90) days prior to the tenth (10th) anniversary of the Effective Date of this Agreement, and ninety (90) days prior to every tenth (10th) anniversary thereafter, Owner shall provide City with an updated schedule of rehabilitation maintenance items for the City's review and approval. Such updated schedule shall contain a list of proposed improvements and/or revisions to be accomplished during the next succeeding ten (10) years of the Agreement and a schedule for the construction of such improvements. Within thirty (30) days after the City's receipt of said updated schedule, the City's Director of Community Development shall either approve or disapprove such proposed schedule of proposed improvements, or shall respond in writing by stating what further information, if any, the City reasonably requires in order to determine the request complete and determine whether or not to grant the requested approval. Upon receipt of such a response, the Owner shall promptly furnish to the City such further information as may be reasonably requested.

From time to time, at the request of the City's Director of Community Development (or his/her authorized representative), the Owner shall meet and confer with the City's Planner for Historic Preservation or in his/her absence the Director of Community Development (or his/her designee) regarding matters arising hereunder with respect to the work and improvements and the progress in constructing the same.

12. **INDEPENDENT ADVICE OF COUNSEL.** The Owner, and each of them, represent and declare that in executing this Agreement he/she/they have relied solely upon his/her/their own judgment, belief and knowledge, and the advice and recommendations of his/her/their own independently selected counsel, concerning the nature, extent and duration of his/her/their rights and claims, and that he/she/they have not been influenced to any extent whatsoever in executing the same by the City or by any person representing the City.

13. **ENFORCEMENT OF AGREEMENT.** If the City determines the owner has breached any of the conditions of the Agreement provided for or has allowed the property to deteriorate to the point it no longer meets the standards for a qualified historical property, the City shall either cancel the Agreement or bring any action in court necessary to enforce the Agreement including, but not limited to an action to enforce the Agreement by specific performance to cure, correct or remedy any breach of the terms of this Agreement, to recover damages for any breach, or to obtain any other remedy consistent with the purpose of this Agreement. In the event of a default under the provisions of this Agreement by Owner, City shall give written notice to Owner specifying the alleged grounds for the default. Said notice shall be given by registered or certified mail addressed to the address stated in this Agreement. If such violation(s) is not corrected to the reasonable satisfaction of the City within thirty (30) days from the receipt of the notice of violation, or within such reasonable time as may be required to cure the breach or default, provided that acts to cure, correct or remedy such breach or default are commenced within thirty (30) days and thereafter diligently pursued to completion, then City may, without further notice, institute legal action.

Except as otherwise expressly stated in this Agreement, the rights and remedies of the City are cumulative, and the exercise by the City of one or more of such rights or remedies shall not preclude the exercise by it, at the same or different times, of any other rights or remedies for the same default or any other default by the Owner. Any failure or delay by the City in asserting any

of its right and remedies as to a breach of any of the covenants, conditions or agreements set forth herein shall not operate as a waiver of such breach or of any such rights or remedies, or deprive the City of its right to institute and maintain any actions or proceedings which it may deem necessary to protect, assert or enforce such rights or remedies. A waiver by the City of a breach shall not be construed as a waiver of any succeeding breach of the same or other covenants, conditions or agreements set forth in this Agreement.

14. CANCELLATION. In lieu of bringing an action to enforce the Agreement City may cancel this Agreement if City determines Owner has breached any of the conditions or covenants of this Agreement or has allowed the Historic Property to deteriorate to the point that it no longer meets the standards for a qualified historical property. City may also cancel this Agreement if it determines Owner has failed to rehabilitate the Historic Property in the manner specified in this Agreement.
15. NOTICE OF CANCELLATION. This Agreement cannot be canceled until after City has given notice and has held a public hearing as required by Government Code Section 50285. Notice of the hearing shall be mailed to the last known address of each owner of property within 300 feet of the Historic Property and shall be published in accordance with Government Code Section 6061.
16. CANCELLATION FEE. If City cancels this Agreement in accordance with Section 15 above, Owner shall pay a cancellation fee of twelve and one-half percent (12-1/2%) of the current fair market value of the Historic Property at the time of cancellation. The current fair market value shall be determined by the County Assessor as though the Historic Property were free of the restriction on the Historic Property imposed pursuant to this Agreement. The cancellation fee shall be paid to the County Auditor at such time and in such manner as the County Auditor shall prescribe.
17. NOTICES. All notices required by or provided for in the Agreement shall be given in writing and may be mailed or delivered in person at the address of the respective parties as specified below or at any other address as may be later specified by the parties. Deposit of notice in the mail, postage prepaid, shall be deemed receipt of the notice.

City of Orange
Attn.: City Clerk
300 E. Chapman Avenue
Orange, CA 92866

Timothy Shieds and Po Geok Chew
1814 N. Woodside Street
Orange, CA 92865

18. NO COMPENSATION. Owner shall not receive any payment from the City in consideration of the obligations imposed under this Agreement. The Owner acknowledges and agrees that the consideration for the execution of this Agreement is the substantial public benefit to be derived therefrom and the advantage that will accrue to Owner as a result of the effect upon the assessed value of the Historic Property on account of the restrictions on the use and preservation of the Historic Property.

19. **REMEDY IF AGREEMENT HELD NOT ENFORCEABLE.** In the event it is finally determined this Agreement does not constitute an enforceable restriction within the meaning of the applicable provisions of the California Government Code and the California Revenue and Taxation Code, except for an unenforceability arising from the cancellation or nonrenewal of this Agreement, then this Agreement shall be null and void and without further effect and the Historic Property subject to this Agreement shall from that time be free from any restriction whatsoever under this Agreement without any payment or further act of the parties to this Agreement.

20. **ACQUISITION OF PROPERTY BY EMINENT DOMAIN; CANCELLATION OF CONTRACT; INAPPLICABILITY TO DETERMINATION OF VALUE.** In the event that the Historic Property is acquired in whole or part by eminent domain or other acquisition by any entity authorized to exercise the power of eminent domain, and the acquisition is determined by the City to frustrate the purpose of the Agreement, the Agreement shall be canceled and no fee shall be imposed under Section 17, above. The Agreement shall be deemed null and void for all purposes of determining the value of the Historic Property so acquired.

If, subsequent to the filing of an action in eminent domain, the proposed condemnation is abandoned by the condemning agency, the restrictions on the use of the Historic Property included in this Agreement shall, without further agreement of the parties, be reinstated and the terms of this Agreement shall continue in full force and effect.

21. **EFFECT OF AGREEMENT.** None of the terms, provisions or conditions of this Agreement shall be deemed to create a partnership between the parties hereto and any of their heirs, successors or assigns, nor shall such terms, provisions or conditions cause the parties hereto to be considered joint venturers or members of any joint enterprise.

22. **SUCCESSORS AND ASSIGNS.** This Agreement is binding upon and shall inure to the benefit of all successors in interest of the Owner, regardless of the tax exempt status of any subsequent owner. A successor in interest shall have the same rights and obligations under this Agreement as the original owner who entered into this Agreement.

23. **REQUIREMENTS RELATED TO TRANSFER OF HISTORIC PROPERTY.** In the event of any sale, transfer, assignment or conveyance of the Historic Property (“Transfer”), the Owner agrees that, at least thirty (30) days prior to such Transfer, it shall give written notice to the City of such proposed Transfer, including the name(s) of the transferee(s). In addition, the Owner and the proposed transferee(s) shall enter into and deliver to the City through the escrow for the Transfer of the Historic Property an assignment and assumption agreement in a form satisfactory to the City's Attorney or such other evidence as may be satisfactory to the City that the transferee(s) has (have) assumed the Owner's obligations set forth in this Agreement. Upon the Transfer of the Historic Property and the assumption of the obligations hereunder by the transferee(s), the Owner's liability for performance shall be terminated as to any obligation to be performed hereunder after the date of such Transfer.

24. **RECORDATION.** City shall record a copy of this Agreement with the Office of the County Recorder of the County of Orange.

25. AMENDMENTS. This Agreement may be amended, in whole or in part, only by a written and recorded instrument executed by the parties hereto, except that the Director of Community Development is authorized to amend the list of required projects in Exhibit D.
26. COUNTERPARTS. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original and all of which shall constitute one and the same agreement with the same effect as if all parties had signed the same signature page. Any signature page of this Agreement may be detached from any counterpart of this Agreement and re-attached to any other counterpart of this Agreement identical in form hereto but having attached to it one or more additional signature pages.
27. ADMINISTRATION. This Agreement shall be administered by the City's Director of Community Development (or his/her designated representative) following approval of this Agreement by the City. The City shall maintain authority of this Agreement through the City's Director of Community Development (or his/her authorized representative). The City's Director of Community Development shall have the authority to issue interpretations, waive provisions and enter into amendments of this Agreement on behalf of the City so long as such actions do not change the uses permitted on the Historic Property or the purpose of this Agreement. Such amendments may include extensions of time or amendments to the projects specified in Exhibit D. All other waivers or amendments shall require the written approval and consent of the City Council.

[Remainder of page intentionally left blank; signatures on next page]

IN WITNESS WHEREOF, the City and the Owner have executed this Agreement.

“OWNER”

Dated: _____, 2020

Timothy Shields

Dated: _____, 2020

Po Geok Chew

“CITY”

CITY OF ORANGE, a municipal corporation

Dated: _____, 2020

By: _____
Mark A. Murphy
Mayor

ATTEST:

APPROVED AS TO FORM:

Pamela Coleman
City Clerk

Mary E. Binning
Senior Assistant City Attorney

ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of _____

On _____ before me, _____,
a Notary Public in and for the State of California, personally appeared _____

_____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

EXHIBIT "A"

LEGAL DESCRIPTION OF HISTORIC PROPERTY

REAL PROPERTY IN THE CITY OF ORANGE, COUNTY OF ORANGE, STATE OF CALIFORNIA, DESCRIBED AS:

Lot 30 of Tract 3978, in the City of Orange, County of Orange, State of California as per map recorded in Book 140, Page(s) 17 through 19, Inclusive of Miscellaneous Maps in the Office of the County Recorder of said County.

[APN 374-215-14]

EXHIBIT "B"

SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION

1. Every reasonable effort shall be made to provide a compatible use for a property, which requires a minimal alteration of the building structure, or site and its environment, or to use a property for its originally intended purpose.
2. The distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.
3. All buildings, structures, and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.
4. Changes which may have taken place in the course of time are evidence of the history and development of a building, structure or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.
5. Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure or site shall be treated with sensitivity.
6. Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.
7. The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.
8. Every reasonable effort shall be made to protect and preserve archeological resources affected by, or adjacent to, any project.
9. Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with the size, scale, color, material and character of the property, neighborhood or environment.
10. Wherever possible, new additions or alterations to structures shall be done in such a manner that, if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.

EXHIBIT “C”

CITY OF ORANGE HISTORIC PROPERTY **MAINTENANCE STANDARDS**

All buildings, structures, yards and other improvements shall be maintained in a manner which does not detract from the appearance of the immediate neighborhood. The following conditions are prohibited:

1. Dilapidated, deteriorating, or unrepaired structures, such as: fences, roofs, doors, walls and windows.
2. Publicly visible storage of scrap lumber, junk, trash or debris.
3. Publicly visible storage of abandoned, discarded or unused objects or equipment, such as automobiles, automobile parts, furniture, stoves, refrigerators, cans, containers or similar items.
4. Stagnant water or excavations, including pools or spas.
5. Any device, decoration, design, structure or vegetation that is unsightly by reason of its height, condition, or its inappropriate location.

EXHIBIT “D”

REHABILITATION/MAINTENANCE SCOPE OF WORK

[Attached.]

EXHIBIT “D”

REHABILITATION/MAINTENANCE SCOPE OF WORK

1814 N. Woodside Street

Priority	Description of Work	Cost Estimate	Completion Date
1.	Replace existing central HVAC system, including relocation of equipment off the roof to the ground	\$15,000	2020
2.	Repair of drywood termite damage on trim and eaves as recommended in Item 2A of termite report dated 10/5/2019	\$750	2020
3.	Replace one existing bedroom window (currently non-operable) with new window (compatible style and material)	\$1,500	2020
4.	Remove existing glass block windows (infill) at various locations and install new windows (compatible style and material)	\$3,000	2021
5.	Replace existing side and rear-yard fences (to match original Eichler style)	\$17,000	2022
6.	Remove existing atrium/driveway paving and replace (restore to original appearance with concrete/wood divider)	\$15,000	2023
7.	Remove existing glass block at carport/atrium screen wall. Restore to original design (wood/obscure glazing)	\$8,000	2023
8.	Routine maintenance of existing torch-down roof maintenance (clean, repair, recoat)	\$3,000	2024
9.	Termite treatment/fumigation treatment	\$2,500	2025
10.	Repair deteriorated exterior wood elements at rear eaves as recommended in Item 3A of termite report dated 10/5/2019	\$5,000	2026
11.	Repair/replace deteriorated beam at atrium as recommended in Item 3B of termite report dated 10/5/2019	\$5,000	2026
12.	Replace exterior plywood siding and eaves(limited north and south sides) to match original as recommended in Item 2B and 3A of termite report dated 10/5/2019	\$6,000	2026
13.	Repair of termite damaged wood members as recommended in Item 3B and 3C of termite report dated 10/5/2019	\$3,000	2026
14.	Paint exterior of house	\$18,000	2026

15.	Repair original screen doors, including handles, rollers, and new screens.	\$3,000	2027
16.	Replace existing water heater, including removal of existing return lines from the roof	\$8,000	2028
17.	Replace existing electrical panel with new California Building Code compliant panel.	\$4,500	2028
TOTAL		\$118,250	

EXHIBIT “E”

HISTORIC PROPERTY INVENTORY FORM (DPR 523)

[Attached.]

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial ORA
NRHP Status Code 3D

Other Listings: _____
Review Code: _____ Reviewer: _____ Date: _____

Page 1 of 3

*Resource Name or #: WOODSIDE_N_1814__APN_374-215-14
(Assigned by Recorder)

P1. Other Identifier: Fairmeadow Tract

*P2. Location: Not for Publication Unrestricted

*a. County: Orange and (P2b and P2c or P2d. Attach a location map as necessary.)

*b. USGS 7.5' Quad: _____ Date: _____ T _____; R _____; 1/4 of _____ 1/4 of Sec _____; B.M.

c. Address: 1814 - N WOODSIDE ST, # _____ City: Orange Zip: 92865

d. UTM: (Give more than one for large and/or linear resources) Zone _____ ' _____ mE/ _____ mN

e. Other Locational Data:

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries. Continues on Pg.3.)

Materials: _____

Model LJ-144

*P3b. Resource Attributes: (HP2)--Single family property
(List attributes and codes)

*P4. Resources Present: Building Structure Object Site Element of District District Other (Isolates, etc.)

P5b. Description of Photo: 2005
(View, date, accession #)



*P6. Date Constructed/ Age and Source:

1964 c

Historic Prehistoric Both

*P7. Owner and Address:

*P8: Recorded by: (Name, affiliation, and address)

Marissa Moshier, Historic
Preservation Planner

City of Orange
300 E. Chapman Ave.
Orange, CA 92866

*P9. Date Recorded:

June 2015

*P10. Survey Type: (Describe)

Reconnaissance

*P11. Report Citation: (Cite survey report and other sources, or enter "none.")

Orange County Assessor Records (2005). Chattel Architecture (2005)
Historic Resources Survey.

*Attachments: NONE Location Map Continuation Sheet(s) Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List): _____

DPR 523A (1/95)

*Required Information

Page 2 of 3

*Resource Name or #: WOODSIDE_N_1814__APN_374-215-14
(Assigned by Recorder)

B1. Historic Name: Unknown

B2. Common Name: _____

B3. Original Use: RES B4. Present Use: RES

*B5. Architectural Style: Mid-Century Modern

*B6. Construction History: (Construction date, alterations, and date of alterations) Date of Construction: 1964 Historic Prehistoric Both

Small, flat roofed addition on north elevation; glass panels in entryway wall replaced with glass brick; front door replaced.

*B7. Moved? No Yes Unknown Date: _____ Original Location: _____

*B8. Related Features: _____

*B9. Architect or Builder: Eichler Homes - A. Quincy Jones

*B10. Significance: Theme: Architecture Area: City of Orange Property Type: Residence

Period of Significance: Eichler Tract (c. 1959 - 1965) Applicable Criteria: C

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity. Continues on Pg.4.)

Structural Integrity: Good Condition - Medium level of alteration as of 2005.

Site Integrity: _____

Opportunities _____

B11. Additional Resource Attributes: (List attributes and codes) _____

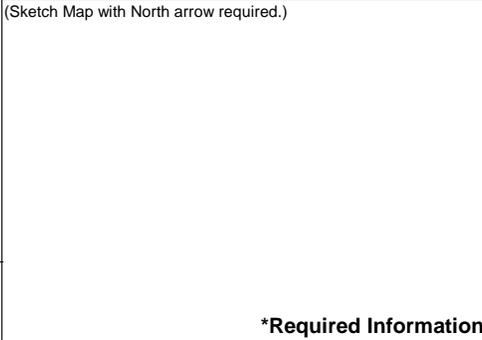
*B12. References: _____

Orange Daily News. Eichler Tract Brochures and miscellaneous Eichler materials from the Orange Public Library.

B13. Remarks: (Continues on Pg.3.)

Status change since 1991 Survey: Not previously surveyed.

(Sketch Map with North arrow required.)



*Required Information

*B14. Evaluator: Robert Chattel

*Date of Evaluation: September 2005

(This space reserved for official comments.)

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # _____
HRI # _____
Trinomial ORA

Page 3 of 3

*Resource Name or #:
(Assigned by Recorder)

WOODSIDE_N_1814__APN_374-215-14

Recorded by:

Marissa Moshier, Historic Preservation Planner
City of Orange
300 E. Chapman Ave.
Orange, CA 92866

Date Recorded: June 2015

Continuation Update

Years Surveyed:

2005, 2015

Description of Photo:

Listed in National Register:

General Plan:

LDR

of Buildings:

1

Planning Zone:

R-1-8

of Stories:

1

Lot Acre:

0.1819

of Units:

1

Principal Building Sqft:

2784

B6. Construction History (Continued from Pg.2):

B13. Remarks (Continued from Pg.2):

P3a. Description (Continued from Pg.1):



EXHIBIT “D”

REHABILITATION/MAINTENANCE SCOPE OF WORK

1065 North Granada Drive

Priority	Description of Work	Cost Estimate	Completion Date
1.	Perform termite repair to damaged wood members as recommended in termite inspection report dated 19/17/2019	\$5,953	2021
2.	Restore primary entry door to original location flush with front façade, consistent with Model OC-574 and approved as Design Review No. 5010-20.	\$3,500	2021
3.	Install new roof system compatible with the Orange Eichler Design Standards	\$35,000	2021
4.	Repaint exterior of the house	\$15,000	2021
5.	Remove sliding door from original garage door opening and install Eichler siding to replicate original appearance of front facade.	\$4,000	2021
6.	Replace existing ductless HVAC units	\$22,000	2021
7.	Replace single-pane, untempered glass windows in atrium with new compatible glass for safety in compliance with the Orange Eichler Design Standards as part of atrium restoration.	\$25,000	2021
TOTAL		\$110,453	



RECORDING REQUESTED BY
AND, WHEN RECORDED,
MAIL TO:

City Clerk
City of Orange
300 E. Chapman Avenue
Orange, California, 92866

Exempt from recording fees pursuant to
Gov. Code Sections 6103 and 27383

Property Address: 5128 E. Elsinore Avenue
APN: 379-022-14
Mills Act Contract Number: 336.0-20

**HISTORIC PROPERTY PRESERVATION AGREEMENT
(MILLS ACT CONTRACT)**

THIS HISTORIC PROPERTY PRESERVATION AGREEMENT (“Agreement”) is made and entered into as of the date of execution by the City (“Effective Date”), by and between the CITY OF ORANGE, a municipal corporation (“City”), and Jeffery Trenchel and Kacy Trenchel, husband and wife as community property with right of survivorship (“Owner”), with reference to the following:

RECITALS

WHEREAS, the Mills Act (Government Code Section 50280 *et seq.*) provides cities with the opportunity to contract with owners of qualified historical properties whereby the owner promises to preserve and rehabilitate the property in return for a potential reduced property tax assessment; and

WHEREAS, the City of Orange has established Historic Districts consisting of the Plaza Historic District, listed in the National Register of Historic Places; the Old Towne Orange Historic District, listed in the National Register of Historic Places; the local Old Towne Orange Historic District, designated by the Orange City Council; and the local Eichler Fairhaven, Fairhills, and Fairmeadow Historic Districts, designated by the Orange City Council; and the City desires to promote the character, quality of life, and historic features of said Districts to its citizens and visitors; and

WHEREAS, the City is dedicated to the protection and stabilization of property values through maintaining and upgrading its older housing stock, through the use of incentives such as the Mills Act; and

WHEREAS, the Mills Act also has beneficial effects on City businesses, economic stability and community pride by preserving important neighborhood historic resources; and

WHEREAS, the use of the Mills Act will fulfill one of the goals of the City’s 2010 General Plan Cultural Resources Element; specifically,

“Provide incentives and expand education efforts for historic preservation” (Goal 3.0, CR-22); and

WHEREAS, Owner possesses fee simple title in and to that certain real property, together with associated structures and improvements thereon, located at 5128 E. Elsinore Avenue in the City of Orange, County of Orange, State of California, having Assessor’s Parcel Number 379-022-14 and more specifically described in Exhibit A, which exhibit is attached hereto and made a part hereof (“Historic Property”); and

WHEREAS, the Historic Property is a qualified historical property under the Mills Act in that it is privately owned property which is not exempt from property taxation and is either: individually designated or is a contributing property within a designated district which is listed in the National Register of Historic Places, California Register of Historical Resources or Register of Historical Landmarks, California Points of Historical Interest, or is a contributing property in a locally designated historic district; and

WHEREAS, Owner, in consideration for abiding by the terms of this Agreement shall be entitled to a reassessment of valuation of the Historic Property and any corresponding reduction in property taxes pursuant to the provisions of the California Revenue and Taxation Code; and

WHEREAS, it is the City’s expectation that the Owner will use the property tax savings accrued under this Agreement for improvements to the “Historic Property” (as defined below). To that end, as a condition of renewal, the City will require a revised schedule of improvements every ten years showing a plan for improvements commensurate with the tax savings; and

WHEREAS, the City and Owner for their mutual benefit, now desire to enter into this Agreement to limit the use of the Historic Property to prevent inappropriate alterations, to ensure that characteristics of historic significance are preserved and maintained in an exemplary manner, and to carry out the purposes of Article 12 (commencing with Section 50280) of Chapter 1, Part 1, Division 1 of Title 5 of the California Government Code and Article 1.9 (commencing with Section 439) of Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code.

AGREEMENT

NOW, THEREFORE, both Owner and City, in consideration of the mutual promises, covenants and conditions contained herein and the substantial public benefits to be derived therefrom, do hereby agree as follows:

1. **APPLICABLE LAWS.** This Agreement is made pursuant to California Government Code Sections 50280 through 50290 and Article 1.9 (commencing with Section 439) of Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code and is subject to all of the provisions of those statutes. To the extent any of the provisions in this Agreement are inconsistent with the aforementioned provisions of the Government and Revenue and Taxation Codes, they are superseded by those Code Sections.

2. ASSESSMENT OF VALUATION. Property tax relief afforded to Owner pursuant to Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code will be determined solely by the Orange County Office of the Assessor. City makes no representations regarding the actual tax savings any person may realize by entering into this Agreement.
3. PRESERVATION OF PROPERTY. Owner agrees to preserve and maintain the Historic Property and its character defining features. Character defining features include, but are not necessarily limited to, the general architectural form, style, materials, design, scale, details, mass, roofline and other aspects of the appearance of the exterior of the Historic Property. For purposes of identification of the Historic Property, the City's Official Historic Property Inventory Form (DPR 523) is attached as Exhibit E.

The *Secretary of the Interior's Standards for Rehabilitation* (Exhibit B) and City's minimum maintenance standards (Exhibit C), attached hereto and incorporated herein by reference, shall constitute the minimum standards and conditions for preservation and rehabilitation of the Historic Property, and shall apply to the Historic Property throughout the term of this Agreement. Owner shall, where necessary, rehabilitate the Historic Property to conform to the rules and regulations of the Office of Historic Preservation of the California Department of Parks and Recreation, the *Secretary of the Interior's Standards for Rehabilitation*, the California Historical Building Code, and the City of Orange's Historic Preservation Design Standards for Old Towne and Eichler Design Standards.

As consideration for the City to enter into this Agreement, the Owner agrees, at its own cost and expense, to complete, or cause to be completed, the work or improvements described in Exhibit D within the times established therefore in Exhibit D. The Owner shall secure any and all permits which may be required by the City or any other governmental agency affected by the construction of the work or improvements. The Owner accepts responsibility for and shall be responsible for identification of and compliance with all applicable laws pertaining to the construction and installation of the work or improvements described on Exhibit D and the contract or contracts pertaining thereto. The Owner will neither seek to hold nor hold the City liable for, and will hold the City harmless with respect to, any consequences of any failure by the Owner to correctly determine the applicability of any such requirements to any contract he/she/they enter into.

In addition to the foregoing, the Owner hereby agrees to and will comply with all applicable local, state, and federal statutes, regulations, rules, codes (including building codes), ordinances, and other requirements of governmental authorities now or hereafter in effect ("Applicable Laws") pertaining to the use of the Historic Property. Owner must give the City immediate written notice on Owner's becoming aware that the use or condition of the Historic Property is in violation of any Applicable Laws.

4. INSPECTIONS AND ANNUAL REPORTING. Owner agrees to permit the examination, by prior appointment, of the interior and exterior of the Historic Property by the City at a minimum every five (5) years during the Agreement term to determine Owner's compliance with the terms and provisions of this Agreement. Owner agrees to provide the City with a report as to the status of the Historic Property annually within thirty (30) days following each anniversary of the

Effective Date of this Agreement. The annual report shall provide substantiation reasonably satisfactory to the City's Historic Preservation Planner or in his/her absence the Director of Community Development that Owner has completed the work required by Exhibit D for the twelve month period preceding each anniversary of this Agreement, and whether the Historic Property has undergone any changed conditions, and whether Owner has received any public funds from other sources designated for the preservation or maintenance of the Historic Property and from whom such funds have been received.

5. PAYMENT OF ANNUAL FEE. The Owner shall pay the City an annual fee to cover administrative costs associated with this Agreement including but not limited to the reasonable cost of monitoring the Historic Property, performing required inspections, and enforcement of the Agreement. Said fee shall be payable to the City of Orange and shall be remitted to the Planning Division upon demand and prior to any required inspection. The amount of the annual inspection fee shall be established by the City and may be revised from time to time, which fee shall be set forth in the City's Master Schedule of Fees and Charges. Failure to pay the required fee within 45 days of the due date will be considered a willful breach of this Agreement and may result in cancellation of the Agreement in accordance with the cancellation terms detailed below.
6. TERM. The term of this Agreement is for a period of ten (10) years. The initial term of this Agreement shall be from September 8, 2020 to and including September 8, 2030.
7. AUTOMATIC RENEWAL. On each yearly anniversary of the Effective Date of this Agreement ("renewal date"), one year shall be added automatically to the initial term of this Agreement, unless notice of non-renewal is given as provided in this Agreement.
8. EFFECT OF OUTSIDE FUNDS. If Owner receives funds designated for the preservation or maintenance of the Historic Property from any other public agency, this Agreement shall not be renewed except upon the vote of the City Council.
9. NOTICE OF NONRENEWAL. If in any year either the Owner or City desires not to renew this Agreement, that party shall serve written notice of nonrenewal to the other party in advance of the annual renewal date. Unless the notice is served by Owner to City at least ninety (90) days, or by City to Owner at least sixty (60) days prior to the renewal date, one year shall automatically be added to the term of the Agreement. Within fifteen (15) days of receipt by Owner of a notice of nonrenewal from the City, Owner may make a written protest. Upon receipt of such a protest the City Council shall set a hearing prior to the expiration of the renewal date of this Agreement or toll the renewal date until such hearing can reasonably held. Owner may furnish the City Council with any information which the Owner deems relevant; and shall furnish the City Council with any information it may require. At any time prior to the renewal date, City may withdraw its notice of nonrenewal.
10. EFFECT OF NOTICE NOT TO RENEW. If in any year either party serves notice of intent not to renew this Agreement, this Agreement shall remain in effect for the balance of the period remaining since the original execution date if not yet renewed, or the last renewal date of the Agreement, as the case may be.

11. UPDATE OF IMPROVEMENT SCHEDULE. At least ninety (90) days prior to the tenth (10th) anniversary of the Effective Date of this Agreement, and ninety (90) days prior to every tenth (10th) anniversary thereafter, Owner shall provide City with an updated schedule of rehabilitation maintenance items for the City's review and approval. Such updated schedule shall contain a list of proposed improvements and/or revisions to be accomplished during the next succeeding ten (10) years of the Agreement and a schedule for the construction of such improvements. Within thirty (30) days after the City's receipt of said updated schedule, the City's Director of Community Development shall either approve or disapprove such proposed schedule of proposed improvements, or shall respond in writing by stating what further information, if any, the City reasonably requires in order to determine the request complete and determine whether or not to grant the requested approval. Upon receipt of such a response, the Owner shall promptly furnish to the City such further information as may be reasonably requested.

From time to time, at the request of the City's Director of Community Development (or his/her authorized representative), the Owner shall meet and confer with the City's Planner for Historic Preservation or in his/her absence the Director of Community Development (or his/her designee) regarding matters arising hereunder with respect to the work and improvements and the progress in constructing the same.

12. INDEPENDENT ADVICE OF COUNSEL. The Owner, and each of them, represent and declare that in executing this Agreement he/she/they have relied solely upon his/her/their own judgment, belief and knowledge, and the advice and recommendations of his/her/their own independently selected counsel, concerning the nature, extent and duration of his/her/their rights and claims, and that he/she/they have not been influenced to any extent whatsoever in executing the same by the City or by any person representing the City.

13. ENFORCEMENT OF AGREEMENT. If the City determines the owner has breached any of the conditions of the Agreement provided for or has allowed the property to deteriorate to the point it no longer meets the standards for a qualified historical property, the City shall either cancel the Agreement or bring any action in court necessary to enforce the Agreement including, but not limited to an action to enforce the Agreement by specific performance to cure, correct or remedy any breach of the terms of this Agreement, to recover damages for any breach, or to obtain any other remedy consistent with the purpose of this Agreement. In the event of a default under the provisions of this Agreement by Owner, City shall give written notice to Owner specifying the alleged grounds for the default. Said notice shall be given by registered or certified mail addressed to the address stated in this Agreement. If such violation(s) is not corrected to the reasonable satisfaction of the City within thirty (30) days from the receipt of the notice of violation, or within such reasonable time as may be required to cure the breach or default, provided that acts to cure, correct or remedy such breach or default are commenced within thirty (30) days and thereafter diligently pursued to completion, then City may, without further notice, institute legal action.

Except as otherwise expressly stated in this Agreement, the rights and remedies of the City are cumulative, and the exercise by the City of one or more of such rights or remedies shall not preclude the exercise by it, at the same or different times, of any other rights or remedies for the same default or any other default by the Owner. Any failure or delay by the City in asserting any

of its right and remedies as to a breach of any of the covenants, conditions or agreements set forth herein shall not operate as a waiver of such breach or of any such rights or remedies, or deprive the City of its right to institute and maintain any actions or proceedings which it may deem necessary to protect, assert or enforce such rights or remedies. A waiver by the City of a breach shall not be construed as a waiver of any succeeding breach of the same or other covenants, conditions or agreements set forth in this Agreement.

14. CANCELLATION. In lieu of bringing an action to enforce the Agreement City may cancel this Agreement if City determines Owner has breached any of the conditions or covenants of this Agreement or has allowed the Historic Property to deteriorate to the point that it no longer meets the standards for a qualified historical property. City may also cancel this Agreement if it determines Owner has failed to rehabilitate the Historic Property in the manner specified in this Agreement.
15. NOTICE OF CANCELLATION. This Agreement cannot be canceled until after City has given notice and has held a public hearing as required by Government Code Section 50285. Notice of the hearing shall be mailed to the last known address of each owner of property within 300 feet of the Historic Property and shall be published in accordance with Government Code Section 6061.
16. CANCELLATION FEE. If City cancels this Agreement in accordance with Section 15 above, Owner shall pay a cancellation fee of twelve and one-half percent (12-1/2%) of the current fair market value of the Historic Property at the time of cancellation. The current fair market value shall be determined by the County Assessor as though the Historic Property were free of the restriction on the Historic Property imposed pursuant to this Agreement. The cancellation fee shall be paid to the County Auditor at such time and in such manner as the County Auditor shall prescribe.
17. NOTICES. All notices required by or provided for in the Agreement shall be given in writing and may be mailed or delivered in person at the address of the respective parties as specified below or at any other address as may be later specified by the parties. Deposit of notice in the mail, postage prepaid, shall be deemed receipt of the notice.

City of Orange
Attn.: City Clerk
300 E. Chapman Avenue
Orange, CA 92866

Jeffery and Kacy Trenchel
5128 E. Elsinore Avenue
Orange, CA 92869

18. NO COMPENSATION. Owner shall not receive any payment from the City in consideration of the obligations imposed under this Agreement. The Owner acknowledges and agrees that the consideration for the execution of this Agreement is the substantial public benefit to be derived therefrom and the advantage that will accrue to Owner as a result of the effect upon the assessed value of the Historic Property on account of the restrictions on the use and preservation of the Historic Property.

19. REMEDY IF AGREEMENT HELD NOT ENFORCEABLE. In the event it is finally determined this Agreement does not constitute an enforceable restriction within the meaning of the applicable provisions of the California Government Code and the California Revenue and Taxation Code, except for an unenforceability arising from the cancellation or nonrenewal of this Agreement, then this Agreement shall be null and void and without further effect and the Historic Property subject to this Agreement shall from that time be free from any restriction whatsoever under this Agreement without any payment or further act of the parties to this Agreement.

20. ACQUISITION OF PROPERTY BY EMINENT DOMAIN; CANCELLATION OF CONTRACT; INAPPLICABILITY TO DETERMINATION OF VALUE. In the event that the Historic Property is acquired in whole or part by eminent domain or other acquisition by any entity authorized to exercise the power of eminent domain, and the acquisition is determined by the City to frustrate the purpose of the Agreement, the Agreement shall be canceled and no fee shall be imposed under Section 17, above. The Agreement shall be deemed null and void for all purposes of determining the value of the Historic Property so acquired.

If, subsequent to the filing of an action in eminent domain, the proposed condemnation is abandoned by the condemning agency, the restrictions on the use of the Historic Property included in this Agreement shall, without further agreement of the parties, be reinstated and the terms of this Agreement shall continue in full force and effect.

21. EFFECT OF AGREEMENT. None of the terms, provisions or conditions of this Agreement shall be deemed to create a partnership between the parties hereto and any of their heirs, successors or assigns, nor shall such terms, provisions or conditions cause the parties hereto to be considered joint venturers or members of any joint enterprise.

22. SUCCESSORS AND ASSIGNS. This Agreement is binding upon and shall inure to the benefit of all successors in interest of the Owner, regardless of the tax exempt status of any subsequent owner. A successor in interest shall have the same rights and obligations under this Agreement as the original owner who entered into this Agreement.

23. REQUIREMENTS RELATED TO TRANSFER OF HISTORIC PROPERTY. In the event of any sale, transfer, assignment or conveyance of the Historic Property ("Transfer"), the Owner agrees that, at least thirty (30) days prior to such Transfer, it shall give written notice to the City of such proposed Transfer, including the name(s) of the transferee(s). In addition, the Owner and the proposed transferee(s) shall enter into and deliver to the City through the escrow for the Transfer of the Historic Property an assignment and assumption agreement in a form satisfactory to the City's Attorney or such other evidence as may be satisfactory to the City that the transferee(s) has (have) assumed the Owner's obligations set forth in this Agreement. Upon the Transfer of the Historic Property and the assumption of the obligations hereunder by the transferee(s), the Owner's liability for performance shall be terminated as to any obligation to be performed hereunder after the date of such Transfer.

24. RECORDATION. City shall record a copy of this Agreement with the Office of the County Recorder of the County of Orange.

25. AMENDMENTS. This Agreement may be amended, in whole or in part, only by a written and recorded instrument executed by the parties hereto, except that the Director of Community Development is authorized to amend the list of required projects in Exhibit D.
26. COUNTERPARTS. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original and all of which shall constitute one and the same agreement with the same effect as if all parties had signed the same signature page. Any signature page of this Agreement may be detached from any counterpart of this Agreement and re-attached to any other counterpart of this Agreement identical in form hereto but having attached to it one or more additional signature pages.
27. ADMINISTRATION. This Agreement shall be administered by the City's Director of Community Development (or his/her designated representative) following approval of this Agreement by the City. The City shall maintain authority of this Agreement through the City's Director of Community Development (or his/her authorized representative). The City's Director of Community Development shall have the authority to issue interpretations, waive provisions and enter into amendments of this Agreement on behalf of the City so long as such actions do not change the uses permitted on the Historic Property or the purpose of this Agreement. Such amendments may include extensions of time or amendments to the projects specified in Exhibit D. All other waivers or amendments shall require the written approval and consent of the City Council.

[Remainder of page intentionally left blank; signatures on next page]

IN WITNESS WHEREOF, the City and the Owner have executed this Agreement.

“OWNER”

Dated: _____, 2020

Jeffery Trenchel

Dated: _____, 2020

Kacy Trenchel

“CITY”

CITY OF ORANGE, a municipal corporation

Dated: _____, 2020

By: _____
Mark A. Murphy
Mayor

ATTEST:

APPROVED AS TO FORM:

Pamela Coleman
City Clerk

Mary E. Binning
Senior Assistant City Attorney

ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of _____

On _____ before me, _____,
a Notary Public in and for the State of California, personally appeared _____

_____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

EXHIBIT "A"

LEGAL DESCRIPTION OF HISTORIC PROPERTY

REAL PROPERTY IN THE CITY OF ORANGE, COUNTY OF ORANGE, STATE OF CALIFORNIA, DESCRIBED AS:

Lot 71 of Tract No. 4733, as per map recorded in Book 177, Pages 7 to 10, inclusive, of Miscellaneous Maps, in the office of the County Recorder of said County.

[APN 379-022-14]

EXHIBIT “B”

SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION

1. Every reasonable effort shall be made to provide a compatible use for a property, which requires a minimal alteration of the building structure, or site and its environment, or to use a property for its originally intended purpose.
2. The distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.
3. All buildings, structures, and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.
4. Changes which may have taken place in the course of time are evidence of the history and development of a building, structure or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.
5. Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure or site shall be treated with sensitivity.
6. Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.
7. The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.
8. Every reasonable effort shall be made to protect and preserve archeological resources affected by, or adjacent to, any project.
9. Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with the size, scale, color, material and character of the property, neighborhood or environment.
10. Wherever possible, new additions or alterations to structures shall be done in such a manner that, if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.

EXHIBIT “C”

CITY OF ORANGE HISTORIC PROPERTY MAINTENANCE STANDARDS

All buildings, structures, yards and other improvements shall be maintained in a manner which does not detract from the appearance of the immediate neighborhood. The following conditions are prohibited:

1. Dilapidated, deteriorating, or unrepaired structures, such as: fences, roofs, doors, walls and windows.
2. Publicly visible storage of scrap lumber, junk, trash or debris.
3. Publicly visible storage of abandoned, discarded or unused objects or equipment, such as automobiles, automobile parts, furniture, stoves, refrigerators, cans, containers or similar items.
4. Stagnant water or excavations, including pools or spas.
5. Any device, decoration, design, structure or vegetation that is unsightly by reason of its height, condition, or its inappropriate location.

EXHIBIT “D”

REHABILITATION/MAINTENANCE SCOPE OF WORK

[Attached.]

EXHIBIT “D”

REHABILITATION/MAINTENANCE SCOPE OF WORK

5128 E. Elsinore Avenue

Priority	Description of Work	Cost Estimate	Completion Date
1.	Patch and repair existing flat roof surface and seal with elastomeric roof coat.	\$3,500	2019
2.	Repair or replace damaged wood vertical groove Eichler siding on the South elevation as needed to restore uniform appearance.	\$9,000	2020
3.	Recondition all original Arcadia sliding glass doors, including rollers, seals, and bumpers.	\$4,000	2021
4.	Repair and stabilize deteriorated window corner post at the southeast corner of the rear elevation where two windowpanes meet.	\$3,000	
5.	Paint exterior of house.	\$7,500	2022
6.	Remove existing concrete in east side yard, grade to correct drainage issue towards the foundation of the house, and re-pour concrete in same location.	\$15,000	2023
7.	Replace Eichler tongue and groove siding on the south elevation of the house to fix old patched holes in the siding and weather damage.	\$5,000	2023
8.	Maintenance of front door and adjacent mislited side lights, including repair of wood frames and door hardware.	\$1,000	2025
TOTAL		\$48,000	

EXHIBIT “E”

HISTORIC PROPERTY INVENTORY FORM (DPR 523)

[Attached.]

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial ORA
NRHP Status Code 3D

Other Listings: _____
Review Code: _____ Reviewer: _____ Date: _____

Page 1 of 3

*Resource Name or #: ELSINORE_E_5128__APN_379-022-14
(Assigned by Recorder)

P1. Other Identifier: Fairhills Tract

*P2. Location: Not for Publication Unrestricted

*a. County: Orange and (P2b and P2c or P2d. Attach a location map as necessary.)

*b. USGS 7.5' Quad: _____ Date: _____ T _____; R _____; 1/4 of _____ 1/4 of Sec _____; B.M. _____

c. Address: 5128 - E ELSINORE AVE, # _____ City: Orange Zip: 92869

d. UTM: (Give more than one for large and/or linear resources) Zone _____ ' _____ mE/ _____ mN

e. Other Locational Data:

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries. Continues on Pg.3.)

Materials: _____

Model OJ-1605

*P3b. Resource Attributes: (HP2)--Single family property
(List attributes and codes)

*P4. Resources Present: Building Structure Object Site Element of District District Other (Isolates, etc.)

P5b. Description of Photo: 2005
(View, date, accession #)



*P6. Date Constructed/ Age and Source:

1962 c

Historic Prehistoric Both

*P7. Owner and Address:

*P8: Recorded by: (Name, affiliation, and address)
D. Gest, P. LaValley

Chattel Architecture
13417 Ventura Blvd.
Sherman Oaks, CA 91423

*P9. Date Recorded:

January 2005

*P10. Survey Type: (Describe)

Reconnaissance

*P11. Report Citation: (Cite survey report and other sources, or enter "none.")

Orange County Assessor Records (2005). Chattel Architecture (2005)
Historic Resources Survey.

*Attachments: NONE Location Map Continuation Sheet(s) Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List): _____

DPR 523A (1/95)

*Required Information

Page 2 of 3

*Resource Name or #: ELSINORE_E_5128__APN_379-022-14
(Assigned by Recorder)

B1. Historic Name: Unknown

B2. Common Name: _____

B3. Original Use: RES B4. Present Use: RES

*B5. Architectural Style: Mid-Century Modern

*B6. Construction History: (Construction date, alterations, and date of alterations) Date of Construction: 1962 Historic Prehistoric Both
Front walk repaved..

*B7. Moved? No Yes Unknown Date: _____ Original Location: _____

*B8. Related Features: _____

*B9. Architect or Builder: Eichler Homes - A. Quincy Jones & Frederick E. Emmons

*B10. Significance: Theme: Architecture Area: City of Orange Property Type: Residence

Period of Significance: Eichler Tract (c. 1959 - 1965) Applicable Criteria: C

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity. Continues on Pg.4.)

Structural Integrity: Excellent Condition - Low level of alteration as of 2005.

Site Integrity: _____

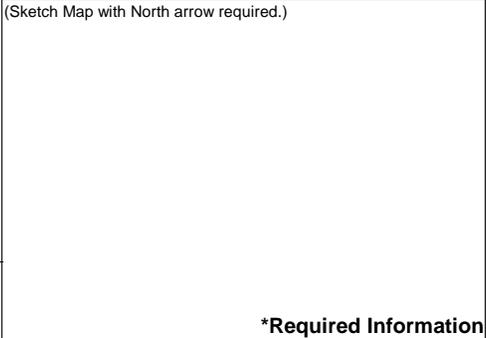
Opportunities _____

B11. Additional Resource Attributes: (List attributes and codes) _____

*B12. References:
Orange Daily News.

B13. Remarks: (Continues on Pg.3.)
Status change since 1991 Survey: Not previously surveyed.

(Sketch Map with North arrow required.)



*B14. Evaluator: Robert Chattel

*Date of Evaluation: September 2005

(This space reserved for official comments.)

DPR 523B (1/95)

*Required Information

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # _____
HRI # _____
Trinomial ORA

Page 3 of 3

*Resource Name or #:
(Assigned by Recorder)

ELSINORE_E_5128__APN_379-022-14

Recorded by:

D. Gest, P. LaValley
Chattel Architecture
13417 Ventura Blvd.
Sherman Oaks, CA 91423

Date Recorded: January 2005

Continuation Update

Years Surveyed: 2005, 2015

Description of Photo: _____

Listed in National Register: _____

General Plan: LDR # of Buildings: 1

Planning Zone: R-1-8 # of Stories: 1

Lot Acre: 0.1909 # of Units: 1

Principal Building Sqft: 2287

B6. Construction History (Continued from Pg.2):

B13. Remarks (Continued from Pg.2):

P3a. Description (Continued from Pg.1):



RECORDING REQUESTED BY
AND, WHEN RECORDED,
MAIL TO:

City Clerk
City of Orange
300 E. Chapman Avenue
Orange, California, 92866

Exempt from recording fees pursuant to
Gov. Code Sections 6103 and 27383

Property Address: 2056 N. Shaffer Street
APN: 374-431-08
Mills Act Contract Number: 337.0-20

**HISTORIC PROPERTY PRESERVATION AGREEMENT
(MILLS ACT CONTRACT)**

THIS HISTORIC PROPERTY PRESERVATION AGREEMENT (“Agreement”) is made and entered into as of the date of execution by the City (“Effective Date”), by and between the CITY OF ORANGE, a municipal corporation (“City”), and Daniel Pawlovich and Maya Tuttle, husband and wife as joint tenants (“Owner”), with reference to the following:

RECITALS

WHEREAS, the Mills Act (Government Code Section 50280 *et seq.*) provides cities with the opportunity to contract with owners of qualified historical properties whereby the owner promises to preserve and rehabilitate the property in return for a potential reduced property tax assessment; and

WHEREAS, the City of Orange has established Historic Districts consisting of the Plaza Historic District, listed in the National Register of Historic Places; the Old Towne Orange Historic District, listed in the National Register of Historic Places; the local Old Towne Orange Historic District, designated by the Orange City Council; and the local Eichler Fairhaven, Fairhills, and Fairmeadow Historic Districts, designated by the Orange City Council; and the City desires to promote the character, quality of life, and historic features of said Districts to its citizens and visitors; and

WHEREAS, the City is dedicated to the protection and stabilization of property values through maintaining and upgrading its older housing stock, through the use of incentives such as the Mills Act; and

WHEREAS, the Mills Act also has beneficial effects on City businesses, economic stability and community pride by preserving important neighborhood historic resources; and

WHEREAS, the use of the Mills Act will fulfill one of the goals of the City’s 2010 General Plan Cultural Resources Element; specifically,

“Provide incentives and expand education efforts for historic preservation” (Goal 3.0, CR-22); and

WHEREAS, Owner possesses fee simple title in and to that certain real property, together with associated structures and improvements thereon, located at 2056 N. Shaffer Street in the City of Orange, County of Orange, State of California, having Assessor’s Parcel Number 374-431-08 and more specifically described in Exhibit A, which exhibit is attached hereto and made a part hereof (“Historic Property”); and

WHEREAS, the Historic Property is a qualified historical property under the Mills Act in that it is privately owned property which is not exempt from property taxation and is either: individually designated or is a contributing property within a designated district which is listed in the National Register of Historic Places, California Register of Historical Resources or Register of Historical Landmarks, California Points of Historical Interest, or is a contributing property in a locally designated historic district; and

WHEREAS, Owner, in consideration for abiding by the terms of this Agreement shall be entitled to a reassessment of valuation of the Historic Property and any corresponding reduction in property taxes pursuant to the provisions of the California Revenue and Taxation Code; and

WHEREAS, it is the City’s expectation that the Owner will use the property tax savings accrued under this Agreement for improvements to the “Historic Property” (as defined below). To that end, as a condition of renewal, the City will require a revised schedule of improvements every ten years showing a plan for improvements commensurate with the tax savings; and

WHEREAS, the City and Owner for their mutual benefit, now desire to enter into this Agreement to limit the use of the Historic Property to prevent inappropriate alterations, to ensure that characteristics of historic significance are preserved and maintained in an exemplary manner, and to carry out the purposes of Article 12 (commencing with Section 50280) of Chapter 1, Part 1, Division 1 of Title 5 of the California Government Code and Article 1.9 (commencing with Section 439) of Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code.

AGREEMENT

NOW, THEREFORE, both Owner and City, in consideration of the mutual promises, covenants and conditions contained herein and the substantial public benefits to be derived therefrom, do hereby agree as follows:

1. **APPLICABLE LAWS.** This Agreement is made pursuant to California Government Code Sections 50280 through 50290 and Article 1.9 (commencing with Section 439) of Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code and is subject to all of the provisions of those statutes. To the extent any of the provisions in this Agreement are inconsistent with the aforementioned provisions of the Government and Revenue and Taxation Codes, they are superseded by those Code Sections.

2. ASSESSMENT OF VALUATION. Property tax relief afforded to Owner pursuant to Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code will be determined solely by the Orange County Office of the Assessor. City makes no representations regarding the actual tax savings any person may realize by entering into this Agreement.
3. PRESERVATION OF PROPERTY. Owner agrees to preserve and maintain the Historic Property and its character defining features. Character defining features include, but are not necessarily limited to, the general architectural form, style, materials, design, scale, details, mass, roofline and other aspects of the appearance of the exterior of the Historic Property. For purposes of identification of the Historic Property, the City's Official Historic Property Inventory Form (DPR 523) is attached as Exhibit E.

The *Secretary of the Interior's Standards for Rehabilitation* (Exhibit B) and City's minimum maintenance standards (Exhibit C), attached hereto and incorporated herein by reference, shall constitute the minimum standards and conditions for preservation and rehabilitation of the Historic Property, and shall apply to the Historic Property throughout the term of this Agreement. Owner shall, where necessary, rehabilitate the Historic Property to conform to the rules and regulations of the Office of Historic Preservation of the California Department of Parks and Recreation, the *Secretary of the Interior's Standards for Rehabilitation*, the California Historical Building Code, and the City of Orange's Historic Preservation Design Standards for Old Towne and Eichler Design Standards.

As consideration for the City to enter into this Agreement, the Owner agrees, at its own cost and expense, to complete, or cause to be completed, the work or improvements described in Exhibit D within the times established therefore in Exhibit D. The Owner shall secure any and all permits which may be required by the City or any other governmental agency affected by the construction of the work or improvements. The Owner accepts responsibility for and shall be responsible for identification of and compliance with all applicable laws pertaining to the construction and installation of the work or improvements described on Exhibit D and the contract or contracts pertaining thereto. The Owner will neither seek to hold nor hold the City liable for, and will hold the City harmless with respect to, any consequences of any failure by the Owner to correctly determine the applicability of any such requirements to any contract he/she/they enter into.

In addition to the foregoing, the Owner hereby agrees to and will comply with all applicable local, state, and federal statutes, regulations, rules, codes (including building codes), ordinances, and other requirements of governmental authorities now or hereafter in effect ("Applicable Laws") pertaining to the use of the Historic Property. Owner must give the City immediate written notice on Owner's becoming aware that the use or condition of the Historic Property is in violation of any Applicable Laws.

4. INSPECTIONS AND ANNUAL REPORTING. Owner agrees to permit the examination, by prior appointment, of the interior and exterior of the Historic Property by the City at a minimum every five (5) years during the Agreement term to determine Owner's compliance with the terms and provisions of this Agreement. Owner agrees to provide the City with a report as to the status of the Historic Property annually within thirty (30) days following each anniversary of the

Effective Date of this Agreement. The annual report shall provide substantiation reasonably satisfactory to the City's Historic Preservation Planner or in his/her absence the Director of Community Development that Owner has completed the work required by Exhibit D for the twelve month period preceding each anniversary of this Agreement, and whether the Historic Property has undergone any changed conditions, and whether Owner has received any public funds from other sources designated for the preservation or maintenance of the Historic Property and from whom such funds have been received.

5. PAYMENT OF ANNUAL FEE. The Owner shall pay the City an annual fee to cover administrative costs associated with this Agreement including but not limited to the reasonable cost of monitoring the Historic Property, performing required inspections, and enforcement of the Agreement. Said fee shall be payable to the City of Orange and shall be remitted to the Planning Division upon demand and prior to any required inspection. The amount of the annual inspection fee shall be established by the City and may be revised from time to time, which fee shall be set forth in the City's Master Schedule of Fees and Charges. Failure to pay the required fee within 45 days of the due date will be considered a willful breach of this Agreement and may result in cancellation of the Agreement in accordance with the cancellation terms detailed below.
6. TERM. The term of this Agreement is for a period of ten (10) years. The initial term of this Agreement shall be from September 8, 2020 to and including September 8, 2030.
7. AUTOMATIC RENEWAL. On each yearly anniversary of the Effective Date of this Agreement ("renewal date"), one year shall be added automatically to the initial term of this Agreement, unless notice of non-renewal is given as provided in this Agreement.
8. EFFECT OF OUTSIDE FUNDS. If Owner receives funds designated for the preservation or maintenance of the Historic Property from any other public agency, this Agreement shall not be renewed except upon the vote of the City Council.
9. NOTICE OF NONRENEWAL. If in any year either the Owner or City desires not to renew this Agreement, that party shall serve written notice of nonrenewal to the other party in advance of the annual renewal date. Unless the notice is served by Owner to City at least ninety (90) days, or by City to Owner at least sixty (60) days prior to the renewal date, one year shall automatically be added to the term of the Agreement. Within fifteen (15) days of receipt by Owner of a notice of nonrenewal from the City, Owner may make a written protest. Upon receipt of such a protest the City Council shall set a hearing prior to the expiration of the renewal date of this Agreement or toll the renewal date until such hearing can reasonably held. Owner may furnish the City Council with any information which the Owner deems relevant; and shall furnish the City Council with any information it may require. At any time prior to the renewal date, City may withdraw its notice of nonrenewal.
10. EFFECT OF NOTICE NOT TO RENEW. If in any year either party serves notice of intent not to renew this Agreement, this Agreement shall remain in effect for the balance of the period remaining since the original execution date if not yet renewed, or the last renewal date of the Agreement, as the case may be.

11. UPDATE OF IMPROVEMENT SCHEDULE. At least ninety (90) days prior to the tenth (10th) anniversary of the Effective Date of this Agreement, and ninety (90) days prior to every tenth (10th) anniversary thereafter, Owner shall provide City with an updated schedule of rehabilitation maintenance items for the City's review and approval. Such updated schedule shall contain a list of proposed improvements and/or revisions to be accomplished during the next succeeding ten (10) years of the Agreement and a schedule for the construction of such improvements. Within thirty (30) days after the City's receipt of said updated schedule, the City's Director of Community Development shall either approve or disapprove such proposed schedule of proposed improvements, or shall respond in writing by stating what further information, if any, the City reasonably requires in order to determine the request complete and determine whether or not to grant the requested approval. Upon receipt of such a response, the Owner shall promptly furnish to the City such further information as may be reasonably requested.

From time to time, at the request of the City's Director of Community Development (or his/her authorized representative), the Owner shall meet and confer with the City's Planner for Historic Preservation or in his/her absence the Director of Community Development (or his/her designee) regarding matters arising hereunder with respect to the work and improvements and the progress in constructing the same.

12. INDEPENDENT ADVICE OF COUNSEL. The Owner, and each of them, represent and declare that in executing this Agreement he/she/they have relied solely upon his/her/their own judgment, belief and knowledge, and the advice and recommendations of his/her/their own independently selected counsel, concerning the nature, extent and duration of his/her/their rights and claims, and that he/she/they have not been influenced to any extent whatsoever in executing the same by the City or by any person representing the City.

13. ENFORCEMENT OF AGREEMENT. If the City determines the owner has breached any of the conditions of the Agreement provided for or has allowed the property to deteriorate to the point it no longer meets the standards for a qualified historical property, the City shall either cancel the Agreement or bring any action in court necessary to enforce the Agreement including, but not limited to an action to enforce the Agreement by specific performance to cure, correct or remedy any breach of the terms of this Agreement, to recover damages for any breach, or to obtain any other remedy consistent with the purpose of this Agreement. In the event of a default under the provisions of this Agreement by Owner, City shall give written notice to Owner specifying the alleged grounds for the default. Said notice shall be given by registered or certified mail addressed to the address stated in this Agreement. If such violation(s) is not corrected to the reasonable satisfaction of the City within thirty (30) days from the receipt of the notice of violation, or within such reasonable time as may be required to cure the breach or default, provided that acts to cure, correct or remedy such breach or default are commenced within thirty (30) days and thereafter diligently pursued to completion, then City may, without further notice, institute legal action.

Except as otherwise expressly stated in this Agreement, the rights and remedies of the City are cumulative, and the exercise by the City of one or more of such rights or remedies shall not preclude the exercise by it, at the same or different times, of any other rights or remedies for the same default or any other default by the Owner. Any failure or delay by the City in asserting any

of its right and remedies as to a breach of any of the covenants, conditions or agreements set forth herein shall not operate as a waiver of such breach or of any such rights or remedies, or deprive the City of its right to institute and maintain any actions or proceedings which it may deem necessary to protect, assert or enforce such rights or remedies. A waiver by the City of a breach shall not be construed as a waiver of any succeeding breach of the same or other covenants, conditions or agreements set forth in this Agreement.

14. CANCELLATION. In lieu of bringing an action to enforce the Agreement City may cancel this Agreement if City determines Owner has breached any of the conditions or covenants of this Agreement or has allowed the Historic Property to deteriorate to the point that it no longer meets the standards for a qualified historical property. City may also cancel this Agreement if it determines Owner has failed to rehabilitate the Historic Property in the manner specified in this Agreement.
15. NOTICE OF CANCELLATION. This Agreement cannot be canceled until after City has given notice and has held a public hearing as required by Government Code Section 50285. Notice of the hearing shall be mailed to the last known address of each owner of property within 300 feet of the Historic Property and shall be published in accordance with Government Code Section 6061.
16. CANCELLATION FEE. If City cancels this Agreement in accordance with Section 15 above, Owner shall pay a cancellation fee of twelve and one-half percent (12-1/2%) of the current fair market value of the Historic Property at the time of cancellation. The current fair market value shall be determined by the County Assessor as though the Historic Property were free of the restriction on the Historic Property imposed pursuant to this Agreement. The cancellation fee shall be paid to the County Auditor at such time and in such manner as the County Auditor shall prescribe.
17. NOTICES. All notices required by or provided for in the Agreement shall be given in writing and may be mailed or delivered in person at the address of the respective parties as specified below or at any other address as may be later specified by the parties. Deposit of notice in the mail, postage prepaid, shall be deemed receipt of the notice.

City of Orange
Attn.: City Clerk
300 E. Chapman Avenue
Orange, CA 92866

Daniel Pawlovich and Maya Tuttle
2056 N. Shaffer Street
Orange, CA 92865

18. NO COMPENSATION. Owner shall not receive any payment from the City in consideration of the obligations imposed under this Agreement. The Owner acknowledges and agrees that the consideration for the execution of this Agreement is the substantial public benefit to be derived therefrom and the advantage that will accrue to Owner as a result of the effect upon the assessed value of the Historic Property on account of the restrictions on the use and preservation of the Historic Property.

19. REMEDY IF AGREEMENT HELD NOT ENFORCEABLE. In the event it is finally determined this Agreement does not constitute an enforceable restriction within the meaning of the applicable provisions of the California Government Code and the California Revenue and Taxation Code, except for an unenforceability arising from the cancellation or nonrenewal of this Agreement, then this Agreement shall be null and void and without further effect and the Historic Property subject to this Agreement shall from that time be free from any restriction whatsoever under this Agreement without any payment or further act of the parties to this Agreement.

20. ACQUISITION OF PROPERTY BY EMINENT DOMAIN; CANCELLATION OF CONTRACT; INAPPLICABILITY TO DETERMINATION OF VALUE. In the event that the Historic Property is acquired in whole or part by eminent domain or other acquisition by any entity authorized to exercise the power of eminent domain, and the acquisition is determined by the City to frustrate the purpose of the Agreement, the Agreement shall be canceled and no fee shall be imposed under Section 17, above. The Agreement shall be deemed null and void for all purposes of determining the value of the Historic Property so acquired.

If, subsequent to the filing of an action in eminent domain, the proposed condemnation is abandoned by the condemning agency, the restrictions on the use of the Historic Property included in this Agreement shall, without further agreement of the parties, be reinstated and the terms of this Agreement shall continue in full force and effect.

21. EFFECT OF AGREEMENT. None of the terms, provisions or conditions of this Agreement shall be deemed to create a partnership between the parties hereto and any of their heirs, successors or assigns, nor shall such terms, provisions or conditions cause the parties hereto to be considered joint venturers or members of any joint enterprise.

22. SUCCESSORS AND ASSIGNS. This Agreement is binding upon and shall inure to the benefit of all successors in interest of the Owner, regardless of the tax exempt status of any subsequent owner. A successor in interest shall have the same rights and obligations under this Agreement as the original owner who entered into this Agreement.

23. REQUIREMENTS RELATED TO TRANSFER OF HISTORIC PROPERTY. In the event of any sale, transfer, assignment or conveyance of the Historic Property ("Transfer"), the Owner agrees that, at least thirty (30) days prior to such Transfer, it shall give written notice to the City of such proposed Transfer, including the name(s) of the transferee(s). In addition, the Owner and the proposed transferee(s) shall enter into and deliver to the City through the escrow for the Transfer of the Historic Property an assignment and assumption agreement in a form satisfactory to the City's Attorney or such other evidence as may be satisfactory to the City that the transferee(s) has (have) assumed the Owner's obligations set forth in this Agreement. Upon the Transfer of the Historic Property and the assumption of the obligations hereunder by the transferee(s), the Owner's liability for performance shall be terminated as to any obligation to be performed hereunder after the date of such Transfer.

24. RECORDATION. City shall record a copy of this Agreement with the Office of the County Recorder of the County of Orange.

25. AMENDMENTS. This Agreement may be amended, in whole or in part, only by a written and recorded instrument executed by the parties hereto, except that the Director of Community Development is authorized to amend the list of required projects in Exhibit D.
26. COUNTERPARTS. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original and all of which shall constitute one and the same agreement with the same effect as if all parties had signed the same signature page. Any signature page of this Agreement may be detached from any counterpart of this Agreement and re-attached to any other counterpart of this Agreement identical in form hereto but having attached to it one or more additional signature pages.
27. ADMINISTRATION. This Agreement shall be administered by the City's Director of Community Development (or his/her designated representative) following approval of this Agreement by the City. The City shall maintain authority of this Agreement through the City's Director of Community Development (or his/her authorized representative). The City's Director of Community Development shall have the authority to issue interpretations, waive provisions and enter into amendments of this Agreement on behalf of the City so long as such actions do not change the uses permitted on the Historic Property or the purpose of this Agreement. Such amendments may include extensions of time or amendments to the projects specified in Exhibit D. All other waivers or amendments shall require the written approval and consent of the City Council.

[Remainder of page intentionally left blank; signatures on next page]

IN WITNESS WHEREOF, the City and the Owner have executed this Agreement.

“OWNER”

Dated: _____, 2020

Daniel Pawlovich

Dated: _____, 2020

Maya Tuttle

“CITY”

CITY OF ORANGE, a municipal corporation

Dated: _____, 2020

By: _____
Mark A. Murphy
Mayor

ATTEST:

APPROVED AS TO FORM:

Pamela Coleman
City Clerk

Mary E. Binning
Senior Assistant City Attorney

ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of _____

On _____ before me, _____,
a Notary Public in and for the State of California, personally appeared _____

_____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

EXHIBIT "A"

LEGAL DESCRIPTION OF HISTORIC PROPERTY

REAL PROPERTY IN THE CITY OF ORANGE, COUNTY OF ORANGE, STATE OF CALIFORNIA, DESCRIBED AS:

That portion of Lot 16 of the Fletcher Tract, in the City of Orange, County of Orange, State of California, as per Map recorded in Book 3 Page 320 of Miscellaneous Maps, in the Office of the County Recorder of Los Angeles County, California, described as follows:

Beginning at the Northeast corner of the land conveyed to Henry O. Luchau et ux. By deed recorded February 4, 1928, in Book 133 Page 19 of Official Records, said Northeast corner being North 1169.92 feet from Northeast corner of Lot 4 of said Fletcher Tract; thence Westerly 299 feet along the North line of said land conveyed to Luchau; thence Southerly 130 feet parallel with the East line of said land conveyed to Luchau; thence Easterly 299 feet parallel with said North line to the East line of said land; thence Northerly 130 feet along said East line to the point of beginning.

[APN 374-431-08]

EXHIBIT "B"

SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION

1. Every reasonable effort shall be made to provide a compatible use for a property, which requires a minimal alteration of the building structure, or site and its environment, or to use a property for its originally intended purpose.
2. The distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.
3. All buildings, structures, and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.
4. Changes which may have taken place in the course of time are evidence of the history and development of a building, structure or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.
5. Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure or site shall be treated with sensitivity.
6. Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.
7. The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.
8. Every reasonable effort shall be made to protect and preserve archeological resources affected by, or adjacent to, any project.
9. Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with the size, scale, color, material and character of the property, neighborhood or environment.
10. Wherever possible, new additions or alterations to structures shall be done in such a manner that, if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.

EXHIBIT “C”

CITY OF ORANGE HISTORIC PROPERTY **MAINTENANCE STANDARDS**

All buildings, structures, yards and other improvements shall be maintained in a manner which does not detract from the appearance of the immediate neighborhood. The following conditions are prohibited:

1. Dilapidated, deteriorating, or unrepaired structures, such as: fences, roofs, doors, walls and windows.
2. Publicly visible storage of scrap lumber, junk, trash or debris.
3. Publicly visible storage of abandoned, discarded or unused objects or equipment, such as automobiles, automobile parts, furniture, stoves, refrigerators, cans, containers or similar items.
4. Stagnant water or excavations, including pools or spas.
5. Any device, decoration, design, structure or vegetation that is unsightly by reason of its height, condition, or its inappropriate location.

EXHIBIT “D”

REHABILITATION/MAINTENANCE SCOPE OF WORK

[Attached.]

EXHIBIT "D"

REHABILITATION/MAINTENANCE SCOPE OF WORK

2056 N. Shaffer Street

Priority	Description of Work	Cost Estimate	Completion Date
1.	Trim mature trees along the south property line to maintain branches away from the roof of the house.	\$900	2020 (and annually as needed)
2.	Hire a licensed arborist to evaluate and trim the mature Deodar Cedar and California Pepper trees in the front yard area visible from N. Shaffer Street.	\$1,400	2020 (and annually as needed)
3.	Termite extermination: Fumigation of entire house and barn.	\$10,000	2020
4.	Paint exterior of house, including patching of knob and tube wiring holes in the exterior siding.	\$30,000	2021
5.	Replace vinyl window on the west side of the barn with a wood frame window in the same opening.	\$3,000	2021
6.	Replace north side family room window due to water + termite damage (show in pictures)	\$4000	2021
7.	Re-enforce foundation of the barn with epoxy brace bolts and rebar to provide a permanent footing for the building.	\$7,000	2021

8.	Hire a licensed structural engineer to investigate termite and water damaged foundation support beam on the house, stabilize the beam as needed, and perform a seismic retrofit of the foundation.	\$15,000	2022
9.	Repair and stabilize barn siding as needed to maintain siding as well the paint shadows from previously painted signs on the front elevation.	\$10,000	2022
10.	Install new composition shingle roof on house.	\$25,000	2023
11.	Repair/Replace structural ceiling beam supports and shiplap in family room damaged by termites	\$15,000	2023
12.	Install French drain to the south of the barn to address driveway drainage issues around the foundation that cause water to pool against the building. Including asphalt repair where work is performed.	\$17,000	2024
TOTAL		\$138,300	

EXHIBIT “E”

HISTORIC PROPERTY INVENTORY FORM (DPR 523)

[Attached.]

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial ORA
NRHP Status Code 3S

Other Listings:
Review Code: _____

Reviewer: _____

Date: _____

Page 1 of 3

*Resource Name or #:
(Assigned by Recorder)

SHAFFER_N_2056__APN_374-431-08

P1. Other Identifier: _____

*P2. Location: Not for Publication Unrestricted

*a. County: Orange and (P2b and P2c or P2d. Attach a location map as necessary.)

*b. USGS 7.5' Quad: _____ Date: _____ T _____ ; R _____ ; 1/4 of _____ 1/4 of Sec _____ ; B.M. _____

c. Address: 2056 - N SHAFFER ST, # _____ City: Orange Zip: 92865

d. UTM: (Give more than one for large and/or linear resources) Zone _____ ' _____ mE/ _____ mN

e. Other Locational Data: _____

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries. Continues on Pg.3.)

Materials: Frame - Wood siding

The large, one and one-half story house retains its original rural look because of the large trees and lot and the barn behind. This is a Craftsman house but as evidenced by the eaves and brackets, has features of an earlier period such as the steeply pitched roof. It is a rectangular house with a steep side facing gable with stick work in the peak, a large gable dormer on the left, and a lower gable projecting front and e

*P3b. Resource Attributes: (HP2), (HP4)--Single family property with barn
(List attributes and codes)

*P4. Resources Present: Building Structure Object Site Element of District District Other (Isolates, etc.)



P5b. Description of Photo: 2010
(View, date, accession #)

*P6. Date Constructed/ Age and Source:

1909

Historic Prehistoric Both

*P7. Owner and Address:

*P8: Recorded by: (Name, affiliation, and address)
AEGIS

111 Spring St.
Claremont, CA 91711

*P9. Date Recorded:

October, 1991

*P10. Survey Type: (Describe)

Intensive

*P11. Report Citation: (Cite survey report and other sources, or enter "none.")

Orange County Assessor Records (2010). AEGIS (1991) Historic Building Inventory Update. Heritage Orange County, Inc. (1982) Orange Historic Survey.

*Attachments: NONE Location Map Continuation Sheet(s) Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List): _____

DPR 523A (1/95)

*Required Information

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
BUILDING, STRUCTURE, AND OBJECT RECORD

Primary # _____
HRI # _____

*NRHP Status Code 3S

Page 2 of 3

*Resource Name or #: SHAFFER_N_2056__APN_374-431-08
(Assigned by Recorder)

B1. Historic Name: Bible Barn

B2. Common Name: _____

B3. Original Use: RES

B4. Present Use: RES

*B5. Architectural Style: Craftsman

*B6. Construction History: (Construction date, alterations, and date of alterations) Date of Construction: 1909 Historic Prehistoric Both

*B7. Moved? No Yes Unknown Date: _____ Original Location: _____

*B8. Related Features: Barn

*B9. Architect or Builder: Unknown

*B10. Significance: Theme: Architecture Area: City of Orange Property Type: Residence

Period of Significance: Early Settlement (c. 1870 - 1920) Applicable Criteria: AC

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity. Continues on Pg.4.)

Structural Integrity: Excellent Condition - No apparent change to original structure.

Site Integrity: _____

Opportunities _____

Nothing found in research except property was listed in the Plot Map 1915-1920 in the W. Louchau Tract.

B11. Additional Resource Attributes: (List attributes and codes) _____

*B12. References:

Orange Daily News. City Directories, L.A. County (1883-1884) and City of Orange Section (1901, 1907 - of the age 15 years and over). Orange Householder's Guide (1919, 1922-1930). City Directory by Streets (1919, 1922-1930). Sanborn Maps (1909, 1922, 1950, 1954). Plat Maps (1915-1920).

B13. Remarks: (Continues on Pg.3.)

Status change since 1991 Survey: None.

(Sketch Map with North arrow required.)

*B14. Evaluator: AEGIS

*Date of Evaluation: October, 1991

(This space reserved for official comments.)

DPR 523B (1/95)

*Required Information

State of California - The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
 CONTINUATION SHEET

Primary # _____
 HRI # _____
 Trinomial ORA _____

Page 3 of 3

*Resource Name or #:
 (Assigned by Recorder)

SHAFFER_N_2056__APN_374-431-08

Recorded by:

AEGIS

Date Recorded: October, 1991

111 Spring St.
 Claremont, CA 91711

Continuation Update

Years Surveyed: 1982, 1991

Description of Photo: 1991

Listed in National Register: _____

General Plan: LMDR # of Buildings: 1

Planning Zone: C-1 # of Stories: 1.5

Lot Acre: _____ # of Units: 1

Principal Building Sqft: _____

B6. Construction History (Continued from Pg.2):

B13. Remarks (Continued from Pg.2):

P3a. Description (Continued from Pg.1):



xtending beyond the house on the right to cover the large porch. This roof as well as the main roof has large eave overhangs with exposed rafters and knee braces supporting the gable overhang. The porch roof gable end is clad with clapboard and has a decorative window vent. The door is in the right canted wall under the porch. It and other openings have flat board trim. The porch roof is supported by a header beam with decorative beam projections. It rests on square posts at the corners on a solid porch rail. The porch is accessed from the side. At the rear of the property is a barn with an intersecting gable roof with shed extension on the left. It has vertical board siding and has a sign painted on the board "Bible Barn". Large trees on property.





RECORDING REQUESTED BY
AND, WHEN RECORDED,
MAIL TO:

City Clerk
City of Orange
300 E. Chapman Avenue
Orange, California, 92866

Exempt from recording fees pursuant to
Gov. Code Sections 6103 and 27383

Property Address: 1830 N. Winlock Street
APN: 374-213-02
Mills Act Contract Number: 338.0-20

**HISTORIC PROPERTY PRESERVATION AGREEMENT
(MILLS ACT CONTRACT)**

THIS HISTORIC PROPERTY PRESERVATION AGREEMENT (“Agreement”) is made and entered into as of the date of execution by the City (“Effective Date”), by and between the CITY OF ORANGE, a municipal corporation (“City”), and Shane A. Trulin and Yvonne B. Trulin, Trustees of the Trulin Family Trust dated April 2, 2013, or any Successor Trustee Thereunder (“Owner”), with reference to the following:

RECITALS

WHEREAS, the Mills Act (Government Code Section 50280 *et seq.*) provides cities with the opportunity to contract with owners of qualified historical properties whereby the owner promises to preserve and rehabilitate the property in return for a potential reduced property tax assessment; and

WHEREAS, the City of Orange has established Historic Districts consisting of the Plaza Historic District, listed in the National Register of Historic Places; the Old Towne Orange Historic District, listed in the National Register of Historic Places; the local Old Towne Orange Historic District, designated by the Orange City Council; and the local Eichler Fairhaven, Fairhills, and Fairmeadow Historic Districts, designated by the Orange City Council; and the City desires to promote the character, quality of life, and historic features of said Districts to its citizens and visitors; and

WHEREAS, the City is dedicated to the protection and stabilization of property values through maintaining and upgrading its older housing stock, through the use of incentives such as the Mills Act; and

WHEREAS, the Mills Act also has beneficial effects on City businesses, economic stability and community pride by preserving important neighborhood historic resources; and

WHEREAS, the use of the Mills Act will fulfill one of the goals of the City’s 2010 General Plan Cultural Resources Element; specifically,

“Provide incentives and expand education efforts for historic preservation” (Goal 3.0, CR-22); and

WHEREAS, Owner possesses fee simple title in and to that certain real property, together with associated structures and improvements thereon, located at 1830 N. Winlock Street in the City of Orange, County of Orange, State of California, having Assessor’s Parcel Number 374-213-02 and more specifically described in Exhibit A, which exhibit is attached hereto and made a part hereof (“Historic Property”); and

WHEREAS, the Historic Property is a qualified historical property under the Mills Act in that it is privately owned property which is not exempt from property taxation and is either: individually designated or is a contributing property within a designated district which is listed in the National Register of Historic Places, California Register of Historical Resources or Register of Historical Landmarks, California Points of Historical Interest, or is a contributing property in a locally designated historic district; and

WHEREAS, Owner, in consideration for abiding by the terms of this Agreement shall be entitled to a reassessment of valuation of the Historic Property and any corresponding reduction in property taxes pursuant to the provisions of the California Revenue and Taxation Code; and

WHEREAS, it is the City’s expectation that the Owner will use the property tax savings accrued under this Agreement for improvements to the “Historic Property” (as defined below). To that end, as a condition of renewal, the City will require a revised schedule of improvements every ten years showing a plan for improvements commensurate with the tax savings; and

WHEREAS, the City and Owner for their mutual benefit, now desire to enter into this Agreement to limit the use of the Historic Property to prevent inappropriate alterations, to ensure that characteristics of historic significance are preserved and maintained in an exemplary manner, and to carry out the purposes of Article 12 (commencing with Section 50280) of Chapter 1, Part 1, Division 1 of Title 5 of the California Government Code and Article 1.9 (commencing with Section 439) of Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code.

AGREEMENT

NOW, THEREFORE, both Owner and City, in consideration of the mutual promises, covenants and conditions contained herein and the substantial public benefits to be derived therefrom, do hereby agree as follows:

1. **APPLICABLE LAWS.** This Agreement is made pursuant to California Government Code Sections 50280 through 50290 and Article 1.9 (commencing with Section 439) of Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code and is subject to all of the provisions of those statutes. To the extent any of the provisions in this Agreement are inconsistent with the aforementioned provisions of the Government and Revenue and Taxation Codes, they are superseded by those Code Sections.

2. ASSESSMENT OF VALUATION. Property tax relief afforded to Owner pursuant to Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code will be determined solely by the Orange County Office of the Assessor. City makes no representations regarding the actual tax savings any person may realize by entering into this Agreement.
3. PRESERVATION OF PROPERTY. Owner agrees to preserve and maintain the Historic Property and its character defining features. Character defining features include, but are not necessarily limited to, the general architectural form, style, materials, design, scale, details, mass, roofline and other aspects of the appearance of the exterior of the Historic Property. For purposes of identification of the Historic Property, the City's Official Historic Property Inventory Form (DPR 523) is attached as Exhibit E.

The *Secretary of the Interior's Standards for Rehabilitation* (Exhibit B) and City's minimum maintenance standards (Exhibit C), attached hereto and incorporated herein by reference, shall constitute the minimum standards and conditions for preservation and rehabilitation of the Historic Property, and shall apply to the Historic Property throughout the term of this Agreement. Owner shall, where necessary, rehabilitate the Historic Property to conform to the rules and regulations of the Office of Historic Preservation of the California Department of Parks and Recreation, the *Secretary of the Interior's Standards for Rehabilitation*, the California Historical Building Code, and the City of Orange's Historic Preservation Design Standards for Old Towne and Eichler Design Standards.

As consideration for the City to enter into this Agreement, the Owner agrees, at its own cost and expense, to complete, or cause to be completed, the work or improvements described in Exhibit D within the times established therefore in Exhibit D. The Owner shall secure any and all permits which may be required by the City or any other governmental agency affected by the construction of the work or improvements. The Owner accepts responsibility for and shall be responsible for identification of and compliance with all applicable laws pertaining to the construction and installation of the work or improvements described on Exhibit D and the contract or contracts pertaining thereto. The Owner will neither seek to hold nor hold the City liable for, and will hold the City harmless with respect to, any consequences of any failure by the Owner to correctly determine the applicability of any such requirements to any contract he/she/they enter into.

In addition to the foregoing, the Owner hereby agrees to and will comply with all applicable local, state, and federal statutes, regulations, rules, codes (including building codes), ordinances, and other requirements of governmental authorities now or hereafter in effect ("Applicable Laws") pertaining to the use of the Historic Property. Owner must give the City immediate written notice on Owner's becoming aware that the use or condition of the Historic Property is in violation of any Applicable Laws.

4. INSPECTIONS AND ANNUAL REPORTING. Owner agrees to permit the examination, by prior appointment, of the interior and exterior of the Historic Property by the City at a minimum every five (5) years during the Agreement term to determine Owner's compliance with the terms and provisions of this Agreement. Owner agrees to provide the City with a report as to the status of the Historic Property annually within thirty (30) days following each anniversary of the

Effective Date of this Agreement. The annual report shall provide substantiation reasonably satisfactory to the City's Historic Preservation Planner or in his/her absence the Director of Community Development that Owner has completed the work required by Exhibit D for the twelve month period preceding each anniversary of this Agreement, and whether the Historic Property has undergone any changed conditions, and whether Owner has received any public funds from other sources designated for the preservation or maintenance of the Historic Property and from whom such funds have been received.

5. PAYMENT OF ANNUAL FEE. The Owner shall pay the City an annual fee to cover administrative costs associated with this Agreement including but not limited to the reasonable cost of monitoring the Historic Property, performing required inspections, and enforcement of the Agreement. Said fee shall be payable to the City of Orange and shall be remitted to the Planning Division upon demand and prior to any required inspection. The amount of the annual inspection fee shall be established by the City and may be revised from time to time, which fee shall be set forth in the City's Master Schedule of Fees and Charges. Failure to pay the required fee within 45 days of the due date will be considered a willful breach of this Agreement and may result in cancellation of the Agreement in accordance with the cancellation terms detailed below.
6. TERM. The term of this Agreement is for a period of ten (10) years. The initial term of this Agreement shall be from September 8, 2020 to and including September 8, 2030.
7. AUTOMATIC RENEWAL. On each yearly anniversary of the Effective Date of this Agreement ("renewal date"), one year shall be added automatically to the initial term of this Agreement, unless notice of non-renewal is given as provided in this Agreement.
8. EFFECT OF OUTSIDE FUNDS. If Owner receives funds designated for the preservation or maintenance of the Historic Property from any other public agency, this Agreement shall not be renewed except upon the vote of the City Council.
9. NOTICE OF NONRENEWAL. If in any year either the Owner or City desires not to renew this Agreement, that party shall serve written notice of nonrenewal to the other party in advance of the annual renewal date. Unless the notice is served by Owner to City at least ninety (90) days, or by City to Owner at least sixty (60) days prior to the renewal date, one year shall automatically be added to the term of the Agreement. Within fifteen (15) days of receipt by Owner of a notice of nonrenewal from the City, Owner may make a written protest. Upon receipt of such a protest the City Council shall set a hearing prior to the expiration of the renewal date of this Agreement or toll the renewal date until such hearing can reasonably held. Owner may furnish the City Council with any information which the Owner deems relevant; and shall furnish the City Council with any information it may require. At any time prior to the renewal date, City may withdraw its notice of nonrenewal.
10. EFFECT OF NOTICE NOT TO RENEW. If in any year either party serves notice of intent not to renew this Agreement, this Agreement shall remain in effect for the balance of the period remaining since the original execution date if not yet renewed, or the last renewal date of the Agreement, as the case may be.

11. UPDATE OF IMPROVEMENT SCHEDULE. At least ninety (90) days prior to the tenth (10th) anniversary of the Effective Date of this Agreement, and ninety (90) days prior to every tenth (10th) anniversary thereafter, Owner shall provide City with an updated schedule of rehabilitation maintenance items for the City's review and approval. Such updated schedule shall contain a list of proposed improvements and/or revisions to be accomplished during the next succeeding ten (10) years of the Agreement and a schedule for the construction of such improvements. Within thirty (30) days after the City's receipt of said updated schedule, the City's Director of Community Development shall either approve or disapprove such proposed schedule of proposed improvements, or shall respond in writing by stating what further information, if any, the City reasonably requires in order to determine the request complete and determine whether or not to grant the requested approval. Upon receipt of such a response, the Owner shall promptly furnish to the City such further information as may be reasonably requested.

From time to time, at the request of the City's Director of Community Development (or his/her authorized representative), the Owner shall meet and confer with the City's Planner for Historic Preservation or in his/her absence the Director of Community Development (or his/her designee) regarding matters arising hereunder with respect to the work and improvements and the progress in constructing the same.

12. INDEPENDENT ADVICE OF COUNSEL. The Owner, and each of them, represent and declare that in executing this Agreement he/she/they have relied solely upon his/her/their own judgment, belief and knowledge, and the advice and recommendations of his/her/their own independently selected counsel, concerning the nature, extent and duration of his/her/their rights and claims, and that he/she/they have not been influenced to any extent whatsoever in executing the same by the City or by any person representing the City.

13. ENFORCEMENT OF AGREEMENT. If the City determines the owner has breached any of the conditions of the Agreement provided for or has allowed the property to deteriorate to the point it no longer meets the standards for a qualified historical property, the City shall either cancel the Agreement or bring any action in court necessary to enforce the Agreement including, but not limited to an action to enforce the Agreement by specific performance to cure, correct or remedy any breach of the terms of this Agreement, to recover damages for any breach, or to obtain any other remedy consistent with the purpose of this Agreement. In the event of a default under the provisions of this Agreement by Owner, City shall give written notice to Owner specifying the alleged grounds for the default. Said notice shall be given by registered or certified mail addressed to the address stated in this Agreement. If such violation(s) is not corrected to the reasonable satisfaction of the City within thirty (30) days from the receipt of the notice of violation, or within such reasonable time as may be required to cure the breach or default, provided that acts to cure, correct or remedy such breach or default are commenced within thirty (30) days and thereafter diligently pursued to completion, then City may, without further notice, institute legal action.

Except as otherwise expressly stated in this Agreement, the rights and remedies of the City are cumulative, and the exercise by the City of one or more of such rights or remedies shall not preclude the exercise by it, at the same or different times, of any other rights or remedies for the same default or any other default by the Owner. Any failure or delay by the City in asserting any

of its right and remedies as to a breach of any of the covenants, conditions or agreements set forth herein shall not operate as a waiver of such breach or of any such rights or remedies, or deprive the City of its right to institute and maintain any actions or proceedings which it may deem necessary to protect, assert or enforce such rights or remedies. A waiver by the City of a breach shall not be construed as a waiver of any succeeding breach of the same or other covenants, conditions or agreements set forth in this Agreement.

14. CANCELLATION. In lieu of bringing an action to enforce the Agreement City may cancel this Agreement if City determines Owner has breached any of the conditions or covenants of this Agreement or has allowed the Historic Property to deteriorate to the point that it no longer meets the standards for a qualified historical property. City may also cancel this Agreement if it determines Owner has failed to rehabilitate the Historic Property in the manner specified in this Agreement.
15. NOTICE OF CANCELLATION. This Agreement cannot be canceled until after City has given notice and has held a public hearing as required by Government Code Section 50285. Notice of the hearing shall be mailed to the last known address of each owner of property within 300 feet of the Historic Property and shall be published in accordance with Government Code Section 6061.
16. CANCELLATION FEE. If City cancels this Agreement in accordance with Section 15 above, Owner shall pay a cancellation fee of twelve and one-half percent (12-1/2%) of the current fair market value of the Historic Property at the time of cancellation. The current fair market value shall be determined by the County Assessor as though the Historic Property were free of the restriction on the Historic Property imposed pursuant to this Agreement. The cancellation fee shall be paid to the County Auditor at such time and in such manner as the County Auditor shall prescribe.
17. NOTICES. All notices required by or provided for in the Agreement shall be given in writing and may be mailed or delivered in person at the address of the respective parties as specified below or at any other address as may be later specified by the parties. Deposit of notice in the mail, postage prepaid, shall be deemed receipt of the notice.

City of Orange
Attn.: City Clerk
300 E. Chapman Avenue
Orange, CA 92866

Shane Trulin and Yvonne Trulin
1830 N. Winlock Street
Orange, CA 92866

18. NO COMPENSATION. Owner shall not receive any payment from the City in consideration of the obligations imposed under this Agreement. The Owner acknowledges and agrees that the consideration for the execution of this Agreement is the substantial public benefit to be derived therefrom and the advantage that will accrue to Owner as a result of the effect upon the assessed value of the Historic Property on account of the restrictions on the use and preservation of the Historic Property.

19. REMEDY IF AGREEMENT HELD NOT ENFORCEABLE. In the event it is finally determined this Agreement does not constitute an enforceable restriction within the meaning of the applicable provisions of the California Government Code and the California Revenue and Taxation Code, except for an unenforceability arising from the cancellation or nonrenewal of this Agreement, then this Agreement shall be null and void and without further effect and the Historic Property subject to this Agreement shall from that time be free from any restriction whatsoever under this Agreement without any payment or further act of the parties to this Agreement.

20. ACQUISITION OF PROPERTY BY EMINENT DOMAIN; CANCELLATION OF CONTRACT; INAPPLICABILITY TO DETERMINATION OF VALUE. In the event that the Historic Property is acquired in whole or part by eminent domain or other acquisition by any entity authorized to exercise the power of eminent domain, and the acquisition is determined by the City to frustrate the purpose of the Agreement, the Agreement shall be canceled and no fee shall be imposed under Section 17, above. The Agreement shall be deemed null and void for all purposes of determining the value of the Historic Property so acquired.

If, subsequent to the filing of an action in eminent domain, the proposed condemnation is abandoned by the condemning agency, the restrictions on the use of the Historic Property included in this Agreement shall, without further agreement of the parties, be reinstated and the terms of this Agreement shall continue in full force and effect.

21. EFFECT OF AGREEMENT. None of the terms, provisions or conditions of this Agreement shall be deemed to create a partnership between the parties hereto and any of their heirs, successors or assigns, nor shall such terms, provisions or conditions cause the parties hereto to be considered joint venturers or members of any joint enterprise.

22. SUCCESSORS AND ASSIGNS. This Agreement is binding upon and shall inure to the benefit of all successors in interest of the Owner, regardless of the tax exempt status of any subsequent owner. A successor in interest shall have the same rights and obligations under this Agreement as the original owner who entered into this Agreement.

23. REQUIREMENTS RELATED TO TRANSFER OF HISTORIC PROPERTY. In the event of any sale, transfer, assignment or conveyance of the Historic Property ("Transfer"), the Owner agrees that, at least thirty (30) days prior to such Transfer, it shall give written notice to the City of such proposed Transfer, including the name(s) of the transferee(s). In addition, the Owner and the proposed transferee(s) shall enter into and deliver to the City through the escrow for the Transfer of the Historic Property an assignment and assumption agreement in a form satisfactory to the City's Attorney or such other evidence as may be satisfactory to the City that the transferee(s) has (have) assumed the Owner's obligations set forth in this Agreement. Upon the Transfer of the Historic Property and the assumption of the obligations hereunder by the transferee(s), the Owner's liability for performance shall be terminated as to any obligation to be performed hereunder after the date of such Transfer.

24. RECORDATION. City shall record a copy of this Agreement with the Office of the County Recorder of the County of Orange.

25. AMENDMENTS. This Agreement may be amended, in whole or in part, only by a written and recorded instrument executed by the parties hereto, except that the Director of Community Development is authorized to amend the list of required projects in Exhibit D.
26. COUNTERPARTS. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original and all of which shall constitute one and the same agreement with the same effect as if all parties had signed the same signature page. Any signature page of this Agreement may be detached from any counterpart of this Agreement and re-attached to any other counterpart of this Agreement identical in form hereto but having attached to it one or more additional signature pages.
27. ADMINISTRATION. This Agreement shall be administered by the City's Director of Community Development (or his/her designated representative) following approval of this Agreement by the City. The City shall maintain authority of this Agreement through the City's Director of Community Development (or his/her authorized representative). The City's Director of Community Development shall have the authority to issue interpretations, waive provisions and enter into amendments of this Agreement on behalf of the City so long as such actions do not change the uses permitted on the Historic Property or the purpose of this Agreement. Such amendments may include extensions of time or amendments to the projects specified in Exhibit D. All other waivers or amendments shall require the written approval and consent of the City Council.

[Remainder of page intentionally left blank; signatures on next page]

IN WITNESS WHEREOF, the City and the Owner have executed this Agreement.

“OWNER”

Dated: _____, 2020

Shane A. Trulin, Trustee of the Trulin Family Trust
dated April 2, 2013

Dated: _____, 2020

Yvonne B. Trulin, Trustee of the Trulin Family Trust
dated April 2, 2013

“CITY”

CITY OF ORANGE, a municipal corporation

Dated: _____, 2020

By: _____
Mark A. Murphy
Mayor

ATTEST:

APPROVED AS TO FORM:

Pamela Coleman
City Clerk

Mary E. Binning
Senior Assistant City Attorney

ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of _____

On _____ before me, _____,
a Notary Public in and for the State of California, personally appeared _____

_____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

EXHIBIT "A"

LEGAL DESCRIPTION OF HISTORIC PROPERTY

REAL PROPERTY IN THE CITY OF ORANGE, COUNTY OF ORANGE, STATE OF CALIFORNIA, DESCRIBED AS:

Lot 109 of Tract 3978, in the City of Orange, County of Orange, State of California as per map recorded in Book 140, Page(s) 17, 18 and 19, of Miscellaneous Maps in the office of the County Recorder of said County.

[APN 374-213-02]

EXHIBIT "B"

SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION

1. Every reasonable effort shall be made to provide a compatible use for a property, which requires a minimal alteration of the building structure, or site and its environment, or to use a property for its originally intended purpose.
2. The distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.
3. All buildings, structures, and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.
4. Changes which may have taken place in the course of time are evidence of the history and development of a building, structure or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.
5. Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure or site shall be treated with sensitivity.
6. Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.
7. The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.
8. Every reasonable effort shall be made to protect and preserve archeological resources affected by, or adjacent to, any project.
9. Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with the size, scale, color, material and character of the property, neighborhood or environment.
10. Wherever possible, new additions or alterations to structures shall be done in such a manner that, if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.

EXHIBIT “C”

CITY OF ORANGE HISTORIC PROPERTY **MAINTENANCE STANDARDS**

All buildings, structures, yards and other improvements shall be maintained in a manner which does not detract from the appearance of the immediate neighborhood. The following conditions are prohibited:

1. Dilapidated, deteriorating, or unrepaired structures, such as: fences, roofs, doors, walls and windows.
2. Publicly visible storage of scrap lumber, junk, trash or debris.
3. Publicly visible storage of abandoned, discarded or unused objects or equipment, such as automobiles, automobile parts, furniture, stoves, refrigerators, cans, containers or similar items.
4. Stagnant water or excavations, including pools or spas.
5. Any device, decoration, design, structure or vegetation that is unsightly by reason of its height, condition, or its inappropriate location.

EXHIBIT “D”

REHABILITATION/MAINTENANCE SCOPE OF WORK

[Attached.]

EXHIBIT "D"

REHABILITATION/MAINTENANCE SCOPE OF WORK

1830 N. Winlock Street

Priority	Description of Work	Cost Estimate	Completion Date
1.	Repair of dry rot termite damage to eaves, rafters, trims, and beams as specified in the termite inspection report dated January 6, 2020.	\$2,000	2021
2.	Foundation repair due to washing machine water line leak, including re-piping of the water line.	\$3,000	2023
3.	Reroute surface mounted irrigation line into the wall on the west elevation, including patching of siding as needed. Kitchen plumbing cleanout.	\$2,500	2023
4.	Paint exterior of the house.	\$8,500	2023
5.	Apply PVC coating on existing foam roof system as part of required regular maintenance	\$5,000	2024
6.	Repair or replacement of sun/weather damaged siding on north and south elevations with Eichler tongue and groove plywood siding.	\$4,000	2025
7.	Replacement of four single-pane Arcadia sliding doors in the atrium and on the rear elevation of the house with new compatible tempered glass doors in compliance with the Orange Eichler Design Standards.	\$12,000	2027
8.	Apply PVC coating on existing foam roof system as part of required regular maintenance.	\$5,000	2029
9.	Yearly maintenance of boiler for radiant heat floor system	\$1,500	2030
10.	Paint exterior of house.	\$8,500	2030
TOTAL		\$52,000	

EXHIBIT “E”

HISTORIC PROPERTY INVENTORY FORM (DPR 523)

[Attached.]

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial ORA
NRHP Status Code 3D

Other Listings: _____
Review Code: _____ Reviewer: _____ Date: _____

Page 1 of 3

*Resource Name or #: WINLOCK_N_1830__APN_374-213-02
(Assigned by Recorder)

P1. Other Identifier: Fairmeadow Tract

*P2. Location: Not for Publication Unrestricted

*a. County: Orange and (P2b and P2c or P2d. Attach a location map as necessary.)

*b. USGS 7.5' Quad: _____ Date: _____ T _____; R _____; 1/4 of _____ 1/4 of Sec _____; B.M. _____

c. Address: 1830 - N WINLOCK ST, # _____ City: Orange Zip: 92865

d. UTM: (Give more than one for large and/or linear resources) Zone _____ ' _____ mE/ _____ mN

e. Other Locational Data:

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries. Continues on Pg.3.)

Materials:

Model LA-24; With clerestory roof reversed to face the street.

*P3b. Resource Attributes: (HP2)--Single family property
(List attributes and codes)

*P4. Resources Present: Building Structure Object Site Element of District District Other (Isolates, etc.)

P5b. Description of Photo: 2005
(View, date, accession #)



*P6. Date Constructed/ Age and Source:

1964 c

Historic Prehistoric Both

*P7. Owner and Address:

*P8: Recorded by: (Name, affiliation, and address)

Marissa Moshier, Historic
Preservation Planner

City of Orange
300 E. Chapman Ave.
Orange, CA 92866

*P9. Date Recorded:

June 2015

*P10. Survey Type: (Describe)

Reconnaissance

*P11. Report Citation: (Cite survey report and other sources, or enter "none.")

Orange County Assessor Records (2005). Chattel Architecture (2005)
Historic Resources Survey.

*Attachments: NONE Location Map Continuation Sheet(s) Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List): _____

DPR 523A (1/95)

*Required Information

Page 2 of 3

*Resource Name or #: WINLOCK_N_1830__APN_374-213-02
(Assigned by Recorder)

B1. Historic Name: Unknown

B2. Common Name: _____

B3. Original Use: RES B4. Present Use: RES

*B5. Architectural Style: Mid-Century Modern

*B6. Construction History: (Construction date, alterations, and date of alterations) Date of Construction: 1964 Historic Prehistoric Both
Garage doors replaced.

*B7. Moved? No Yes Unknown Date: _____ Original Location: _____

*B8. Related Features: _____

*B9. Architect or Builder: Eichler Homes

*B10. Significance: Theme: Architecture Area: City of Orange Property Type: Residence

Period of Significance: Eichler Tract (c. 1959 - 1965) Applicable Criteria: C

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity. Continues on Pg.4.)

Structural Integrity: Excellent Condition - Low level of alteration as of 2005.

Site Integrity: _____

Opportunities _____

B11. Additional Resource Attributes: (List attributes and codes) _____

*B12. References: _____

Orange Daily News. Eichler Tract Brochures and miscellaneous Eichler materials from the Orange Public Library.

B13. Remarks: (Continues on Pg.3.)

Status change since 1991 Survey: Not previously surveyed.

(Sketch Map with North arrow required.)

*B14. Evaluator: Robert Chattel

*Date of Evaluation: September 2005

(This space reserved for official comments.)

DPR 523B (1/95)

*Required Information

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # _____
HRI # _____
Trinomial ORA

Page 3 of 3

*Resource Name or #:
(Assigned by Recorder)

WINLOCK_N_1830__APN_374-213-02

Recorded by:

Marissa Moshier, Historic Preservation Planner
City of Orange
300 E. Chapman Ave.
Orange, CA 92866

Date Recorded: June 2015

Continuation Update

Years Surveyed:

2005, 2015

Description of Photo:

Listed in National Register:

General Plan:

LDR

of Buildings:

1

Planning Zone:

R-1-8

of Stories:

1

Lot Acre:

0.1809

of Units:

1

Principal Building Sqft:

2176

B6. Construction History (Continued from Pg.2):

B13. Remarks (Continued from Pg.2):

P3a. Description (Continued from Pg.1):

EXHIBIT “F”

CERTIFICATION OF TRUST

[Attached.]



RECORDING REQUESTED BY
AND, WHEN RECORDED,
MAIL TO:

City Clerk
City of Orange
300 E. Chapman Avenue
Orange, California, 92866

Exempt from recording fees pursuant to
Gov. Code Sections 6103 and 27383

Property Address: 883 S. Oakwood Street
APN: 094-122-19
Mills Act Contract Number: 339.0-20

**HISTORIC PROPERTY PRESERVATION AGREEMENT
(MILLS ACT CONTRACT)**

THIS HISTORIC PROPERTY PRESERVATION AGREEMENT (“Agreement”) is made and entered into as of the date of execution by the City (“Effective Date”), by and between the CITY OF ORANGE, a municipal corporation (“City”), and Rolly Devore, an unmarried man (“Owner”), with reference to the following:

RECITALS

WHEREAS, the Mills Act (Government Code Section 50280 *et seq.*) provides cities with the opportunity to contract with owners of qualified historical properties whereby the owner promises to preserve and rehabilitate the property in return for a potential reduced property tax assessment; and

WHEREAS, the City of Orange has established Historic Districts consisting of the Plaza Historic District, listed in the National Register of Historic Places; the Old Towne Orange Historic District, listed in the National Register of Historic Places; the local Old Towne Orange Historic District, designated by the Orange City Council; and the local Eichler Fairhaven, Fairhills, and Fairmeadow Historic Districts, designated by the Orange City Council; and the City desires to promote the character, quality of life, and historic features of said Districts to its citizens and visitors; and

WHEREAS, the City is dedicated to the protection and stabilization of property values through maintaining and upgrading its older housing stock, through the use of incentives such as the Mills Act; and

WHEREAS, the Mills Act also has beneficial effects on City businesses, economic stability and community pride by preserving important neighborhood historic resources; and

WHEREAS, the use of the Mills Act will fulfill one of the goals of the City’s 2010 General Plan Cultural Resources Element; specifically,

“Provide incentives and expand education efforts for historic preservation” (Goal 3.0, CR-22); and

WHEREAS, Owner possesses fee simple title in and to that certain real property, together with associated structures and improvements thereon, located at 883 S. Oakwood Street in the City of Orange, County of Orange, State of California, having Assessor’s Parcel Number 094-122-19 and more specifically described in Exhibit A, which exhibit is attached hereto and made a part hereof (“Historic Property”); and

WHEREAS, the Historic Property is a qualified historical property under the Mills Act in that it is privately owned property which is not exempt from property taxation and is either: individually designated or is a contributing property within a designated district which is listed in the National Register of Historic Places, California Register of Historical Resources or Register of Historical Landmarks, California Points of Historical Interest, or is a contributing property in a locally designated historic district; and

WHEREAS, Owner, in consideration for abiding by the terms of this Agreement shall be entitled to a reassessment of valuation of the Historic Property and any corresponding reduction in property taxes pursuant to the provisions of the California Revenue and Taxation Code; and

WHEREAS, it is the City’s expectation that the Owner will use the property tax savings accrued under this Agreement for improvements to the “Historic Property” (as defined below). To that end, as a condition of renewal, the City will require a revised schedule of improvements every ten years showing a plan for improvements commensurate with the tax savings; and

WHEREAS, the City and Owner for their mutual benefit, now desire to enter into this Agreement to limit the use of the Historic Property to prevent inappropriate alterations, to ensure that characteristics of historic significance are preserved and maintained in an exemplary manner, and to carry out the purposes of Article 12 (commencing with Section 50280) of Chapter 1, Part 1, Division 1 of Title 5 of the California Government Code and Article 1.9 (commencing with Section 439) of Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code.

AGREEMENT

NOW, THEREFORE, both Owner and City, in consideration of the mutual promises, covenants and conditions contained herein and the substantial public benefits to be derived therefrom, do hereby agree as follows:

1. **APPLICABLE LAWS.** This Agreement is made pursuant to California Government Code Sections 50280 through 50290 and Article 1.9 (commencing with Section 439) of Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code and is subject to all of the provisions of those statutes. To the extent any of the provisions in this Agreement are inconsistent with the aforementioned provisions of the Government and Revenue and Taxation Codes, they are superseded by those Code Sections.

2. ASSESSMENT OF VALUATION. Property tax relief afforded to Owner pursuant to Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code will be determined solely by the Orange County Office of the Assessor. City makes no representations regarding the actual tax savings any person may realize by entering into this Agreement.
3. PRESERVATION OF PROPERTY. Owner agrees to preserve and maintain the Historic Property and its character defining features. Character defining features include, but are not necessarily limited to, the general architectural form, style, materials, design, scale, details, mass, roofline and other aspects of the appearance of the exterior of the Historic Property. For purposes of identification of the Historic Property, the City's Official Historic Property Inventory Form (DPR 523) is attached as Exhibit E.

The *Secretary of the Interior's Standards for Rehabilitation* (Exhibit B) and City's minimum maintenance standards (Exhibit C), attached hereto and incorporated herein by reference, shall constitute the minimum standards and conditions for preservation and rehabilitation of the Historic Property, and shall apply to the Historic Property throughout the term of this Agreement. Owner shall, where necessary, rehabilitate the Historic Property to conform to the rules and regulations of the Office of Historic Preservation of the California Department of Parks and Recreation, the *Secretary of the Interior's Standards for Rehabilitation*, the California Historical Building Code, and the City of Orange's Historic Preservation Design Standards for Old Towne and Eichler Design Standards.

As consideration for the City to enter into this Agreement, the Owner agrees, at its own cost and expense, to complete, or cause to be completed, the work or improvements described in Exhibit D within the times established therefore in Exhibit D. The Owner shall secure any and all permits which may be required by the City or any other governmental agency affected by the construction of the work or improvements. The Owner accepts responsibility for and shall be responsible for identification of and compliance with all applicable laws pertaining to the construction and installation of the work or improvements described on Exhibit D and the contract or contracts pertaining thereto. The Owner will neither seek to hold nor hold the City liable for, and will hold the City harmless with respect to, any consequences of any failure by the Owner to correctly determine the applicability of any such requirements to any contract he/she/they enter into.

In addition to the foregoing, the Owner hereby agrees to and will comply with all applicable local, state, and federal statutes, regulations, rules, codes (including building codes), ordinances, and other requirements of governmental authorities now or hereafter in effect ("Applicable Laws") pertaining to the use of the Historic Property. Owner must give the City immediate written notice on Owner's becoming aware that the use or condition of the Historic Property is in violation of any Applicable Laws.

4. INSPECTIONS AND ANNUAL REPORTING. Owner agrees to permit the examination, by prior appointment, of the interior and exterior of the Historic Property by the City at a minimum every five (5) years during the Agreement term to determine Owner's compliance with the terms and provisions of this Agreement. Owner agrees to provide the City with a report as to the status of the Historic Property annually within thirty (30) days following each anniversary of the

Effective Date of this Agreement. The annual report shall provide substantiation reasonably satisfactory to the City's Historic Preservation Planner or in his/her absence the Director of Community Development that Owner has completed the work required by Exhibit D for the twelve month period preceding each anniversary of this Agreement, and whether the Historic Property has undergone any changed conditions, and whether Owner has received any public funds from other sources designated for the preservation or maintenance of the Historic Property and from whom such funds have been received.

5. PAYMENT OF ANNUAL FEE. The Owner shall pay the City an annual fee to cover administrative costs associated with this Agreement including but not limited to the reasonable cost of monitoring the Historic Property, performing required inspections, and enforcement of the Agreement. Said fee shall be payable to the City of Orange and shall be remitted to the Planning Division upon demand and prior to any required inspection. The amount of the annual inspection fee shall be established by the City and may be revised from time to time, which fee shall be set forth in the City's Master Schedule of Fees and Charges. Failure to pay the required fee within 45 days of the due date will be considered a willful breach of this Agreement and may result in cancellation of the Agreement in accordance with the cancellation terms detailed below.
6. TERM. The term of this Agreement is for a period of ten (10) years. The initial term of this Agreement shall be from September 8, 2020 to and including September 8, 2030.
7. AUTOMATIC RENEWAL. On each yearly anniversary of the Effective Date of this Agreement ("renewal date"), one year shall be added automatically to the initial term of this Agreement, unless notice of non-renewal is given as provided in this Agreement.
8. EFFECT OF OUTSIDE FUNDS. If Owner receives funds designated for the preservation or maintenance of the Historic Property from any other public agency, this Agreement shall not be renewed except upon the vote of the City Council.
9. NOTICE OF NONRENEWAL. If in any year either the Owner or City desires not to renew this Agreement, that party shall serve written notice of nonrenewal to the other party in advance of the annual renewal date. Unless the notice is served by Owner to City at least ninety (90) days, or by City to Owner at least sixty (60) days prior to the renewal date, one year shall automatically be added to the term of the Agreement. Within fifteen (15) days of receipt by Owner of a notice of nonrenewal from the City, Owner may make a written protest. Upon receipt of such a protest the City Council shall set a hearing prior to the expiration of the renewal date of this Agreement or toll the renewal date until such hearing can reasonably held. Owner may furnish the City Council with any information which the Owner deems relevant; and shall furnish the City Council with any information it may require. At any time prior to the renewal date, City may withdraw its notice of nonrenewal.
10. EFFECT OF NOTICE NOT TO RENEW. If in any year either party serves notice of intent not to renew this Agreement, this Agreement shall remain in effect for the balance of the period remaining since the original execution date if not yet renewed, or the last renewal date of the Agreement, as the case may be.

11. UPDATE OF IMPROVEMENT SCHEDULE. At least ninety (90) days prior to the tenth (10th) anniversary of the Effective Date of this Agreement, and ninety (90) days prior to every tenth (10th) anniversary thereafter, Owner shall provide City with an updated schedule of rehabilitation maintenance items for the City's review and approval. Such updated schedule shall contain a list of proposed improvements and/or revisions to be accomplished during the next succeeding ten (10) years of the Agreement and a schedule for the construction of such improvements. Within thirty (30) days after the City's receipt of said updated schedule, the City's Director of Community Development shall either approve or disapprove such proposed schedule of proposed improvements, or shall respond in writing by stating what further information, if any, the City reasonably requires in order to determine the request complete and determine whether or not to grant the requested approval. Upon receipt of such a response, the Owner shall promptly furnish to the City such further information as may be reasonably requested.

From time to time, at the request of the City's Director of Community Development (or his/her authorized representative), the Owner shall meet and confer with the City's Planner for Historic Preservation or in his/her absence the Director of Community Development (or his/her designee) regarding matters arising hereunder with respect to the work and improvements and the progress in constructing the same.

12. INDEPENDENT ADVICE OF COUNSEL. The Owner, and each of them, represent and declare that in executing this Agreement he/she/they have relied solely upon his/her/their own judgment, belief and knowledge, and the advice and recommendations of his/her/their own independently selected counsel, concerning the nature, extent and duration of his/her/their rights and claims, and that he/she/they have not been influenced to any extent whatsoever in executing the same by the City or by any person representing the City.

13. ENFORCEMENT OF AGREEMENT. If the City determines the owner has breached any of the conditions of the Agreement provided for or has allowed the property to deteriorate to the point it no longer meets the standards for a qualified historical property, the City shall either cancel the Agreement or bring any action in court necessary to enforce the Agreement including, but not limited to an action to enforce the Agreement by specific performance to cure, correct or remedy any breach of the terms of this Agreement, to recover damages for any breach, or to obtain any other remedy consistent with the purpose of this Agreement. In the event of a default under the provisions of this Agreement by Owner, City shall give written notice to Owner specifying the alleged grounds for the default. Said notice shall be given by registered or certified mail addressed to the address stated in this Agreement. If such violation(s) is not corrected to the reasonable satisfaction of the City within thirty (30) days from the receipt of the notice of violation, or within such reasonable time as may be required to cure the breach or default, provided that acts to cure, correct or remedy such breach or default are commenced within thirty (30) days and thereafter diligently pursued to completion, then City may, without further notice, institute legal action.

Except as otherwise expressly stated in this Agreement, the rights and remedies of the City are cumulative, and the exercise by the City of one or more of such rights or remedies shall not preclude the exercise by it, at the same or different times, of any other rights or remedies for the same default or any other default by the Owner. Any failure or delay by the City in asserting any

of its right and remedies as to a breach of any of the covenants, conditions or agreements set forth herein shall not operate as a waiver of such breach or of any such rights or remedies, or deprive the City of its right to institute and maintain any actions or proceedings which it may deem necessary to protect, assert or enforce such rights or remedies. A waiver by the City of a breach shall not be construed as a waiver of any succeeding breach of the same or other covenants, conditions or agreements set forth in this Agreement.

14. CANCELLATION. In lieu of bringing an action to enforce the Agreement City may cancel this Agreement if City determines Owner has breached any of the conditions or covenants of this Agreement or has allowed the Historic Property to deteriorate to the point that it no longer meets the standards for a qualified historical property. City may also cancel this Agreement if it determines Owner has failed to rehabilitate the Historic Property in the manner specified in this Agreement.
15. NOTICE OF CANCELLATION. This Agreement cannot be canceled until after City has given notice and has held a public hearing as required by Government Code Section 50285. Notice of the hearing shall be mailed to the last known address of each owner of property within 300 feet of the Historic Property and shall be published in accordance with Government Code Section 6061.
16. CANCELLATION FEE. If City cancels this Agreement in accordance with Section 15 above, Owner shall pay a cancellation fee of twelve and one-half percent (12-1/2%) of the current fair market value of the Historic Property at the time of cancellation. The current fair market value shall be determined by the County Assessor as though the Historic Property were free of the restriction on the Historic Property imposed pursuant to this Agreement. The cancellation fee shall be paid to the County Auditor at such time and in such manner as the County Auditor shall prescribe.
17. NOTICES. All notices required by or provided for in the Agreement shall be given in writing and may be mailed or delivered in person at the address of the respective parties as specified below or at any other address as may be later specified by the parties. Deposit of notice in the mail, postage prepaid, shall be deemed receipt of the notice.

City of Orange
Attn.: City Clerk
300 E. Chapman Avenue
Orange, CA 92866

Rolly Devore
883 S. Oakwood Street
Orange, CA 92869

18. NO COMPENSATION. Owner shall not receive any payment from the City in consideration of the obligations imposed under this Agreement. The Owner acknowledges and agrees that the consideration for the execution of this Agreement is the substantial public benefit to be derived therefrom and the advantage that will accrue to Owner as a result of the effect upon the assessed value of the Historic Property on account of the restrictions on the use and preservation of the Historic Property.

19. REMEDY IF AGREEMENT HELD NOT ENFORCEABLE. In the event it is finally determined this Agreement does not constitute an enforceable restriction within the meaning of the applicable provisions of the California Government Code and the California Revenue and Taxation Code, except for an unenforceability arising from the cancellation or nonrenewal of this Agreement, then this Agreement shall be null and void and without further effect and the Historic Property subject to this Agreement shall from that time be free from any restriction whatsoever under this Agreement without any payment or further act of the parties to this Agreement.

20. ACQUISITION OF PROPERTY BY EMINENT DOMAIN; CANCELLATION OF CONTRACT; INAPPLICABILITY TO DETERMINATION OF VALUE. In the event that the Historic Property is acquired in whole or part by eminent domain or other acquisition by any entity authorized to exercise the power of eminent domain, and the acquisition is determined by the City to frustrate the purpose of the Agreement, the Agreement shall be canceled and no fee shall be imposed under Section 17, above. The Agreement shall be deemed null and void for all purposes of determining the value of the Historic Property so acquired.

If, subsequent to the filing of an action in eminent domain, the proposed condemnation is abandoned by the condemning agency, the restrictions on the use of the Historic Property included in this Agreement shall, without further agreement of the parties, be reinstated and the terms of this Agreement shall continue in full force and effect.

21. EFFECT OF AGREEMENT. None of the terms, provisions or conditions of this Agreement shall be deemed to create a partnership between the parties hereto and any of their heirs, successors or assigns, nor shall such terms, provisions or conditions cause the parties hereto to be considered joint venturers or members of any joint enterprise.

22. SUCCESSORS AND ASSIGNS. This Agreement is binding upon and shall inure to the benefit of all successors in interest of the Owner, regardless of the tax exempt status of any subsequent owner. A successor in interest shall have the same rights and obligations under this Agreement as the original owner who entered into this Agreement.

23. REQUIREMENTS RELATED TO TRANSFER OF HISTORIC PROPERTY. In the event of any sale, transfer, assignment or conveyance of the Historic Property ("Transfer"), the Owner agrees that, at least thirty (30) days prior to such Transfer, it shall give written notice to the City of such proposed Transfer, including the name(s) of the transferee(s). In addition, the Owner and the proposed transferee(s) shall enter into and deliver to the City through the escrow for the Transfer of the Historic Property an assignment and assumption agreement in a form satisfactory to the City's Attorney or such other evidence as may be satisfactory to the City that the transferee(s) has (have) assumed the Owner's obligations set forth in this Agreement. Upon the Transfer of the Historic Property and the assumption of the obligations hereunder by the transferee(s), the Owner's liability for performance shall be terminated as to any obligation to be performed hereunder after the date of such Transfer.

24. RECORDATION. City shall record a copy of this Agreement with the Office of the County Recorder of the County of Orange.

25. AMENDMENTS. This Agreement may be amended, in whole or in part, only by a written and recorded instrument executed by the parties hereto, except that the Director of Community Development is authorized to amend the list of required projects in Exhibit D.
26. COUNTERPARTS. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original and all of which shall constitute one and the same agreement with the same effect as if all parties had signed the same signature page. Any signature page of this Agreement may be detached from any counterpart of this Agreement and re-attached to any other counterpart of this Agreement identical in form hereto but having attached to it one or more additional signature pages.
27. ADMINISTRATION. This Agreement shall be administered by the City's Director of Community Development (or his/her designated representative) following approval of this Agreement by the City. The City shall maintain authority of this Agreement through the City's Director of Community Development (or his/her authorized representative). The City's Director of Community Development shall have the authority to issue interpretations, waive provisions and enter into amendments of this Agreement on behalf of the City so long as such actions do not change the uses permitted on the Historic Property or the purpose of this Agreement. Such amendments may include extensions of time or amendments to the projects specified in Exhibit D. All other waivers or amendments shall require the written approval and consent of the City Council.

[Remainder of page intentionally left blank; signatures on next page]

IN WITNESS WHEREOF, the City and the Owner have executed this Agreement.

“OWNER”

Dated: _____, 2020

Rolly Devore

“CITY”

CITY OF ORANGE, a municipal corporation

Dated: _____, 2020

By: _____
Mark A. Murphy
Mayor

ATTEST:

APPROVED AS TO FORM:

Pamela Coleman
City Clerk

Mary E. Binning
Senior Assistant City Attorney

ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of _____

On _____ before me, _____,
a Notary Public in and for the State of California, personally appeared _____

_____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

EXHIBIT "A"

LEGAL DESCRIPTION OF HISTORIC PROPERTY

REAL PROPERTY IN THE CITY OF ORANGE, COUNTY OF ORANGE, STATE OF CALIFORNIA, DESCRIBED AS:

Lot 2 of Tract No. 3545, in the City of Orange, County of Orange, State of California, as per map recorded in Book 125, Page 1 through 5, inclusive of Miscellaneous Maps, in the Office of the County Recorder of said County.

[APN 094-122-19]

EXHIBIT "B"

SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION

1. Every reasonable effort shall be made to provide a compatible use for a property, which requires a minimal alteration of the building structure, or site and its environment, or to use a property for its originally intended purpose.
2. The distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.
3. All buildings, structures, and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.
4. Changes which may have taken place in the course of time are evidence of the history and development of a building, structure or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.
5. Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure or site shall be treated with sensitivity.
6. Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.
7. The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.
8. Every reasonable effort shall be made to protect and preserve archeological resources affected by, or adjacent to, any project.
9. Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with the size, scale, color, material and character of the property, neighborhood or environment.
10. Wherever possible, new additions or alterations to structures shall be done in such a manner that, if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.

EXHIBIT “C”

CITY OF ORANGE HISTORIC PROPERTY **MAINTENANCE STANDARDS**

All buildings, structures, yards and other improvements shall be maintained in a manner which does not detract from the appearance of the immediate neighborhood. The following conditions are prohibited:

1. Dilapidated, deteriorating, or unrepaired structures, such as: fences, roofs, doors, walls and windows.
2. Publicly visible storage of scrap lumber, junk, trash or debris.
3. Publicly visible storage of abandoned, discarded or unused objects or equipment, such as automobiles, automobile parts, furniture, stoves, refrigerators, cans, containers or similar items.
4. Stagnant water or excavations, including pools or spas.
5. Any device, decoration, design, structure or vegetation that is unsightly by reason of its height, condition, or its inappropriate location.

EXHIBIT “D”

REHABILITATION/MAINTENANCE SCOPE OF WORK

[Attached.]

EXHIBIT "D"

REHABILITATION/MAINTENANCE SCOPE OF WORK

883 S. Oakwood Street

Priority	Description of Work	Cost Estimate	Completion Date
1.	Repair of radiant floor heating system.	\$5,320	2020
2.	Maintenance servicing of air conditioning system and radiant floor heating system boiler.	\$410	2020
3.	Replace electrical panel to bring system up to current code safety standards, including rewiring of outdoor electrical connections.	\$3,790	2020
4.	Installation of UV film on kitchen window and sliding glass door.	\$302	2020
5.	Replace sun damaged siding on the south wall of the atrium with no Eichler tongue and groove siding to match existing siding, including sanding and repainting of weather damaged exposed roof beams.	\$2,000	2020
6.	Replace vinyl window on north elevation of the house with a new compatible metal frame window in conformance with the Orange Eichler Design Standards.	\$1,100	2020
7.	Termite inspection and treatment of areas of evidence of infestation as recommended in the termite inspection report dated June 7, 2020.	\$650	2021
8.	Replacement of damaged wood siding new Eichler tongue and groove wood siding on the south elevation of the house as result of sun damage and installation of an a/c unit and dog door in the wall. Also includes repainting of the exterior of the house.	\$15,000	2021
9.	Installation of UV film on rear elevation windows and doors, with level of tint in	\$6,000	2021

	compliance with the Orange Eichler Design Standards.		
10.	Replace front door lockset with a new set to match original Eichler round escutcheon plate door lockset.	\$500	2022
11.	Maintenance of sliding glass doors, including oiling of rollers, repairs to metal frames and new screens as needed.	\$1,000	2024
12.	Apply PVC coating on existing foam roof system as part of required regular maintenance.	\$8,500	2025
13.	Apply PVC coating on existing foam roof system as part of required regular maintenance.	\$8,500	2030
TOTAL		\$53,072	

EXHIBIT “E”

HISTORIC PROPERTY INVENTORY FORM (DPR 523)

[Attached.]

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial ORA
NRHP Status Code 3D

Other Listings: _____
Review Code: _____ Reviewer: _____ Date: _____

Page 1 of 3

*Resource Name or #: OAKWOOD_S_883__APN_094-122-19
(Assigned by Recorder)

P1. Other Identifier: Fairhaven Tract

*P2. Location: Not for Publication Unrestricted

*a. County: Orange and (P2b and P2c or P2d. Attach a location map as necessary.)

*b. USGS 7.5' Quad: _____ Date: _____ T _____; R _____; 1/4 of _____ 1/4 of Sec _____; B.M. _____

c. Address: 883 - S OAKWOOD ST, # _____ City: Orange Zip: 92869

d. UTM: (Give more than one for large and/or linear resources) Zone _____ ' _____ mE/ _____ mN

e. Other Locational Data:

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries. Continues on Pg.3.)

Materials: _____

Model LJ-124

*P3b. Resource Attributes: (HP2)--Single family property
(List attributes and codes)

*P4. Resources Present: Building Structure Object Site Element of District District Other (Isolates, etc.)

P5b. Description of Photo: 2005
(View, date, accession #)



*P6. Date Constructed/ Age and Source:

1960 c

Historic Prehistoric Both

*P7. Owner and Address:

*P8: Recorded by: (Name, affiliation, and address)

Marissa Moshier, Historic
Preservation Planner

City of Orange
300 E. Chapman Ave.
Orange, CA 92866

*P9. Date Recorded:

June 2015

*P10. Survey Type: (Describe)

Reconnaissance

*P11. Report Citation: (Cite survey report and other sources, or enter "none.")

Orange County Assessor Records (2005). Chattel Architecture (2005)
Historic Resources Survey.

*Attachments: NONE Location Map Continuation Sheet(s) Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List): _____

DPR 523A (1/95)

*Required Information

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
BUILDING, STRUCTURE, AND OBJECT RECORD

Primary # _____
HRI # _____
*NRHP Status Code 3D

Page 2 of 3

*Resource Name or #: OAKWOOD_S_883__APN_094-122-19
(Assigned by Recorder)

B1. Historic Name: Unknown

B2. Common Name: _____

B3. Original Use: RES B4. Present Use: RES

*B5. Architectural Style: Mid-Century Modern

*B6. Construction History: (Construction date, alterations, and date of alterations) Date of Construction: 1960 Historic Prehistoric Both
Infilled opening in roof overhang; altered transom over entry.

*B7. Moved? No Yes Unknown Date: _____ Original Location: _____

*B8. Related Features: _____

*B9. Architect or Builder: Eichler Homes - A. Quincy Jones

*B10. Significance: Theme: Architecture Area: City of Orange Property Type: Residence

Period of Significance: Eichler Tract (c. 1959 - 1965) Applicable Criteria: C
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity. Continues on Pg.4.)

Structural Integrity: Excellent Condition - Low level of alteration as of 2005.

Site Integrity: _____

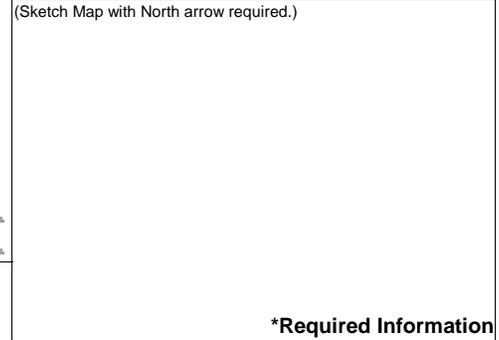
Opportunities _____

B11. Additional Resource Attributes: (List attributes and codes) _____

*B12. References:
Orange Daily News. Eichler Tract Brochures and miscellaneous Eichler materials from the Orange Public Library.

B13. Remarks: (Continues on Pg.3.)
Status change since 1991 Survey: Not previously surveyed.

(Sketch Map with North arrow required.)



*B14. Evaluator: Robert Chattel
*Date of Evaluation: September 2005

(This space reserved for official comments.)
DPR 523B (1/95)

*Required Information

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # _____
HRI # _____
Trinomial ORA

Page 3 of 3

*Resource Name or #:
(Assigned by Recorder)

OAKWOOD_S_883__APN_094-122-19

Recorded by:

Marissa Moshier, Historic Preservation Planner
City of Orange
300 E. Chapman Ave.
Orange, CA 92866

Date Recorded: June 2015

Continuation Update

Years Surveyed:

2005, 2015

Description of Photo:

Listed in National Register:

General Plan:

LDR

of Buildings:

1

Planning Zone:

R-1-8

of Stories:

1

Lot Acre:

0.1842

of Units:

1

Principal Building Sqft:

2030

B6. Construction History (Continued from Pg.2):

B13. Remarks (Continued from Pg.2):

P3a. Description (Continued from Pg.1):



RECORDING REQUESTED BY
AND, WHEN RECORDED,
MAIL TO:

City Clerk
City of Orange
300 E. Chapman Avenue
Orange, California, 92866

Exempt from recording fees pursuant to
Gov. Code Sections 6103 and 27383

Property Address: 165 S. Batavia Street
APN: 390-671-07
Mills Act Contract Number: 340.0-20

**HISTORIC PROPERTY PRESERVATION AGREEMENT
(MILLS ACT CONTRACT)**

THIS HISTORIC PROPERTY PRESERVATION AGREEMENT (“Agreement”) is made and entered into as of the date of execution by the City (“Effective Date”), by and between the CITY OF ORANGE, a municipal corporation (“City”), and Walter Lewis Holloman and Elizabeth Ann Holloman, Trustees of The Holloman Family Trust dated September 29, 1999, as tenants in common (“Owner”), with reference to the following:

RECITALS

WHEREAS, the Mills Act (Government Code Section 50280 *et seq.*) provides cities with the opportunity to contract with owners of qualified historical properties whereby the owner promises to preserve and rehabilitate the property in return for a potential reduced property tax assessment; and

WHEREAS, the City of Orange has established Historic Districts consisting of the Plaza Historic District, listed in the National Register of Historic Places; the Old Towne Orange Historic District, listed in the National Register of Historic Places; the local Old Towne Orange Historic District, designated by the Orange City Council; and the local Eichler Fairhaven, Fairhills, and Fairmeadow Historic Districts, designated by the Orange City Council; and the City desires to promote the character, quality of life, and historic features of said Districts to its citizens and visitors; and

WHEREAS, the City is dedicated to the protection and stabilization of property values through maintaining and upgrading its older housing stock, through the use of incentives such as the Mills Act; and

WHEREAS, the Mills Act also has beneficial effects on City businesses, economic stability and community pride by preserving important neighborhood historic resources; and

WHEREAS, the use of the Mills Act will fulfill one of the goals of the City’s 2010 General Plan Cultural Resources Element; specifically,

“Provide incentives and expand education efforts for historic preservation” (Goal 3.0, CR-22); and

WHEREAS, Owner possesses fee simple title in and to that certain real property, together with associated structures and improvements thereon, located at 165 S. Batavia Street in the City of Orange, County of Orange, State of California, having Assessor’s Parcel Number 390-671-07 and more specifically described in Exhibit A, which exhibit is attached hereto and made a part hereof (“Historic Property); and

WHEREAS, the Historic Property is a qualified historical property under the Mills Act in that it is privately owned property which is not exempt from property taxation and is either: individually designated or is a contributing property within a designated district which is listed in the National Register of Historic Places, California Register of Historical Resources or Register of Historical Landmarks, California Points of Historical Interest, or is a contributing property in a locally designated historic district; and

WHEREAS, Owner, in consideration for abiding by the terms of this Agreement shall be entitled to a reassessment of valuation of the Historic Property and any corresponding reduction in property taxes pursuant to the provisions of the California Revenue and Taxation Code; and

WHEREAS, it is the City’s expectation that the Owner will use the property tax savings accrued under this Agreement for improvements to the “Historic Property” (as defined below). To that end, as a condition of renewal, the City will require a revised schedule of improvements every ten years showing a plan for improvements commensurate with the tax savings; and

WHEREAS, the City and Owner for their mutual benefit, now desire to enter into this Agreement to limit the use of the Historic Property to prevent inappropriate alterations, to ensure that characteristics of historic significance are preserved and maintained in an exemplary manner, and to carry out the purposes of Article 12 (commencing with Section 50280) of Chapter 1, Part 1, Division 1 of Title 5 of the California Government Code and Article 1.9 (commencing with Section 439) of Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code.

AGREEMENT

NOW, THEREFORE, both Owner and City, in consideration of the mutual promises, covenants and conditions contained herein and the substantial public benefits to be derived therefrom, do hereby agree as follows:

1. **APPLICABLE LAWS.** This Agreement is made pursuant to California Government Code Sections 50280 through 50290 and Article 1.9 (commencing with Section 439) of Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code and is subject to all of the provisions of those statutes. To the extent any of the provisions in this Agreement are inconsistent with the aforementioned provisions of the Government and Revenue and Taxation Codes, they are superseded by those Code Sections.

2. ASSESSMENT OF VALUATION. Property tax relief afforded to Owner pursuant to Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code will be determined solely by the Orange County Office of the Assessor. City makes no representations regarding the actual tax savings any person may realize by entering into this Agreement.
3. PRESERVATION OF PROPERTY. Owner agrees to preserve and maintain the Historic Property and its character defining features. Character defining features include, but are not necessarily limited to, the general architectural form, style, materials, design, scale, details, mass, roofline and other aspects of the appearance of the exterior of the Historic Property. For purposes of identification of the Historic Property, the City's Official Historic Property Inventory Form (DPR 523) is attached as Exhibit E.

The *Secretary of the Interior's Standards for Rehabilitation* (Exhibit B) and City's minimum maintenance standards (Exhibit C), attached hereto and incorporated herein by reference, shall constitute the minimum standards and conditions for preservation and rehabilitation of the Historic Property, and shall apply to the Historic Property throughout the term of this Agreement. Owner shall, where necessary, rehabilitate the Historic Property to conform to the rules and regulations of the Office of Historic Preservation of the California Department of Parks and Recreation, the *Secretary of the Interior's Standards for Rehabilitation*, the California Historical Building Code, and the City of Orange's Historic Preservation Design Standards for Old Towne and Eichler Design Standards.

As consideration for the City to enter into this Agreement, the Owner agrees, at its own cost and expense, to complete, or cause to be completed, the work or improvements described in Exhibit D within the times established therefore in Exhibit D. The Owner shall secure any and all permits which may be required by the City or any other governmental agency affected by the construction of the work or improvements. The Owner accepts responsibility for and shall be responsible for identification of and compliance with all applicable laws pertaining to the construction and installation of the work or improvements described on Exhibit D and the contract or contracts pertaining thereto. The Owner will neither seek to hold nor hold the City liable for, and will hold the City harmless with respect to, any consequences of any failure by the Owner to correctly determine the applicability of any such requirements to any contract he/she/they enter into.

In addition to the foregoing, the Owner hereby agrees to and will comply with all applicable local, state, and federal statutes, regulations, rules, codes (including building codes), ordinances, and other requirements of governmental authorities now or hereafter in effect ("Applicable Laws") pertaining to the use of the Historic Property. Owner must give the City immediate written notice on Owner's becoming aware that the use or condition of the Historic Property is in violation of any Applicable Laws.

4. INSPECTIONS AND ANNUAL REPORTING. Owner agrees to permit the examination, by prior appointment, of the interior and exterior of the Historic Property by the City at a minimum every five (5) years during the Agreement term to determine Owner's compliance with the terms and provisions of this Agreement. Owner agrees to provide the City with a report as to the status of the Historic Property annually within thirty (30) days following each anniversary of the

Effective Date of this Agreement. The annual report shall provide substantiation reasonably satisfactory to the City's Historic Preservation Planner or in his/her absence the Director of Community Development that Owner has completed the work required by Exhibit D for the twelve month period preceding each anniversary of this Agreement, and whether the Historic Property has undergone any changed conditions, and whether Owner has received any public funds from other sources designated for the preservation or maintenance of the Historic Property and from whom such funds have been received.

5. PAYMENT OF ANNUAL FEE. The Owner shall pay the City an annual fee to cover administrative costs associated with this Agreement including but not limited to the reasonable cost of monitoring the Historic Property, performing required inspections, and enforcement of the Agreement. Said fee shall be payable to the City of Orange and shall be remitted to the Planning Division upon demand and prior to any required inspection. The amount of the annual inspection fee shall be established by the City and may be revised from time to time, which fee shall be set forth in the City's Master Schedule of Fees and Charges. Failure to pay the required fee within 45 days of the due date will be considered a willful breach of this Agreement and may result in cancellation of the Agreement in accordance with the cancellation terms detailed below.
6. TERM. The term of this Agreement is for a period of ten (10) years. The initial term of this Agreement shall be from September 8, 2020 to and including September 8, 2030.
7. AUTOMATIC RENEWAL. On each yearly anniversary of the Effective Date of this Agreement ("renewal date"), one year shall be added automatically to the initial term of this Agreement, unless notice of non-renewal is given as provided in this Agreement.
8. EFFECT OF OUTSIDE FUNDS. If Owner receives funds designated for the preservation or maintenance of the Historic Property from any other public agency, this Agreement shall not be renewed except upon the vote of the City Council.
9. NOTICE OF NONRENEWAL. If in any year either the Owner or City desires not to renew this Agreement, that party shall serve written notice of nonrenewal to the other party in advance of the annual renewal date. Unless the notice is served by Owner to City at least ninety (90) days, or by City to Owner at least sixty (60) days prior to the renewal date, one year shall automatically be added to the term of the Agreement. Within fifteen (15) days of receipt by Owner of a notice of nonrenewal from the City, Owner may make a written protest. Upon receipt of such a protest the City Council shall set a hearing prior to the expiration of the renewal date of this Agreement or toll the renewal date until such hearing can reasonably held. Owner may furnish the City Council with any information which the Owner deems relevant; and shall furnish the City Council with any information it may require. At any time prior to the renewal date, City may withdraw its notice of nonrenewal.
10. EFFECT OF NOTICE NOT TO RENEW. If in any year either party serves notice of intent not to renew this Agreement, this Agreement shall remain in effect for the balance of the period remaining since the original execution date if not yet renewed, or the last renewal date of the Agreement, as the case may be.

11. UPDATE OF IMPROVEMENT SCHEDULE. At least ninety (90) days prior to the tenth (10th) anniversary of the Effective Date of this Agreement, and ninety (90) days prior to every tenth (10th) anniversary thereafter, Owner shall provide City with an updated schedule of rehabilitation maintenance items for the City's review and approval. Such updated schedule shall contain a list of proposed improvements and/or revisions to be accomplished during the next succeeding ten (10) years of the Agreement and a schedule for the construction of such improvements. Within thirty (30) days after the City's receipt of said updated schedule, the City's Director of Community Development shall either approve or disapprove such proposed schedule of proposed improvements, or shall respond in writing by stating what further information, if any, the City reasonably requires in order to determine the request complete and determine whether or not to grant the requested approval. Upon receipt of such a response, the Owner shall promptly furnish to the City such further information as may be reasonably requested.

From time to time, at the request of the City's Director of Community Development (or his/her authorized representative), the Owner shall meet and confer with the City's Planner for Historic Preservation or in his/her absence the Director of Community Development (or his/her designee) regarding matters arising hereunder with respect to the work and improvements and the progress in constructing the same.

12. INDEPENDENT ADVICE OF COUNSEL. The Owner, and each of them, represent and declare that in executing this Agreement he/she/they have relied solely upon his/her/their own judgment, belief and knowledge, and the advice and recommendations of his/her/their own independently selected counsel, concerning the nature, extent and duration of his/her/their rights and claims, and that he/she/they have not been influenced to any extent whatsoever in executing the same by the City or by any person representing the City.

13. ENFORCEMENT OF AGREEMENT. If the City determines the owner has breached any of the conditions of the Agreement provided for or has allowed the property to deteriorate to the point it no longer meets the standards for a qualified historical property, the City shall either cancel the Agreement or bring any action in court necessary to enforce the Agreement including, but not limited to an action to enforce the Agreement by specific performance to cure, correct or remedy any breach of the terms of this Agreement, to recover damages for any breach, or to obtain any other remedy consistent with the purpose of this Agreement. In the event of a default under the provisions of this Agreement by Owner, City shall give written notice to Owner specifying the alleged grounds for the default. Said notice shall be given by registered or certified mail addressed to the address stated in this Agreement. If such violation(s) is not corrected to the reasonable satisfaction of the City within thirty (30) days from the receipt of the notice of violation, or within such reasonable time as may be required to cure the breach or default, provided that acts to cure, correct or remedy such breach or default are commenced within thirty (30) days and thereafter diligently pursued to completion, then City may, without further notice, institute legal action.

Except as otherwise expressly stated in this Agreement, the rights and remedies of the City are cumulative, and the exercise by the City of one or more of such rights or remedies shall not preclude the exercise by it, at the same or different times, of any other rights or remedies for the same default or any other default by the Owner. Any failure or delay by the City in asserting any

of its right and remedies as to a breach of any of the covenants, conditions or agreements set forth herein shall not operate as a waiver of such breach or of any such rights or remedies, or deprive the City of its right to institute and maintain any actions or proceedings which it may deem necessary to protect, assert or enforce such rights or remedies. A waiver by the City of a breach shall not be construed as a waiver of any succeeding breach of the same or other covenants, conditions or agreements set forth in this Agreement.

14. CANCELLATION. In lieu of bringing an action to enforce the Agreement City may cancel this Agreement if City determines Owner has breached any of the conditions or covenants of this Agreement or has allowed the Historic Property to deteriorate to the point that it no longer meets the standards for a qualified historical property. City may also cancel this Agreement if it determines Owner has failed to rehabilitate the Historic Property in the manner specified in this Agreement.
15. NOTICE OF CANCELLATION. This Agreement cannot be canceled until after City has given notice and has held a public hearing as required by Government Code Section 50285. Notice of the hearing shall be mailed to the last known address of each owner of property within 300 feet of the Historic Property and shall be published in accordance with Government Code Section 6061.
16. CANCELLATION FEE. If City cancels this Agreement in accordance with Section 15 above, Owner shall pay a cancellation fee of twelve and one-half percent (12-1/2%) of the current fair market value of the Historic Property at the time of cancellation. The current fair market value shall be determined by the County Assessor as though the Historic Property were free of the restriction on the Historic Property imposed pursuant to this Agreement. The cancellation fee shall be paid to the County Auditor at such time and in such manner as the County Auditor shall prescribe.
17. NOTICES. All notices required by or provided for in the Agreement shall be given in writing and may be mailed or delivered in person at the address of the respective parties as specified below or at any other address as may be later specified by the parties. Deposit of notice in the mail, postage prepaid, shall be deemed receipt of the notice.

City of Orange
Attn.: City Clerk
300 E. Chapman Avenue
Orange, CA 92866

Walter and Elizabeth Holloman
6622 E. San Marcos Court
Orange, CA 92867

18. NO COMPENSATION. Owner shall not receive any payment from the City in consideration of the obligations imposed under this Agreement. The Owner acknowledges and agrees that the consideration for the execution of this Agreement is the substantial public benefit to be derived therefrom and the advantage that will accrue to Owner as a result of the effect upon the assessed value of the Historic Property on account of the restrictions on the use and preservation of the Historic Property.

19. REMEDY IF AGREEMENT HELD NOT ENFORCEABLE. In the event it is finally determined this Agreement does not constitute an enforceable restriction within the meaning of the applicable provisions of the California Government Code and the California Revenue and Taxation Code, except for an unenforceability arising from the cancellation or nonrenewal of this Agreement, then this Agreement shall be null and void and without further effect and the Historic Property subject to this Agreement shall from that time be free from any restriction whatsoever under this Agreement without any payment or further act of the parties to this Agreement.

20. ACQUISITION OF PROPERTY BY EMINENT DOMAIN; CANCELLATION OF CONTRACT; INAPPLICABILITY TO DETERMINATION OF VALUE. In the event that the Historic Property is acquired in whole or part by eminent domain or other acquisition by any entity authorized to exercise the power of eminent domain, and the acquisition is determined by the City to frustrate the purpose of the Agreement, the Agreement shall be canceled and no fee shall be imposed under Section 17, above. The Agreement shall be deemed null and void for all purposes of determining the value of the Historic Property so acquired.

If, subsequent to the filing of an action in eminent domain, the proposed condemnation is abandoned by the condemning agency, the restrictions on the use of the Historic Property included in this Agreement shall, without further agreement of the parties, be reinstated and the terms of this Agreement shall continue in full force and effect.

21. EFFECT OF AGREEMENT. None of the terms, provisions or conditions of this Agreement shall be deemed to create a partnership between the parties hereto and any of their heirs, successors or assigns, nor shall such terms, provisions or conditions cause the parties hereto to be considered joint venturers or members of any joint enterprise.

22. SUCCESSORS AND ASSIGNS. This Agreement is binding upon and shall inure to the benefit of all successors in interest of the Owner, regardless of the tax exempt status of any subsequent owner. A successor in interest shall have the same rights and obligations under this Agreement as the original owner who entered into this Agreement.

23. REQUIREMENTS RELATED TO TRANSFER OF HISTORIC PROPERTY. In the event of any sale, transfer, assignment or conveyance of the Historic Property ("Transfer"), the Owner agrees that, at least thirty (30) days prior to such Transfer, it shall give written notice to the City of such proposed Transfer, including the name(s) of the transferee(s). In addition, the Owner and the proposed transferee(s) shall enter into and deliver to the City through the escrow for the Transfer of the Historic Property an assignment and assumption agreement in a form satisfactory to the City's Attorney or such other evidence as may be satisfactory to the City that the transferee(s) has (have) assumed the Owner's obligations set forth in this Agreement. Upon the Transfer of the Historic Property and the assumption of the obligations hereunder by the transferee(s), the Owner's liability for performance shall be terminated as to any obligation to be performed hereunder after the date of such Transfer.

24. RECORDATION. City shall record a copy of this Agreement with the Office of the County Recorder of the County of Orange.

25. AMENDMENTS. This Agreement may be amended, in whole or in part, only by a written and recorded instrument executed by the parties hereto, except that the Director of Community Development is authorized to amend the list of required projects in Exhibit D.
26. COUNTERPARTS. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original and all of which shall constitute one and the same agreement with the same effect as if all parties had signed the same signature page. Any signature page of this Agreement may be detached from any counterpart of this Agreement and re-attached to any other counterpart of this Agreement identical in form hereto but having attached to it one or more additional signature pages.
27. ADMINISTRATION. This Agreement shall be administered by the City's Director of Community Development (or his/her designated representative) following approval of this Agreement by the City. The City shall maintain authority of this Agreement through the City's Director of Community Development (or his/her authorized representative). The City's Director of Community Development shall have the authority to issue interpretations, waive provisions and enter into amendments of this Agreement on behalf of the City so long as such actions do not change the uses permitted on the Historic Property or the purpose of this Agreement. Such amendments may include extensions of time or amendments to the projects specified in Exhibit D. All other waivers or amendments shall require the written approval and consent of the City Council.

[Remainder of page intentionally left blank; signatures on next page]

IN WITNESS WHEREOF, the City and the Owner have executed this Agreement.

“OWNER”

Dated: _____, 2020

Walter Lewis Holloman, Trustee of The Holloman
Family Trust dated September 29, 1999

Dated: _____, 2020

Elizabeth Ann Holloman, Trustee of The Holloman
Family Trust dated September 29, 1999

“CITY”

CITY OF ORANGE, a municipal corporation

Dated: _____, 2020

By: _____
Mark A. Murphy
Mayor

ATTEST:

APPROVED AS TO FORM:

Pamela Coleman
City Clerk

Mary E. Binning
Senior Assistant City Attorney

ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of _____

On _____ before me, _____,
a Notary Public in and for the State of California, personally appeared _____

_____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

EXHIBIT "A"

LEGAL DESCRIPTION OF HISTORIC PROPERTY

REAL PROPERTY IN THE CITY OF ORANGE, COUNTY OF ORANGE, STATE OF CALIFORNIA, DESCRIBED AS:

Real property in the City of Orange, County of Orange, State of California, described as follows:

Lot 10 of Chas E. Spott's Subdivision, as per map recorded in Book 8, Page 79 of Miscellaneous Maps, in the office of the County Recorder of said County.

[APN 390-671-07]

EXHIBIT "B"

SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION

1. Every reasonable effort shall be made to provide a compatible use for a property, which requires a minimal alteration of the building structure, or site and its environment, or to use a property for its originally intended purpose.
2. The distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.
3. All buildings, structures, and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.
4. Changes which may have taken place in the course of time are evidence of the history and development of a building, structure or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.
5. Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure or site shall be treated with sensitivity.
6. Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.
7. The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.
8. Every reasonable effort shall be made to protect and preserve archeological resources affected by, or adjacent to, any project.
9. Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with the size, scale, color, material and character of the property, neighborhood or environment.
10. Wherever possible, new additions or alterations to structures shall be done in such a manner that, if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.

EXHIBIT “C”

CITY OF ORANGE HISTORIC PROPERTY **MAINTENANCE STANDARDS**

All buildings, structures, yards and other improvements shall be maintained in a manner which does not detract from the appearance of the immediate neighborhood. The following conditions are prohibited:

1. Dilapidated, deteriorating, or unrepaired structures, such as: fences, roofs, doors, walls and windows.
2. Publicly visible storage of scrap lumber, junk, trash or debris.
3. Publicly visible storage of abandoned, discarded or unused objects or equipment, such as automobiles, automobile parts, furniture, stoves, refrigerators, cans, containers or similar items.
4. Stagnant water or excavations, including pools or spas.
5. Any device, decoration, design, structure or vegetation that is unsightly by reason of its height, condition, or its inappropriate location.

EXHIBIT “D”

REHABILITATION/MAINTENANCE SCOPE OF WORK

[Attached.]

EXHIBIT “D”

REHABILITATION/MAINTENANCE SCOPE OF WORK

165 S. Batavia Street

Priority	Description of Work	Cost Estimate	Completion Date
1.	Paint exterior of the house, including touchups as needed.	\$6,300	2020
2.	Repair of dormer gable vent on the south side of the roof.	\$500	2021
3.	Maintenance of existing sash windows, including re-glazing and weather proofing with spring bronze baffles as needed.	\$5,000	2022
4.	Replace deteriorated and termite damaged siding on the east elevation of house as needed with wood siding to match existing.	\$1,000	2023
5.	Replace 1970s side door with period appropriate Craftsman style wood door.	\$1,000	2023
6.	Seismic retrofitting of foundation of the house.	\$7,000	2024
7.	Replace existing driveway with new driveway in compliance with the Historic Design Standards for Old Towne, including widening of the street curb cut to facilitate safer access to the property.	\$3,000	2027
8.	Add rain gutter to roofline of detached garage to mitigate foundation issues caused by water damage.	\$500	2027
9.	Replace vinyl window on south elevation of detached garage with a compatible wood sash window.	\$1,000	2027
10.	New roof on garage, including repair of sagging roof joists in consultation with a licensed structural engineer.	\$10,000	2028
TOTAL		\$35,300	

EXHIBIT “E”

HISTORIC PROPERTY INVENTORY FORM (DPR 523)

[Attached.]

State of California - The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
 PRIMARY RECORD

Primary # 30-158705
 HRI # 038071
 Trinomial ORA
 NRHP Status Code 5D1

Other Listings:

Review Code: _____

Reviewer: _____

Date: _____

Page 1 of 3

*Resource Name or #: _____
 (Assigned by Recorder)

BATAVIA_S_165__APN_390-671-07

P1. Other Identifier: _____

*P2. Location: Not for Publication Unrestricted

*a. County: Orange and (P2b and P2c or P2d. Attach a location map as necessary.)

*b. USGS 7.5' Quad: _____ Date: _____ T _____ ; R _____ ; 1/4 of _____ 1/4 of Sec _____ ; B.M. _____

c. Address: 165 - S BATAVIA ST, # _____ City: Orange Zip: 92868

d. UTM: (Give more than one for large and/or linear resources) Zone _____ ' _____ mE/ _____ mN

e. Other Locational Data: _____

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries. Continues on Pg.3.)

Materials: Frame - Wood siding

Low, horizontal, single-story bungalow with modified L-plan and multi-gable roof. Frontmost gable forms overhang for entry porch and is supported by decorative, brick based piers. Large picture windows are typical of the style.

*P3b. Resource Attributes: (HP2)--Single family property
 (List attributes and codes)

*P4. Resources Present: Building Structure Object Site Element of District District Other (Isolates, etc.)

P5b. Description of Photo: 2005
 (View, date, accession #)



*P6. Date Constructed/ Age and Source:

1924

Historic Prehistoric Both

*P7. Owner and Address:

*P8: Recorded by: (Name, affiliation, and address)

D. Gest, P. LaValley, D. Matsumoto

Chattel Architecture

13417 Ventura Blvd.

Sherman Oaks, CA 91423

*P9. Date Recorded:

March, 2005

*P10. Survey Type: (Describe)

Reconnaissance

*P11. Report Citation: (Cite survey report and other sources, or enter "none.")

Orange County Assessor Records (2005). Chattel Architecture (2005) Historic Resources Survey. AEGIS (1991) Historic Building Inventory Update. Heritage Orange County, Inc. (1982) Orange Historic Survey.

*Attachments: NONE Location Map Continuation Sheet(s) Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List): _____

DPR 523A (1/95)

*Required Information

Page 2 of 3

*Resource Name or #: BATAVIA_S_165__APN_390-671-07
(Assigned by Recorder)

B1. Historic Name: Unknown

B2. Common Name:

B3. Original Use: RES B4. Present Use: RES

*B5. Architectural Style: Craftsman Bungalow

*B6. Construction History: (Construction date, alterations, and date of alterations) Date of Construction: 1924 Historic Prehistoric Both

*B7. Moved? No Yes Unknown Date: Original Location:

*B8. Related Features:

*B9. Architect or Builder: Unknown

*B10. Significance: Theme: Architecture Area: City of Orange Property Type: Residence

Period of Significance: Old Towne: Interwar Development (c. 1921 - 1941) Applicable Criteria: AC
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity. Continues on Pg.4.)

Structural Integrity: Excellent Condition - No apparent change to original structure.

Site Integrity:

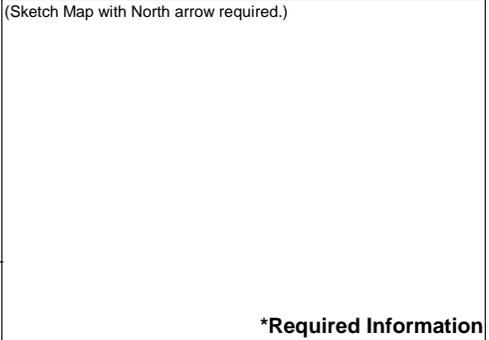
Opportunities:

B11. Additional Resource Attributes: (List attributes and codes)

*B12. References:
Orange Daily News.

B13. Remarks: (Continues on Pg.3.)
Status change since 1991 Survey: None.
Style previously noted in 1991 Survey as: Bungalow.

(Sketch Map with North arrow required.)



*Required Information

*B14. Evaluator: Robert Chattel
*Date of Evaluation: September, 2005

(This space reserved for official comments.)

State of California - The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
 CONTINUATION SHEET

Primary # 30-158705
 HRI # 038071
 Trinomial ORA

Page 3 of 3

*Resource Name or #:
 (Assigned by Recorder)

BATAVIA_S_165__APN_390-671-07

Recorded by:

D. Gest, P. LaValley, D. Matsumoto
 Chattel Architecture
 13417 Ventura Blvd.
 Sherman Oaks, CA 91423

Date Recorded: March, 2005

Continuation Update

Years Surveyed:

1982, 1991, 2005

Description of Photo: 1991

Listed in National Register:

General Plan: LDR # of Buildings: 1

Planning Zone: R-2-6 # of Stories: 1

Lot Acre: 0.1564 # of Units: 1

Principal Building Sqft: 1005

B6. Construction History (Continued from Pg.2):

B13. Remarks (Continued from Pg.2):

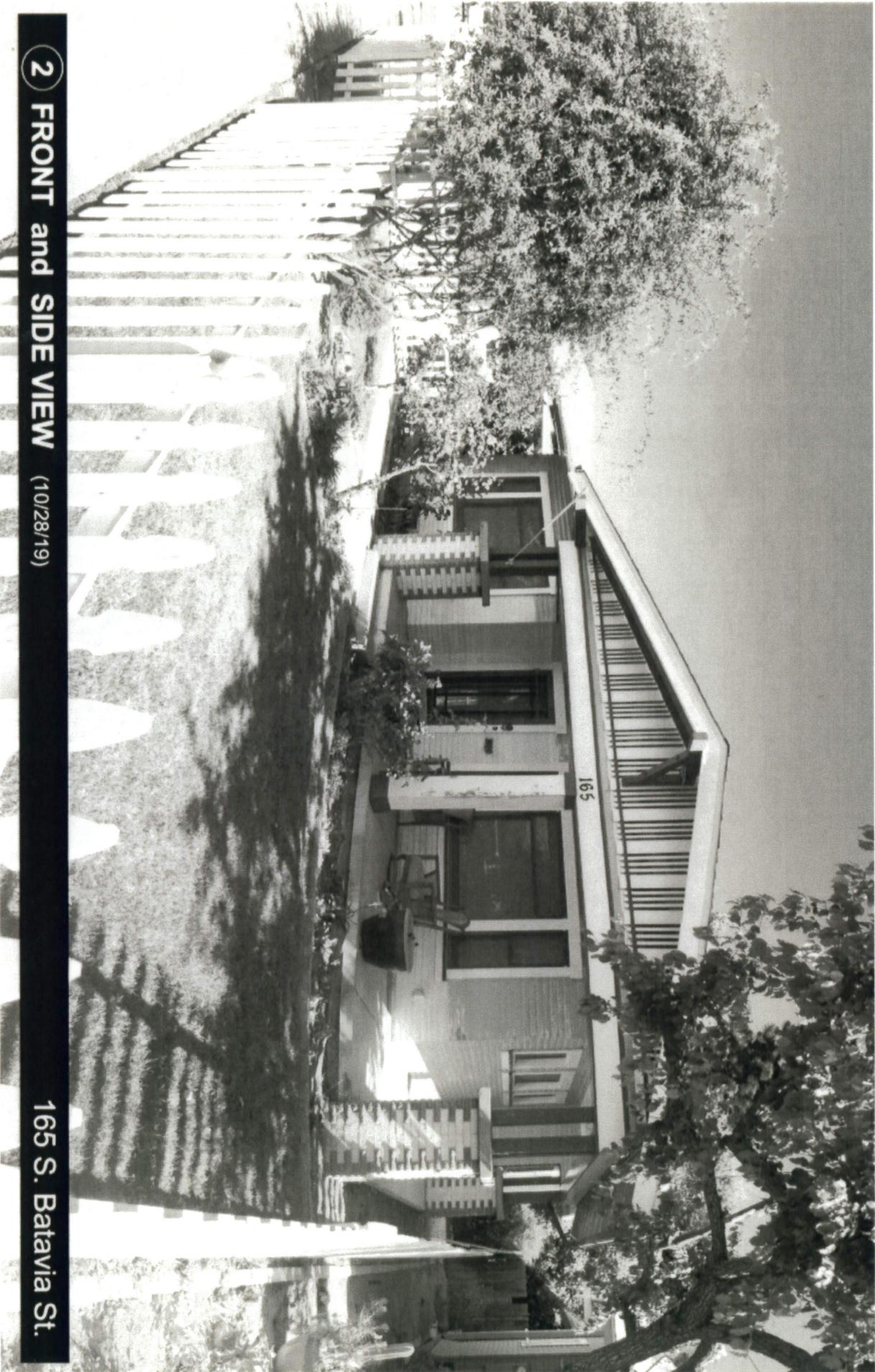
P3a. Description (Continued from Pg.1):



EXHIBIT “F”

CERTIFICATION OF TRUST

[Attached.]



2 FRONT and SIDE VIEW (10/28/19)

165 S. Batavia St.

RECORDING REQUESTED BY
AND, WHEN RECORDED,
MAIL TO:

City Clerk
City of Orange
300 E. Chapman Avenue
Orange, California, 92866

Exempt from recording fees pursuant to
Gov. Code Sections 6103 and 27383

Property Address: 5123 E. Elsinore Avenue
APN: 379-021-03
Mills Act Contract Number: 341.0-20

**HISTORIC PROPERTY PRESERVATION AGREEMENT
(MILLS ACT CONTRACT)**

THIS HISTORIC PROPERTY PRESERVATION AGREEMENT (“Agreement”) is made and entered into as of the date of execution by the City (“Effective Date”), by and between the CITY OF ORANGE, a municipal corporation (“City”), and Buddhika Hathotuwegama, a married man as his sole and separate property (“Owner”), with reference to the following:

RECITALS

WHEREAS, the Mills Act (Government Code Section 50280 *et seq.*) provides cities with the opportunity to contract with owners of qualified historical properties whereby the owner promises to preserve and rehabilitate the property in return for a potential reduced property tax assessment; and

WHEREAS, the City of Orange has established Historic Districts consisting of the Plaza Historic District, listed in the National Register of Historic Places; the Old Towne Orange Historic District, listed in the National Register of Historic Places; the local Old Towne Orange Historic District, designated by the Orange City Council; and the local Eichler Fairhaven, Fairhills, and Fairmeadow Historic Districts, designated by the Orange City Council; and the City desires to promote the character, quality of life, and historic features of said Districts to its citizens and visitors; and

WHEREAS, the City is dedicated to the protection and stabilization of property values through maintaining and upgrading its older housing stock, through the use of incentives such as the Mills Act; and

WHEREAS, the Mills Act also has beneficial effects on City businesses, economic stability and community pride by preserving important neighborhood historic resources; and

WHEREAS, the use of the Mills Act will fulfill one of the goals of the City’s 2010 General Plan Cultural Resources Element; specifically,

“Provide incentives and expand education efforts for historic preservation” (Goal 3.0, CR-22); and

WHEREAS, Owner possesses fee simple title in and to that certain real property, together with associated structures and improvements thereon, located at 5123 E. Elsinore Avenue in the City of Orange, County of Orange, State of California, having Assessor’s Parcel Number 379-021-03 and more specifically described in Exhibit A, which exhibit is attached hereto and made a part hereof (“Historic Property”); and

WHEREAS, the Historic Property is a qualified historical property under the Mills Act in that it is privately owned property which is not exempt from property taxation and is either: individually designated or is a contributing property within a designated district which is listed in the National Register of Historic Places, California Register of Historical Resources or Register of Historical Landmarks, California Points of Historical Interest, or is a contributing property in a locally designated historic district; and

WHEREAS, Owner, in consideration for abiding by the terms of this Agreement shall be entitled to a reassessment of valuation of the Historic Property and any corresponding reduction in property taxes pursuant to the provisions of the California Revenue and Taxation Code; and

WHEREAS, it is the City’s expectation that the Owner will use the property tax savings accrued under this Agreement for improvements to the “Historic Property” (as defined below). To that end, as a condition of renewal, the City will require a revised schedule of improvements every ten years showing a plan for improvements commensurate with the tax savings; and

WHEREAS, the City and Owner for their mutual benefit, now desire to enter into this Agreement to limit the use of the Historic Property to prevent inappropriate alterations, to ensure that characteristics of historic significance are preserved and maintained in an exemplary manner, and to carry out the purposes of Article 12 (commencing with Section 50280) of Chapter 1, Part 1, Division 1 of Title 5 of the California Government Code and Article 1.9 (commencing with Section 439) of Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code.

AGREEMENT

NOW, THEREFORE, both Owner and City, in consideration of the mutual promises, covenants and conditions contained herein and the substantial public benefits to be derived therefrom, do hereby agree as follows:

1. **APPLICABLE LAWS.** This Agreement is made pursuant to California Government Code Sections 50280 through 50290 and Article 1.9 (commencing with Section 439) of Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code and is subject to all of the provisions of those statutes. To the extent any of the provisions in this Agreement are inconsistent with the aforementioned provisions of the Government and Revenue and Taxation Codes, they are superseded by those Code Sections.

2. ASSESSMENT OF VALUATION. Property tax relief afforded to Owner pursuant to Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code will be determined solely by the Orange County Office of the Assessor. City makes no representations regarding the actual tax savings any person may realize by entering into this Agreement.
3. PRESERVATION OF PROPERTY. Owner agrees to preserve and maintain the Historic Property and its character defining features. Character defining features include, but are not necessarily limited to, the general architectural form, style, materials, design, scale, details, mass, roofline and other aspects of the appearance of the exterior of the Historic Property. For purposes of identification of the Historic Property, the City's Official Historic Property Inventory Form (DPR 523) is attached as Exhibit E.

The *Secretary of the Interior's Standards for Rehabilitation* (Exhibit B) and City's minimum maintenance standards (Exhibit C), attached hereto and incorporated herein by reference, shall constitute the minimum standards and conditions for preservation and rehabilitation of the Historic Property, and shall apply to the Historic Property throughout the term of this Agreement. Owner shall, where necessary, rehabilitate the Historic Property to conform to the rules and regulations of the Office of Historic Preservation of the California Department of Parks and Recreation, the *Secretary of the Interior's Standards for Rehabilitation*, the California Historical Building Code, and the City of Orange's Historic Preservation Design Standards for Old Towne and Eichler Design Standards.

As consideration for the City to enter into this Agreement, the Owner agrees, at its own cost and expense, to complete, or cause to be completed, the work or improvements described in Exhibit D within the times established therefore in Exhibit D. The Owner shall secure any and all permits which may be required by the City or any other governmental agency affected by the construction of the work or improvements. The Owner accepts responsibility for and shall be responsible for identification of and compliance with all applicable laws pertaining to the construction and installation of the work or improvements described on Exhibit D and the contract or contracts pertaining thereto. The Owner will neither seek to hold nor hold the City liable for, and will hold the City harmless with respect to, any consequences of any failure by the Owner to correctly determine the applicability of any such requirements to any contract he/she/they enter into.

In addition to the foregoing, the Owner hereby agrees to and will comply with all applicable local, state, and federal statutes, regulations, rules, codes (including building codes), ordinances, and other requirements of governmental authorities now or hereafter in effect ("Applicable Laws") pertaining to the use of the Historic Property. Owner must give the City immediate written notice on Owner's becoming aware that the use or condition of the Historic Property is in violation of any Applicable Laws.

4. INSPECTIONS AND ANNUAL REPORTING. Owner agrees to permit the examination, by prior appointment, of the interior and exterior of the Historic Property by the City at a minimum every five (5) years during the Agreement term to determine Owner's compliance with the terms and provisions of this Agreement. Owner agrees to provide the City with a report as to the status of the Historic Property annually within thirty (30) days following each anniversary of the

Effective Date of this Agreement. The annual report shall provide substantiation reasonably satisfactory to the City's Historic Preservation Planner or in his/her absence the Director of Community Development that Owner has completed the work required by Exhibit D for the twelve month period preceding each anniversary of this Agreement, and whether the Historic Property has undergone any changed conditions, and whether Owner has received any public funds from other sources designated for the preservation or maintenance of the Historic Property and from whom such funds have been received.

5. PAYMENT OF ANNUAL FEE. The Owner shall pay the City an annual fee to cover administrative costs associated with this Agreement including but not limited to the reasonable cost of monitoring the Historic Property, performing required inspections, and enforcement of the Agreement. Said fee shall be payable to the City of Orange and shall be remitted to the Planning Division upon demand and prior to any required inspection. The amount of the annual inspection fee shall be established by the City and may be revised from time to time, which fee shall be set forth in the City's Master Schedule of Fees and Charges. Failure to pay the required fee within 45 days of the due date will be considered a willful breach of this Agreement and may result in cancellation of the Agreement in accordance with the cancellation terms detailed below.
6. TERM. The term of this Agreement is for a period of ten (10) years. The initial term of this Agreement shall be from September 8, 2020 to and including September 8, 2030.
7. AUTOMATIC RENEWAL. On each yearly anniversary of the Effective Date of this Agreement ("renewal date"), one year shall be added automatically to the initial term of this Agreement, unless notice of non-renewal is given as provided in this Agreement.
8. EFFECT OF OUTSIDE FUNDS. If Owner receives funds designated for the preservation or maintenance of the Historic Property from any other public agency, this Agreement shall not be renewed except upon the vote of the City Council.
9. NOTICE OF NONRENEWAL. If in any year either the Owner or City desires not to renew this Agreement, that party shall serve written notice of nonrenewal to the other party in advance of the annual renewal date. Unless the notice is served by Owner to City at least ninety (90) days, or by City to Owner at least sixty (60) days prior to the renewal date, one year shall automatically be added to the term of the Agreement. Within fifteen (15) days of receipt by Owner of a notice of nonrenewal from the City, Owner may make a written protest. Upon receipt of such a protest the City Council shall set a hearing prior to the expiration of the renewal date of this Agreement or toll the renewal date until such hearing can reasonably held. Owner may furnish the City Council with any information which the Owner deems relevant; and shall furnish the City Council with any information it may require. At any time prior to the renewal date, City may withdraw its notice of nonrenewal.
10. EFFECT OF NOTICE NOT TO RENEW. If in any year either party serves notice of intent not to renew this Agreement, this Agreement shall remain in effect for the balance of the period remaining since the original execution date if not yet renewed, or the last renewal date of the Agreement, as the case may be.

11. UPDATE OF IMPROVEMENT SCHEDULE. At least ninety (90) days prior to the tenth (10th) anniversary of the Effective Date of this Agreement, and ninety (90) days prior to every tenth (10th) anniversary thereafter, Owner shall provide City with an updated schedule of rehabilitation maintenance items for the City's review and approval. Such updated schedule shall contain a list of proposed improvements and/or revisions to be accomplished during the next succeeding ten (10) years of the Agreement and a schedule for the construction of such improvements. Within thirty (30) days after the City's receipt of said updated schedule, the City's Director of Community Development shall either approve or disapprove such proposed schedule of proposed improvements, or shall respond in writing by stating what further information, if any, the City reasonably requires in order to determine the request complete and determine whether or not to grant the requested approval. Upon receipt of such a response, the Owner shall promptly furnish to the City such further information as may be reasonably requested.

From time to time, at the request of the City's Director of Community Development (or his/her authorized representative), the Owner shall meet and confer with the City's Planner for Historic Preservation or in his/her absence the Director of Community Development (or his/her designee) regarding matters arising hereunder with respect to the work and improvements and the progress in constructing the same.

12. INDEPENDENT ADVICE OF COUNSEL. The Owner, and each of them, represent and declare that in executing this Agreement he/she/they have relied solely upon his/her/their own judgment, belief and knowledge, and the advice and recommendations of his/her/their own independently selected counsel, concerning the nature, extent and duration of his/her/their rights and claims, and that he/she/they have not been influenced to any extent whatsoever in executing the same by the City or by any person representing the City.

13. ENFORCEMENT OF AGREEMENT. If the City determines the owner has breached any of the conditions of the Agreement provided for or has allowed the property to deteriorate to the point it no longer meets the standards for a qualified historical property, the City shall either cancel the Agreement or bring any action in court necessary to enforce the Agreement including, but not limited to an action to enforce the Agreement by specific performance to cure, correct or remedy any breach of the terms of this Agreement, to recover damages for any breach, or to obtain any other remedy consistent with the purpose of this Agreement. In the event of a default under the provisions of this Agreement by Owner, City shall give written notice to Owner specifying the alleged grounds for the default. Said notice shall be given by registered or certified mail addressed to the address stated in this Agreement. If such violation(s) is not corrected to the reasonable satisfaction of the City within thirty (30) days from the receipt of the notice of violation, or within such reasonable time as may be required to cure the breach or default, provided that acts to cure, correct or remedy such breach or default are commenced within thirty (30) days and thereafter diligently pursued to completion, then City may, without further notice, institute legal action.

Except as otherwise expressly stated in this Agreement, the rights and remedies of the City are cumulative, and the exercise by the City of one or more of such rights or remedies shall not preclude the exercise by it, at the same or different times, of any other rights or remedies for the same default or any other default by the Owner. Any failure or delay by the City in asserting any

of its right and remedies as to a breach of any of the covenants, conditions or agreements set forth herein shall not operate as a waiver of such breach or of any such rights or remedies, or deprive the City of its right to institute and maintain any actions or proceedings which it may deem necessary to protect, assert or enforce such rights or remedies. A waiver by the City of a breach shall not be construed as a waiver of any succeeding breach of the same or other covenants, conditions or agreements set forth in this Agreement.

14. CANCELLATION. In lieu of bringing an action to enforce the Agreement City may cancel this Agreement if City determines Owner has breached any of the conditions or covenants of this Agreement or has allowed the Historic Property to deteriorate to the point that it no longer meets the standards for a qualified historical property. City may also cancel this Agreement if it determines Owner has failed to rehabilitate the Historic Property in the manner specified in this Agreement.
15. NOTICE OF CANCELLATION. This Agreement cannot be canceled until after City has given notice and has held a public hearing as required by Government Code Section 50285. Notice of the hearing shall be mailed to the last known address of each owner of property within 300 feet of the Historic Property and shall be published in accordance with Government Code Section 6061.
16. CANCELLATION FEE. If City cancels this Agreement in accordance with Section 15 above, Owner shall pay a cancellation fee of twelve and one-half percent (12-1/2%) of the current fair market value of the Historic Property at the time of cancellation. The current fair market value shall be determined by the County Assessor as though the Historic Property were free of the restriction on the Historic Property imposed pursuant to this Agreement. The cancellation fee shall be paid to the County Auditor at such time and in such manner as the County Auditor shall prescribe.
17. NOTICES. All notices required by or provided for in the Agreement shall be given in writing and may be mailed or delivered in person at the address of the respective parties as specified below or at any other address as may be later specified by the parties. Deposit of notice in the mail, postage prepaid, shall be deemed receipt of the notice.

City of Orange
Attn.: City Clerk
300 E. Chapman Avenue
Orange, CA 92866

Buddhika Hathotuwegama
5123 E. Elsinore Avenue
Orange, CA 92869

18. NO COMPENSATION. Owner shall not receive any payment from the City in consideration of the obligations imposed under this Agreement. The Owner acknowledges and agrees that the consideration for the execution of this Agreement is the substantial public benefit to be derived therefrom and the advantage that will accrue to Owner as a result of the effect upon the assessed value of the Historic Property on account of the restrictions on the use and preservation of the Historic Property.

19. REMEDY IF AGREEMENT HELD NOT ENFORCEABLE. In the event it is finally determined this Agreement does not constitute an enforceable restriction within the meaning of the applicable provisions of the California Government Code and the California Revenue and Taxation Code, except for an unenforceability arising from the cancellation or nonrenewal of this Agreement, then this Agreement shall be null and void and without further effect and the Historic Property subject to this Agreement shall from that time be free from any restriction whatsoever under this Agreement without any payment or further act of the parties to this Agreement.

20. ACQUISITION OF PROPERTY BY EMINENT DOMAIN; CANCELLATION OF CONTRACT; INAPPLICABILITY TO DETERMINATION OF VALUE. In the event that the Historic Property is acquired in whole or part by eminent domain or other acquisition by any entity authorized to exercise the power of eminent domain, and the acquisition is determined by the City to frustrate the purpose of the Agreement, the Agreement shall be canceled and no fee shall be imposed under Section 17, above. The Agreement shall be deemed null and void for all purposes of determining the value of the Historic Property so acquired.

If, subsequent to the filing of an action in eminent domain, the proposed condemnation is abandoned by the condemning agency, the restrictions on the use of the Historic Property included in this Agreement shall, without further agreement of the parties, be reinstated and the terms of this Agreement shall continue in full force and effect.

21. EFFECT OF AGREEMENT. None of the terms, provisions or conditions of this Agreement shall be deemed to create a partnership between the parties hereto and any of their heirs, successors or assigns, nor shall such terms, provisions or conditions cause the parties hereto to be considered joint venturers or members of any joint enterprise.

22. SUCCESSORS AND ASSIGNS. This Agreement is binding upon and shall inure to the benefit of all successors in interest of the Owner, regardless of the tax exempt status of any subsequent owner. A successor in interest shall have the same rights and obligations under this Agreement as the original owner who entered into this Agreement.

23. REQUIREMENTS RELATED TO TRANSFER OF HISTORIC PROPERTY. In the event of any sale, transfer, assignment or conveyance of the Historic Property ("Transfer"), the Owner agrees that, at least thirty (30) days prior to such Transfer, it shall give written notice to the City of such proposed Transfer, including the name(s) of the transferee(s). In addition, the Owner and the proposed transferee(s) shall enter into and deliver to the City through the escrow for the Transfer of the Historic Property an assignment and assumption agreement in a form satisfactory to the City's Attorney or such other evidence as may be satisfactory to the City that the transferee(s) has (have) assumed the Owner's obligations set forth in this Agreement. Upon the Transfer of the Historic Property and the assumption of the obligations hereunder by the transferee(s), the Owner's liability for performance shall be terminated as to any obligation to be performed hereunder after the date of such Transfer.

24. RECORDATION. City shall record a copy of this Agreement with the Office of the County Recorder of the County of Orange.

25. AMENDMENTS. This Agreement may be amended, in whole or in part, only by a written and recorded instrument executed by the parties hereto, except that the Director of Community Development is authorized to amend the list of required projects in Exhibit D.
26. COUNTERPARTS. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original and all of which shall constitute one and the same agreement with the same effect as if all parties had signed the same signature page. Any signature page of this Agreement may be detached from any counterpart of this Agreement and re-attached to any other counterpart of this Agreement identical in form hereto but having attached to it one or more additional signature pages.
27. ADMINISTRATION. This Agreement shall be administered by the City's Director of Community Development (or his/her designated representative) following approval of this Agreement by the City. The City shall maintain authority of this Agreement through the City's Director of Community Development (or his/her authorized representative). The City's Director of Community Development shall have the authority to issue interpretations, waive provisions and enter into amendments of this Agreement on behalf of the City so long as such actions do not change the uses permitted on the Historic Property or the purpose of this Agreement. Such amendments may include extensions of time or amendments to the projects specified in Exhibit D. All other waivers or amendments shall require the written approval and consent of the City Council.

[Remainder of page intentionally left blank; signatures on next page]

IN WITNESS WHEREOF, the City and the Owner have executed this Agreement.

“OWNER”

Dated: _____, 2020

Buddhika Hathotuwegama

“CITY”

CITY OF ORANGE, a municipal corporation

Dated: _____, 2020

By: _____
Mark A. Murphy
Mayor

ATTEST:

APPROVED AS TO FORM:

Pamela Coleman
City Clerk

Mary E. Binning
Senior Assistant City Attorney

ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of _____

On _____ before me, _____,
a Notary Public in and for the State of California, personally appeared _____

_____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

EXHIBIT "A"

LEGAL DESCRIPTION OF HISTORIC PROPERTY

REAL PROPERTY IN THE CITY OF ORANGE, COUNTY OF ORANGE, STATE OF CALIFORNIA, DESCRIBED AS:

Lot 19 of Tract No. 4733, in the City of Orange, County of Orange, State of California, as per map recorded in Book 177, Page 7 through 10, inclusive, of Miscellaneous Maps, in the office of the County Recorder of said County.

[APN 379-021-03]

EXHIBIT "B"

SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION

1. Every reasonable effort shall be made to provide a compatible use for a property, which requires a minimal alteration of the building structure, or site and its environment, or to use a property for its originally intended purpose.
2. The distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.
3. All buildings, structures, and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.
4. Changes which may have taken place in the course of time are evidence of the history and development of a building, structure or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.
5. Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure or site shall be treated with sensitivity.
6. Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.
7. The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.
8. Every reasonable effort shall be made to protect and preserve archeological resources affected by, or adjacent to, any project.
9. Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with the size, scale, color, material and character of the property, neighborhood or environment.
10. Wherever possible, new additions or alterations to structures shall be done in such a manner that, if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.

EXHIBIT “C”

CITY OF ORANGE HISTORIC PROPERTY **MAINTENANCE STANDARDS**

All buildings, structures, yards and other improvements shall be maintained in a manner which does not detract from the appearance of the immediate neighborhood. The following conditions are prohibited:

1. Dilapidated, deteriorating, or unrepaired structures, such as: fences, roofs, doors, walls and windows.
2. Publicly visible storage of scrap lumber, junk, trash or debris.
3. Publicly visible storage of abandoned, discarded or unused objects or equipment, such as automobiles, automobile parts, furniture, stoves, refrigerators, cans, containers or similar items.
4. Stagnant water or excavations, including pools or spas.
5. Any device, decoration, design, structure or vegetation that is unsightly by reason of its height, condition, or its inappropriate location.

EXHIBIT “D”

REHABILITATION/MAINTENANCE SCOPE OF WORK

[Attached.]

EXHIBIT “D”

REHABILITATION/MAINTENANCE SCOPE OF WORK

5123 E. Elsinore Avenue

Priority	Description of Work	Cost Estimate	Completion Date
1.	Replace wall mounted exterior lighting in entrance, atrium back and side yards.	\$2,000	2021
2.	Install water softener system.	\$2,800	2021
3.	Replace previously replaced front door side light glass with new glass compatible with original mislite glass in compliance with the Orange Eichler Design Standards.	\$1,000	2021
4.	Install new water heater/continuous flow hot water.	\$3,000	2022
5.	Restore Interior Mahogany Paneling dining room wall	\$4,000	2023
6.	Repair or replace sliding doors	\$15,000	2026
7.	Complete repaint of exterior of the house.	\$10,000	2025
8.	Install new foam insulated roof system.	\$35,000	2027
9.	Exterior maintenance of wood siding and trims, including repair and paint touchups, roof repair	\$4,000	2022
10.	Exterior maintenance of wood siding and trims, including repair and paint touchups, roof repair	\$4,000	2024
11.	Exterior maintenance of wood siding and trims, including repair and paint touchups, roof repair	\$4,000	2028
12.	Exterior maintenance of wood siding and trims, including repair, and paint touchups	\$4,000	2030
TOTAL		\$88,800	

EXHIBIT “E”

HISTORIC PROPERTY INVENTORY FORM (DPR 523)

[Attached.]

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial ORA
NRHP Status Code 3D

Other Listings: _____
Review Code: _____ Reviewer: _____ Date: _____

Page 1 of 3

*Resource Name or #: ELSINORE_E_5123__APN_379-021-03
(Assigned by Recorder)

P1. Other Identifier: Fairhills Tract

*P2. Location: Not for Publication Unrestricted

*a. County: Orange and (P2b and P2c or P2d. Attach a location map as necessary.)

*b. USGS 7.5' Quad: _____ Date: _____ T _____; R _____; 1/4 of _____ 1/4 of Sec _____; B.M. _____

c. Address: 5123 - E ELSINORE AVE, # _____ City: Orange Zip: 92869

d. UTM: (Give more than one for large and/or linear resources) Zone _____ ' _____ mE/ _____ mN

e. Other Locational Data:

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries. Continues on Pg.3.)

Materials:

Model OC-274; With shingle siding

*P3b. Resource Attributes: (HP2)--Single family property
(List attributes and codes)

*P4. Resources Present: Building Structure Object Site Element of District District Other (Isolates, etc.)

P5b. Description of Photo: 2005
(View, date, accession #)



*P6. Date Constructed/ Age and Source:

1962 c

Historic Prehistoric Both

*P7. Owner and Address:

*P8: Recorded by: (Name, affiliation, and address)

Marissa Moshier, Historic
Preservation Planner

City of Orange
300 E. Chapman Ave.
Orange, CA 92866

*P9. Date Recorded:

January 2016

*P10. Survey Type: (Describe)

Reconnaissance

*P11. Report Citation: (Cite survey report and other sources, or enter "none.")

Orange County Assessor Records (2005). Chattel Architecture (2005)
Historic Resources Survey.

*Attachments: NONE Location Map Continuation Sheet(s) Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List): _____

DPR 523A (1/95)

*Required Information

Page 2 of 3

*Resource Name or #: ELSINORE_E_5123__APN_379-021-03
(Assigned by Recorder)

B1. Historic Name: Unknown

B2. Common Name: _____

B3. Original Use: RES B4. Present Use: RES

*B5. Architectural Style: Mid-Century Modern

*B6. Construction History: (Construction date, alterations, and date of alterations) Date of Construction: 1962 Historic Prehistoric Both
Front door replaced and surround infilled; driveway and front walk repaved.

*B7. Moved? No Yes Unknown Date: _____ Original Location: _____

*B8. Related Features: _____

*B9. Architect or Builder: Eichler Homes - Anshen & Allen

*B10. Significance: Theme: Architecture Area: City of Orange Property Type: Residence

Period of Significance: Eichler Tract (c. 1959 - 1965) Applicable Criteria: C

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity. Continues on Pg.4.)

Structural Integrity: Good Condition - High level of alteration as of 2005.

Site Integrity: _____

Opportunities _____

B11. Additional Resource Attributes: (List attributes and codes) _____

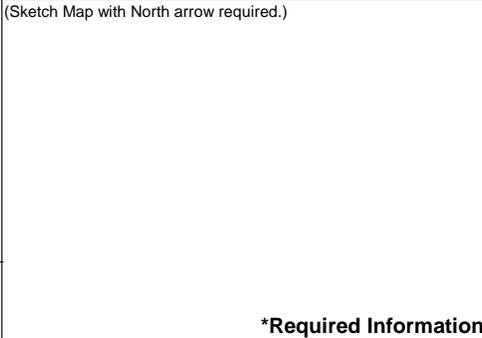
*B12. References: _____

Orange Daily News. Eichler Tract Brochures and miscellaneous Eichler materials from the Orange Public Library.

B13. Remarks: (Continues on Pg.3.)

Status change since 1991 Survey: Not previously surveyed.

(Sketch Map with North arrow required.)



*B14. Evaluator: Marissa Moshier, City of Orange

*Date of Evaluation: January 2016

(This space reserved for official comments.)

DPR 523B (1/95)

*Required Information

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # _____
HRI # _____
Trinomial ORA

Page 3 of 3

*Resource Name or #:
(Assigned by Recorder)

ELSINORE_E_5123__APN_379-021-03

Recorded by:

Marissa Moshier, Historic Preservation Planner
City of Orange
300 E. Chapman Ave.
Orange, CA 92866

Date Recorded: January 2016

Continuation Update

Years Surveyed:

2005, 2015

Description of Photo:

Listed in National Register:

General Plan:

LDR

of Buildings:

1

Planning Zone:

R-1-8

of Stories:

1

Lot Acre:

0.2015

of Units:

1

Principal Building Sqft:

2805

B6. Construction History (Continued from Pg.2):

B13. Remarks (Continued from Pg.2):

P3a. Description (Continued from Pg.1):



RECORDING REQUESTED BY
AND, WHEN RECORDED,
MAIL TO:

City Clerk
City of Orange
300 E. Chapman Avenue
Orange, California, 92866

Exempt from recording fees pursuant to
Gov. Code Sections 6103 and 27383

Property Address: 852 S. Oakwood Street
APN: 094-123-09
Mills Act Contract Number: 342.0-20

**HISTORIC PROPERTY PRESERVATION AGREEMENT
(MILLS ACT CONTRACT)**

THIS HISTORIC PROPERTY PRESERVATION AGREEMENT (“Agreement”) is made and entered into as of the date of execution by the City (“Effective Date”), by and between the CITY OF ORANGE, a municipal corporation (“City”), and Andrew Barmeyer, an unmarried man, and Kym Bashford, a widow as joint tenants (“Owner”), with reference to the following:

RECITALS

WHEREAS, the Mills Act (Government Code Section 50280 *et seq.*) provides cities with the opportunity to contract with owners of qualified historical properties whereby the owner promises to preserve and rehabilitate the property in return for a potential reduced property tax assessment; and

WHEREAS, the City of Orange has established Historic Districts consisting of the Plaza Historic District, listed in the National Register of Historic Places; the Old Towne Orange Historic District, listed in the National Register of Historic Places; the local Old Towne Orange Historic District, designated by the Orange City Council; and the local Eichler Fairhaven, Fairhills, and Fairmeadow Historic Districts, designated by the Orange City Council; and the City desires to promote the character, quality of life, and historic features of said Districts to its citizens and visitors; and

WHEREAS, the City is dedicated to the protection and stabilization of property values through maintaining and upgrading its older housing stock, through the use of incentives such as the Mills Act; and

WHEREAS, the Mills Act also has beneficial effects on City businesses, economic stability and community pride by preserving important neighborhood historic resources; and

WHEREAS, the use of the Mills Act will fulfill one of the goals of the City’s 2010 General Plan Cultural Resources Element; specifically,

“Provide incentives and expand education efforts for historic preservation” (Goal 3.0, CR-22); and

WHEREAS, Owner possesses fee simple title in and to that certain real property, together with associated structures and improvements thereon, located at 852 S. Oakwood Street in the City of Orange, County of Orange, State of California, having Assessor’s Parcel Number 094-123-09 and more specifically described in Exhibit A, which exhibit is attached hereto and made a part hereof (“Historic Property”); and

WHEREAS, the Historic Property is a qualified historical property under the Mills Act in that it is privately owned property which is not exempt from property taxation and is either: individually designated or is a contributing property within a designated district which is listed in the National Register of Historic Places, California Register of Historical Resources or Register of Historical Landmarks, California Points of Historical Interest, or is a contributing property in a locally designated historic district; and

WHEREAS, Owner, in consideration for abiding by the terms of this Agreement shall be entitled to a reassessment of valuation of the Historic Property and any corresponding reduction in property taxes pursuant to the provisions of the California Revenue and Taxation Code; and

WHEREAS, it is the City’s expectation that the Owner will use the property tax savings accrued under this Agreement for improvements to the “Historic Property” (as defined below). To that end, as a condition of renewal, the City will require a revised schedule of improvements every ten years showing a plan for improvements commensurate with the tax savings; and

WHEREAS, the City and Owner for their mutual benefit, now desire to enter into this Agreement to limit the use of the Historic Property to prevent inappropriate alterations, to ensure that characteristics of historic significance are preserved and maintained in an exemplary manner, and to carry out the purposes of Article 12 (commencing with Section 50280) of Chapter 1, Part 1, Division 1 of Title 5 of the California Government Code and Article 1.9 (commencing with Section 439) of Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code.

AGREEMENT

NOW, THEREFORE, both Owner and City, in consideration of the mutual promises, covenants and conditions contained herein and the substantial public benefits to be derived therefrom, do hereby agree as follows:

1. **APPLICABLE LAWS.** This Agreement is made pursuant to California Government Code Sections 50280 through 50290 and Article 1.9 (commencing with Section 439) of Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code and is subject to all of the provisions of those statutes. To the extent any of the provisions in this Agreement are inconsistent with the aforementioned provisions of the Government and Revenue and Taxation Codes, they are superseded by those Code Sections.

2. ASSESSMENT OF VALUATION. Property tax relief afforded to Owner pursuant to Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code will be determined solely by the Orange County Office of the Assessor. City makes no representations regarding the actual tax savings any person may realize by entering into this Agreement.
3. PRESERVATION OF PROPERTY. Owner agrees to preserve and maintain the Historic Property and its character defining features. Character defining features include, but are not necessarily limited to, the general architectural form, style, materials, design, scale, details, mass, roofline and other aspects of the appearance of the exterior of the Historic Property. For purposes of identification of the Historic Property, the City's Official Historic Property Inventory Form (DPR 523) is attached as Exhibit E.

The *Secretary of the Interior's Standards for Rehabilitation* (Exhibit B) and City's minimum maintenance standards (Exhibit C), attached hereto and incorporated herein by reference, shall constitute the minimum standards and conditions for preservation and rehabilitation of the Historic Property, and shall apply to the Historic Property throughout the term of this Agreement. Owner shall, where necessary, rehabilitate the Historic Property to conform to the rules and regulations of the Office of Historic Preservation of the California Department of Parks and Recreation, the *Secretary of the Interior's Standards for Rehabilitation*, the California Historical Building Code, and the City of Orange's Historic Preservation Design Standards for Old Towne and Eichler Design Standards.

As consideration for the City to enter into this Agreement, the Owner agrees, at its own cost and expense, to complete, or cause to be completed, the work or improvements described in Exhibit D within the times established therefore in Exhibit D. The Owner shall secure any and all permits which may be required by the City or any other governmental agency affected by the construction of the work or improvements. The Owner accepts responsibility for and shall be responsible for identification of and compliance with all applicable laws pertaining to the construction and installation of the work or improvements described on Exhibit D and the contract or contracts pertaining thereto. The Owner will neither seek to hold nor hold the City liable for, and will hold the City harmless with respect to, any consequences of any failure by the Owner to correctly determine the applicability of any such requirements to any contract he/she/they enter into.

In addition to the foregoing, the Owner hereby agrees to and will comply with all applicable local, state, and federal statutes, regulations, rules, codes (including building codes), ordinances, and other requirements of governmental authorities now or hereafter in effect ("Applicable Laws") pertaining to the use of the Historic Property. Owner must give the City immediate written notice on Owner's becoming aware that the use or condition of the Historic Property is in violation of any Applicable Laws.

4. INSPECTIONS AND ANNUAL REPORTING. Owner agrees to permit the examination, by prior appointment, of the interior and exterior of the Historic Property by the City at a minimum every five (5) years during the Agreement term to determine Owner's compliance with the terms and provisions of this Agreement. Owner agrees to provide the City with a report as to the status of the Historic Property annually within thirty (30) days following each anniversary of the

Effective Date of this Agreement. The annual report shall provide substantiation reasonably satisfactory to the City's Historic Preservation Planner or in his/her absence the Director of Community Development that Owner has completed the work required by Exhibit D for the twelve month period preceding each anniversary of this Agreement, and whether the Historic Property has undergone any changed conditions, and whether Owner has received any public funds from other sources designated for the preservation or maintenance of the Historic Property and from whom such funds have been received.

5. PAYMENT OF ANNUAL FEE. The Owner shall pay the City an annual fee to cover administrative costs associated with this Agreement including but not limited to the reasonable cost of monitoring the Historic Property, performing required inspections, and enforcement of the Agreement. Said fee shall be payable to the City of Orange and shall be remitted to the Planning Division upon demand and prior to any required inspection. The amount of the annual inspection fee shall be established by the City and may be revised from time to time, which fee shall be set forth in the City's Master Schedule of Fees and Charges. Failure to pay the required fee within 45 days of the due date will be considered a willful breach of this Agreement and may result in cancellation of the Agreement in accordance with the cancellation terms detailed below.
6. TERM. The term of this Agreement is for a period of ten (10) years. The initial term of this Agreement shall be from September 8, 2020 to and including September 8, 2030.
7. AUTOMATIC RENEWAL. On each yearly anniversary of the Effective Date of this Agreement ("renewal date"), one year shall be added automatically to the initial term of this Agreement, unless notice of non-renewal is given as provided in this Agreement.
8. EFFECT OF OUTSIDE FUNDS. If Owner receives funds designated for the preservation or maintenance of the Historic Property from any other public agency, this Agreement shall not be renewed except upon the vote of the City Council.
9. NOTICE OF NONRENEWAL. If in any year either the Owner or City desires not to renew this Agreement, that party shall serve written notice of nonrenewal to the other party in advance of the annual renewal date. Unless the notice is served by Owner to City at least ninety (90) days, or by City to Owner at least sixty (60) days prior to the renewal date, one year shall automatically be added to the term of the Agreement. Within fifteen (15) days of receipt by Owner of a notice of nonrenewal from the City, Owner may make a written protest. Upon receipt of such a protest the City Council shall set a hearing prior to the expiration of the renewal date of this Agreement or toll the renewal date until such hearing can reasonably held. Owner may furnish the City Council with any information which the Owner deems relevant; and shall furnish the City Council with any information it may require. At any time prior to the renewal date, City may withdraw its notice of nonrenewal.
10. EFFECT OF NOTICE NOT TO RENEW. If in any year either party serves notice of intent not to renew this Agreement, this Agreement shall remain in effect for the balance of the period remaining since the original execution date if not yet renewed, or the last renewal date of the Agreement, as the case may be.

11. UPDATE OF IMPROVEMENT SCHEDULE. At least ninety (90) days prior to the tenth (10th) anniversary of the Effective Date of this Agreement, and ninety (90) days prior to every tenth (10th) anniversary thereafter, Owner shall provide City with an updated schedule of rehabilitation maintenance items for the City's review and approval. Such updated schedule shall contain a list of proposed improvements and/or revisions to be accomplished during the next succeeding ten (10) years of the Agreement and a schedule for the construction of such improvements. Within thirty (30) days after the City's receipt of said updated schedule, the City's Director of Community Development shall either approve or disapprove such proposed schedule of proposed improvements, or shall respond in writing by stating what further information, if any, the City reasonably requires in order to determine the request complete and determine whether or not to grant the requested approval. Upon receipt of such a response, the Owner shall promptly furnish to the City such further information as may be reasonably requested.

From time to time, at the request of the City's Director of Community Development (or his/her authorized representative), the Owner shall meet and confer with the City's Planner for Historic Preservation or in his/her absence the Director of Community Development (or his/her designee) regarding matters arising hereunder with respect to the work and improvements and the progress in constructing the same.

12. INDEPENDENT ADVICE OF COUNSEL. The Owner, and each of them, represent and declare that in executing this Agreement he/she/they have relied solely upon his/her/their own judgment, belief and knowledge, and the advice and recommendations of his/her/their own independently selected counsel, concerning the nature, extent and duration of his/her/their rights and claims, and that he/she/they have not been influenced to any extent whatsoever in executing the same by the City or by any person representing the City.

13. ENFORCEMENT OF AGREEMENT. If the City determines the owner has breached any of the conditions of the Agreement provided for or has allowed the property to deteriorate to the point it no longer meets the standards for a qualified historical property, the City shall either cancel the Agreement or bring any action in court necessary to enforce the Agreement including, but not limited to an action to enforce the Agreement by specific performance to cure, correct or remedy any breach of the terms of this Agreement, to recover damages for any breach, or to obtain any other remedy consistent with the purpose of this Agreement. In the event of a default under the provisions of this Agreement by Owner, City shall give written notice to Owner specifying the alleged grounds for the default. Said notice shall be given by registered or certified mail addressed to the address stated in this Agreement. If such violation(s) is not corrected to the reasonable satisfaction of the City within thirty (30) days from the receipt of the notice of violation, or within such reasonable time as may be required to cure the breach or default, provided that acts to cure, correct or remedy such breach or default are commenced within thirty (30) days and thereafter diligently pursued to completion, then City may, without further notice, institute legal action.

Except as otherwise expressly stated in this Agreement, the rights and remedies of the City are cumulative, and the exercise by the City of one or more of such rights or remedies shall not preclude the exercise by it, at the same or different times, of any other rights or remedies for the same default or any other default by the Owner. Any failure or delay by the City in asserting any

of its right and remedies as to a breach of any of the covenants, conditions or agreements set forth herein shall not operate as a waiver of such breach or of any such rights or remedies, or deprive the City of its right to institute and maintain any actions or proceedings which it may deem necessary to protect, assert or enforce such rights or remedies. A waiver by the City of a breach shall not be construed as a waiver of any succeeding breach of the same or other covenants, conditions or agreements set forth in this Agreement.

14. CANCELLATION. In lieu of bringing an action to enforce the Agreement City may cancel this Agreement if City determines Owner has breached any of the conditions or covenants of this Agreement or has allowed the Historic Property to deteriorate to the point that it no longer meets the standards for a qualified historical property. City may also cancel this Agreement if it determines Owner has failed to rehabilitate the Historic Property in the manner specified in this Agreement.
15. NOTICE OF CANCELLATION. This Agreement cannot be canceled until after City has given notice and has held a public hearing as required by Government Code Section 50285. Notice of the hearing shall be mailed to the last known address of each owner of property within 300 feet of the Historic Property and shall be published in accordance with Government Code Section 6061.
16. CANCELLATION FEE. If City cancels this Agreement in accordance with Section 15 above, Owner shall pay a cancellation fee of twelve and one-half percent (12-1/2%) of the current fair market value of the Historic Property at the time of cancellation. The current fair market value shall be determined by the County Assessor as though the Historic Property were free of the restriction on the Historic Property imposed pursuant to this Agreement. The cancellation fee shall be paid to the County Auditor at such time and in such manner as the County Auditor shall prescribe.
17. NOTICES. All notices required by or provided for in the Agreement shall be given in writing and may be mailed or delivered in person at the address of the respective parties as specified below or at any other address as may be later specified by the parties. Deposit of notice in the mail, postage prepaid, shall be deemed receipt of the notice.

City of Orange
Attn.: City Clerk
300 E. Chapman Avenue
Orange, CA 92866

Andrew Barmeyer and Kym Bashford
852 S. Oakwood Street
Orange, CA 92869

18. NO COMPENSATION. Owner shall not receive any payment from the City in consideration of the obligations imposed under this Agreement. The Owner acknowledges and agrees that the consideration for the execution of this Agreement is the substantial public benefit to be derived therefrom and the advantage that will accrue to Owner as a result of the effect upon the assessed value of the Historic Property on account of the restrictions on the use and preservation of the Historic Property.

19. REMEDY IF AGREEMENT HELD NOT ENFORCEABLE. In the event it is finally determined this Agreement does not constitute an enforceable restriction within the meaning of the applicable provisions of the California Government Code and the California Revenue and Taxation Code, except for an unenforceability arising from the cancellation or nonrenewal of this Agreement, then this Agreement shall be null and void and without further effect and the Historic Property subject to this Agreement shall from that time be free from any restriction whatsoever under this Agreement without any payment or further act of the parties to this Agreement.

20. ACQUISITION OF PROPERTY BY EMINENT DOMAIN; CANCELLATION OF CONTRACT; INAPPLICABILITY TO DETERMINATION OF VALUE. In the event that the Historic Property is acquired in whole or part by eminent domain or other acquisition by any entity authorized to exercise the power of eminent domain, and the acquisition is determined by the City to frustrate the purpose of the Agreement, the Agreement shall be canceled and no fee shall be imposed under Section 17, above. The Agreement shall be deemed null and void for all purposes of determining the value of the Historic Property so acquired.

If, subsequent to the filing of an action in eminent domain, the proposed condemnation is abandoned by the condemning agency, the restrictions on the use of the Historic Property included in this Agreement shall, without further agreement of the parties, be reinstated and the terms of this Agreement shall continue in full force and effect.

21. EFFECT OF AGREEMENT. None of the terms, provisions or conditions of this Agreement shall be deemed to create a partnership between the parties hereto and any of their heirs, successors or assigns, nor shall such terms, provisions or conditions cause the parties hereto to be considered joint venturers or members of any joint enterprise.

22. SUCCESSORS AND ASSIGNS. This Agreement is binding upon and shall inure to the benefit of all successors in interest of the Owner, regardless of the tax exempt status of any subsequent owner. A successor in interest shall have the same rights and obligations under this Agreement as the original owner who entered into this Agreement.

23. REQUIREMENTS RELATED TO TRANSFER OF HISTORIC PROPERTY. In the event of any sale, transfer, assignment or conveyance of the Historic Property ("Transfer"), the Owner agrees that, at least thirty (30) days prior to such Transfer, it shall give written notice to the City of such proposed Transfer, including the name(s) of the transferee(s). In addition, the Owner and the proposed transferee(s) shall enter into and deliver to the City through the escrow for the Transfer of the Historic Property an assignment and assumption agreement in a form satisfactory to the City's Attorney or such other evidence as may be satisfactory to the City that the transferee(s) has (have) assumed the Owner's obligations set forth in this Agreement. Upon the Transfer of the Historic Property and the assumption of the obligations hereunder by the transferee(s), the Owner's liability for performance shall be terminated as to any obligation to be performed hereunder after the date of such Transfer.

24. RECORDATION. City shall record a copy of this Agreement with the Office of the County Recorder of the County of Orange.

25. AMENDMENTS. This Agreement may be amended, in whole or in part, only by a written and recorded instrument executed by the parties hereto, except that the Director of Community Development is authorized to amend the list of required projects in Exhibit D.
26. COUNTERPARTS. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original and all of which shall constitute one and the same agreement with the same effect as if all parties had signed the same signature page. Any signature page of this Agreement may be detached from any counterpart of this Agreement and re-attached to any other counterpart of this Agreement identical in form hereto but having attached to it one or more additional signature pages.
27. ADMINISTRATION. This Agreement shall be administered by the City's Director of Community Development (or his/her designated representative) following approval of this Agreement by the City. The City shall maintain authority of this Agreement through the City's Director of Community Development (or his/her authorized representative). The City's Director of Community Development shall have the authority to issue interpretations, waive provisions and enter into amendments of this Agreement on behalf of the City so long as such actions do not change the uses permitted on the Historic Property or the purpose of this Agreement. Such amendments may include extensions of time or amendments to the projects specified in Exhibit D. All other waivers or amendments shall require the written approval and consent of the City Council.

[Remainder of page intentionally left blank; signatures on next page]

IN WITNESS WHEREOF, the City and the Owner have executed this Agreement.

“OWNER”

Dated: _____, 2020

Andrew Barmeyer

Dated: _____, 2020

Kym Bashford

“CITY”

CITY OF ORANGE, a municipal corporation

Dated: _____, 2020

By: _____
Mark A. Murphy
Mayor

ATTEST:

APPROVED AS TO FORM:

Pamela Coleman
City Clerk

Mary E. Binning
Senior Assistant City Attorney

ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of _____

On _____ before me, _____,
a Notary Public in and for the State of California, personally appeared _____

_____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

EXHIBIT "A"

LEGAL DESCRIPTION OF HISTORIC PROPERTY

REAL PROPERTY IN THE CITY OF ORANGE, COUNTY OF ORANGE, STATE OF CALIFORNIA, DESCRIBED AS:

Lot 123 of Tract No. 3545, in the City of Orange, County of Orange, State of California, as shown on map recorded in Book 125, Pages 1 to 5 both inclusive of Miscellaneous Maps, Records of Orange County, California.

[APN 094-123-09]

EXHIBIT "B"

SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION

1. Every reasonable effort shall be made to provide a compatible use for a property, which requires a minimal alteration of the building structure, or site and its environment, or to use a property for its originally intended purpose.
2. The distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.
3. All buildings, structures, and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.
4. Changes which may have taken place in the course of time are evidence of the history and development of a building, structure or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.
5. Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure or site shall be treated with sensitivity.
6. Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.
7. The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.
8. Every reasonable effort shall be made to protect and preserve archeological resources affected by, or adjacent to, any project.
9. Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with the size, scale, color, material and character of the property, neighborhood or environment.
10. Wherever possible, new additions or alterations to structures shall be done in such a manner that, if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.

EXHIBIT “C”

CITY OF ORANGE HISTORIC PROPERTY **MAINTENANCE STANDARDS**

All buildings, structures, yards and other improvements shall be maintained in a manner which does not detract from the appearance of the immediate neighborhood. The following conditions are prohibited:

1. Dilapidated, deteriorating, or unrepaired structures, such as: fences, roofs, doors, walls and windows.
2. Publicly visible storage of scrap lumber, junk, trash or debris.
3. Publicly visible storage of abandoned, discarded or unused objects or equipment, such as automobiles, automobile parts, furniture, stoves, refrigerators, cans, containers or similar items.
4. Stagnant water or excavations, including pools or spas.
5. Any device, decoration, design, structure or vegetation that is unsightly by reason of its height, condition, or its inappropriate location.

EXHIBIT “D”

REHABILITATION/MAINTENANCE SCOPE OF WORK

[Attached.]

EXHIBIT “D”

REHABILITATION/MAINTENANCE SCOPE OF WORK

852 S. Oakwood Street

Priority	Description of Work	Cost Estimate	Completion Date
1.	Termite abatement and dry rot repair of siding as recommend in termite inspection report dated 2/20/2020.	\$4,000	2020
2.	Repair of drywood termite damage to beams, fascia, and roof sheathing as recommended in termite inspection report dated 2/20/2020.	\$6,000	2020
3.	Replace central a/c unit at end of service life, including upgrade of main electrical panel to meet California Building Code requirements and repair of exterior siding related to panel replacement.	\$14,500	2020
4.	Repair of built-up roof system.	\$1,275	2020
5.	Paint the exterior of the house, including repair of damaged siding at the southeast corner of the house and garage and replacement of non-historic siding patches with Eichler tongue and groove siding.	\$8,600	2021
6.	Remove front fence and gates on the south and north side of the house and relocate back even to or recessed from the front elevation of the house, in compliance with the Orange Eichler Design Standards.	\$5,500	2021
7.	Restoration or replacement like for like as needed of original mahogany panels in the living/dining room area.	\$5,000	2024
8.	Maintenance of original Arcadia sliding glass doors, including oiling of rollers and screen repair as needed.	\$1,000	2024
9.	Repair or replace main sewer line to the public right-of-way to address drainage issues.	\$15,000	2025
10.	Replace roof with new built-up roof system.	\$12,000	2029
TOTAL		\$71,875	

EXHIBIT “E”

HISTORIC PROPERTY INVENTORY FORM (DPR 523)

[Attached.]

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial ORA
NRHP Status Code 3D

Other Listings: _____
Review Code: _____ Reviewer: _____ Date: _____

Page 1 of 3

*Resource Name or #: OAKWOOD_S_852__APN_094-123-09
(Assigned by Recorder)

P1. Other Identifier: Fairhaven Tract

*P2. Location: Not for Publication Unrestricted

*a. County: Orange and (P2b and P2c or P2d. Attach a location map as necessary.)

*b. USGS 7.5' Quad: _____ Date: _____ T _____; R _____; 1/4 of _____ 1/4 of Sec _____; B.M. _____

c. Address: 852 - S OAKWOOD ST, # _____ City: Orange Zip: 92869

d. UTM: (Give more than one for large and/or linear resources) Zone _____ ' _____ mE/ _____ mN

e. Other Locational Data:

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries. Continues on Pg.3.)

Materials:

Model LJ-115

*P3b. Resource Attributes: (HP2)--Single family property
(List attributes and codes)

*P4. Resources Present: Building Structure Object Site Element of District District Other (Isolates, etc.)

P5b. Description of Photo: 2005
(View, date, accession #)



*P6. Date Constructed/ Age and Source:

1960 c

Historic Prehistoric Both

*P7. Owner and Address:

*P8. Recorded by: (Name, affiliation, and address)
D. Gest, P. LaValley

Chattel Architecture
13417 Ventura Blvd.
Sherman Oaks, CA 91423

*P9. Date Recorded:

January 2005

*P10. Survey Type: (Describe)

Reconnaissance

*P11. Report Citation: (Cite survey report and other sources, or enter "none.")

Orange County Assessor Records (2005). Chattel Architecture (2005)
Historic Resources Survey.

*Attachments: NONE Location Map Continuation Sheet(s) Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List): _____

DPR 523A (1/95)

*Required Information

Page 2 of 3

*Resource Name or #: OAKWOOD_S_852__APN_094-123-09
(Assigned by Recorder)

B1. Historic Name: Unknown

B2. Common Name: _____

B3. Original Use: RES B4. Present Use: RES

*B5. Architectural Style: Mid-Century Modern

*B6. Construction History: (Construction date, alterations, and date of alterations) Date of Construction: 1960 Historic Prehistoric Both

*B7. Moved? No Yes Unknown Date: _____ Original Location: _____

*B8. Related Features: _____

*B9. Architect or Builder: Eichler Homes - A. Quincy Jones

*B10. Significance: Theme: Architecture Area: City of Orange Property Type: Residence

Period of Significance: Eichler Tract (c. 1959 - 1965) Applicable Criteria: C

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity. Continues on Pg.4.)

Structural Integrity: Good Condition - Low level of alteration as of 2015.

Site Integrity: _____

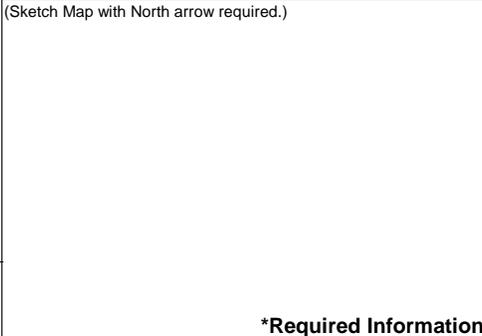
Opportunities _____

B11. Additional Resource Attributes: (List attributes and codes) _____

*B12. References:
Orange Daily News.

B13. Remarks: (Continues on Pg.3.)
Status change since 1991 Survey: Not previously surveyed.

(Sketch Map with North arrow required.)



*Required Information

*B14. Evaluator: Robert Chattel

*Date of Evaluation: September 2005

(This space reserved for official comments.)

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # _____
HRI # _____
Trinomial ORA

Page 3 of 3

*Resource Name or #: OAKWOOD_S_852__APN_094-123-09
(Assigned by Recorder)

Recorded by:

D. Gest, P. LaValley
Chattel Architecture
13417 Ventura Blvd.
Sherman Oaks, CA 91423

Date Recorded: January 2005

Continuation Update

Years Surveyed: 2005, 2015

Description of Photo: _____

Listed in National Register: _____

General Plan: LDR # of Buildings: 1

Planning Zone: R-1-8 # of Stories: 1

Lot Acre: 0.1902 # of Units: 1

Principal Building Sqft: 2391

B6. Construction History (Continued from Pg.2):

B13. Remarks (Continued from Pg.2):

P3a. Description (Continued from Pg.1):



RECORDING REQUESTED BY
AND, WHEN RECORDED,
MAIL TO:

City Clerk
City of Orange
300 E. Chapman Avenue
Orange, California, 92866

Exempt from recording fees pursuant to
Gov. Code Sections 6103 and 27383

Property Address: 1081 N. Granada Drive
APN: 379-022-06
Mills Act Contract Number: 343.0-20

**HISTORIC PROPERTY PRESERVATION AGREEMENT
(MILLS ACT CONTRACT)**

THIS HISTORIC PROPERTY PRESERVATION AGREEMENT (“Agreement”) is made and entered into as of the date of execution by the City (“Effective Date”), by and between the CITY OF ORANGE, a municipal corporation (“City”), and Paul Coleman and Elisabeth Lucas, husband and wife as community property with Right of Survivorship (“Owner”), with reference to the following:

RECITALS

WHEREAS, the Mills Act (Government Code Section 50280 *et seq.*) provides cities with the opportunity to contract with owners of qualified historical properties whereby the owner promises to preserve and rehabilitate the property in return for a potential reduced property tax assessment; and

WHEREAS, the City of Orange has established Historic Districts consisting of the Plaza Historic District, listed in the National Register of Historic Places; the Old Towne Orange Historic District, listed in the National Register of Historic Places; the local Old Towne Orange Historic District, designated by the Orange City Council; and the local Eichler Fairhaven, Fairhills, and Fairmeadow Historic Districts, designated by the Orange City Council; and the City desires to promote the character, quality of life, and historic features of said Districts to its citizens and visitors; and

WHEREAS, the City is dedicated to the protection and stabilization of property values through maintaining and upgrading its older housing stock, through the use of incentives such as the Mills Act; and

WHEREAS, the Mills Act also has beneficial effects on City businesses, economic stability and community pride by preserving important neighborhood historic resources; and

WHEREAS, the use of the Mills Act will fulfill one of the goals of the City’s 2010 General Plan Cultural Resources Element; specifically,

“Provide incentives and expand education efforts for historic preservation” (Goal 3.0, CR-22); and

WHEREAS, Owner possesses fee simple title in and to that certain real property, together with associated structures and improvements thereon, located at 1081 N. Granada Drive in the City of Orange, County of Orange, State of California, having Assessor’s Parcel Number 379-022-06 and more specifically described in Exhibit A, which exhibit is attached hereto and made a part hereof (“Historic Property”); and

WHEREAS, the Historic Property is a qualified historical property under the Mills Act in that it is privately owned property which is not exempt from property taxation and is either: individually designated or is a contributing property within a designated district which is listed in the National Register of Historic Places, California Register of Historical Resources or Register of Historical Landmarks, California Points of Historical Interest, or is a contributing property in a locally designated historic district; and

WHEREAS, Owner, in consideration for abiding by the terms of this Agreement shall be entitled to a reassessment of valuation of the Historic Property and any corresponding reduction in property taxes pursuant to the provisions of the California Revenue and Taxation Code; and

WHEREAS, it is the City’s expectation that the Owner will use the property tax savings accrued under this Agreement for improvements to the “Historic Property” (as defined below). To that end, as a condition of renewal, the City will require a revised schedule of improvements every ten years showing a plan for improvements commensurate with the tax savings; and

WHEREAS, the City and Owner for their mutual benefit, now desire to enter into this Agreement to limit the use of the Historic Property to prevent inappropriate alterations, to ensure that characteristics of historic significance are preserved and maintained in an exemplary manner, and to carry out the purposes of Article 12 (commencing with Section 50280) of Chapter 1, Part 1, Division 1 of Title 5 of the California Government Code and Article 1.9 (commencing with Section 439) of Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code.

AGREEMENT

NOW, THEREFORE, both Owner and City, in consideration of the mutual promises, covenants and conditions contained herein and the substantial public benefits to be derived therefrom, do hereby agree as follows:

1. **APPLICABLE LAWS.** This Agreement is made pursuant to California Government Code Sections 50280 through 50290 and Article 1.9 (commencing with Section 439) of Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code and is subject to all of the provisions of those statutes. To the extent any of the provisions in this Agreement are inconsistent with the aforementioned provisions of the Government and Revenue and Taxation Codes, they are superseded by those Code Sections.

2. ASSESSMENT OF VALUATION. Property tax relief afforded to Owner pursuant to Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code will be determined solely by the Orange County Office of the Assessor. City makes no representations regarding the actual tax savings any person may realize by entering into this Agreement.
3. PRESERVATION OF PROPERTY. Owner agrees to preserve and maintain the Historic Property and its character defining features. Character defining features include, but are not necessarily limited to, the general architectural form, style, materials, design, scale, details, mass, roofline and other aspects of the appearance of the exterior of the Historic Property. For purposes of identification of the Historic Property, the City's Official Historic Property Inventory Form (DPR 523) is attached as Exhibit E.

The *Secretary of the Interior's Standards for Rehabilitation* (Exhibit B) and City's minimum maintenance standards (Exhibit C), attached hereto and incorporated herein by reference, shall constitute the minimum standards and conditions for preservation and rehabilitation of the Historic Property, and shall apply to the Historic Property throughout the term of this Agreement. Owner shall, where necessary, rehabilitate the Historic Property to conform to the rules and regulations of the Office of Historic Preservation of the California Department of Parks and Recreation, the *Secretary of the Interior's Standards for Rehabilitation*, the California Historical Building Code, and the City of Orange's Historic Preservation Design Standards for Old Towne and Eichler Design Standards.

As consideration for the City to enter into this Agreement, the Owner agrees, at its own cost and expense, to complete, or cause to be completed, the work or improvements described in Exhibit D within the times established therefore in Exhibit D. The Owner shall secure any and all permits which may be required by the City or any other governmental agency affected by the construction of the work or improvements. The Owner accepts responsibility for and shall be responsible for identification of and compliance with all applicable laws pertaining to the construction and installation of the work or improvements described on Exhibit D and the contract or contracts pertaining thereto. The Owner will neither seek to hold nor hold the City liable for, and will hold the City harmless with respect to, any consequences of any failure by the Owner to correctly determine the applicability of any such requirements to any contract he/she/they enter into.

In addition to the foregoing, the Owner hereby agrees to and will comply with all applicable local, state, and federal statutes, regulations, rules, codes (including building codes), ordinances, and other requirements of governmental authorities now or hereafter in effect ("Applicable Laws") pertaining to the use of the Historic Property. Owner must give the City immediate written notice on Owner's becoming aware that the use or condition of the Historic Property is in violation of any Applicable Laws.

4. INSPECTIONS AND ANNUAL REPORTING. Owner agrees to permit the examination, by prior appointment, of the interior and exterior of the Historic Property by the City at a minimum every five (5) years during the Agreement term to determine Owner's compliance with the terms and provisions of this Agreement. Owner agrees to provide the City with a report as to the status of the Historic Property annually within thirty (30) days following each anniversary of the

Effective Date of this Agreement. The annual report shall provide substantiation reasonably satisfactory to the City's Historic Preservation Planner or in his/her absence the Director of Community Development that Owner has completed the work required by Exhibit D for the twelve month period preceding each anniversary of this Agreement, and whether the Historic Property has undergone any changed conditions, and whether Owner has received any public funds from other sources designated for the preservation or maintenance of the Historic Property and from whom such funds have been received.

5. PAYMENT OF ANNUAL FEE. The Owner shall pay the City an annual fee to cover administrative costs associated with this Agreement including but not limited to the reasonable cost of monitoring the Historic Property, performing required inspections, and enforcement of the Agreement. Said fee shall be payable to the City of Orange and shall be remitted to the Planning Division upon demand and prior to any required inspection. The amount of the annual inspection fee shall be established by the City and may be revised from time to time, which fee shall be set forth in the City's Master Schedule of Fees and Charges. Failure to pay the required fee within 45 days of the due date will be considered a willful breach of this Agreement and may result in cancellation of the Agreement in accordance with the cancellation terms detailed below.
6. TERM. The term of this Agreement is for a period of ten (10) years. The initial term of this Agreement shall be from September 8, 2020 to and including September 8, 2030.
7. AUTOMATIC RENEWAL. On each yearly anniversary of the Effective Date of this Agreement ("renewal date"), one year shall be added automatically to the initial term of this Agreement, unless notice of non-renewal is given as provided in this Agreement.
8. EFFECT OF OUTSIDE FUNDS. If Owner receives funds designated for the preservation or maintenance of the Historic Property from any other public agency, this Agreement shall not be renewed except upon the vote of the City Council.
9. NOTICE OF NONRENEWAL. If in any year either the Owner or City desires not to renew this Agreement, that party shall serve written notice of nonrenewal to the other party in advance of the annual renewal date. Unless the notice is served by Owner to City at least ninety (90) days, or by City to Owner at least sixty (60) days prior to the renewal date, one year shall automatically be added to the term of the Agreement. Within fifteen (15) days of receipt by Owner of a notice of nonrenewal from the City, Owner may make a written protest. Upon receipt of such a protest the City Council shall set a hearing prior to the expiration of the renewal date of this Agreement or toll the renewal date until such hearing can reasonably held. Owner may furnish the City Council with any information which the Owner deems relevant; and shall furnish the City Council with any information it may require. At any time prior to the renewal date, City may withdraw its notice of nonrenewal.
10. EFFECT OF NOTICE NOT TO RENEW. If in any year either party serves notice of intent not to renew this Agreement, this Agreement shall remain in effect for the balance of the period remaining since the original execution date if not yet renewed, or the last renewal date of the Agreement, as the case may be.

11. UPDATE OF IMPROVEMENT SCHEDULE. At least ninety (90) days prior to the tenth (10th) anniversary of the Effective Date of this Agreement, and ninety (90) days prior to every tenth (10th) anniversary thereafter, Owner shall provide City with an updated schedule of rehabilitation maintenance items for the City's review and approval. Such updated schedule shall contain a list of proposed improvements and/or revisions to be accomplished during the next succeeding ten (10) years of the Agreement and a schedule for the construction of such improvements. Within thirty (30) days after the City's receipt of said updated schedule, the City's Director of Community Development shall either approve or disapprove such proposed schedule of proposed improvements, or shall respond in writing by stating what further information, if any, the City reasonably requires in order to determine the request complete and determine whether or not to grant the requested approval. Upon receipt of such a response, the Owner shall promptly furnish to the City such further information as may be reasonably requested.

From time to time, at the request of the City's Director of Community Development (or his/her authorized representative), the Owner shall meet and confer with the City's Planner for Historic Preservation or in his/her absence the Director of Community Development (or his/her designee) regarding matters arising hereunder with respect to the work and improvements and the progress in constructing the same.

12. INDEPENDENT ADVICE OF COUNSEL. The Owner, and each of them, represent and declare that in executing this Agreement he/she/they have relied solely upon his/her/their own judgment, belief and knowledge, and the advice and recommendations of his/her/their own independently selected counsel, concerning the nature, extent and duration of his/her/their rights and claims, and that he/she/they have not been influenced to any extent whatsoever in executing the same by the City or by any person representing the City.

13. ENFORCEMENT OF AGREEMENT. If the City determines the owner has breached any of the conditions of the Agreement provided for or has allowed the property to deteriorate to the point it no longer meets the standards for a qualified historical property, the City shall either cancel the Agreement or bring any action in court necessary to enforce the Agreement including, but not limited to an action to enforce the Agreement by specific performance to cure, correct or remedy any breach of the terms of this Agreement, to recover damages for any breach, or to obtain any other remedy consistent with the purpose of this Agreement. In the event of a default under the provisions of this Agreement by Owner, City shall give written notice to Owner specifying the alleged grounds for the default. Said notice shall be given by registered or certified mail addressed to the address stated in this Agreement. If such violation(s) is not corrected to the reasonable satisfaction of the City within thirty (30) days from the receipt of the notice of violation, or within such reasonable time as may be required to cure the breach or default, provided that acts to cure, correct or remedy such breach or default are commenced within thirty (30) days and thereafter diligently pursued to completion, then City may, without further notice, institute legal action.

Except as otherwise expressly stated in this Agreement, the rights and remedies of the City are cumulative, and the exercise by the City of one or more of such rights or remedies shall not preclude the exercise by it, at the same or different times, of any other rights or remedies for the same default or any other default by the Owner. Any failure or delay by the City in asserting any

of its right and remedies as to a breach of any of the covenants, conditions or agreements set forth herein shall not operate as a waiver of such breach or of any such rights or remedies, or deprive the City of its right to institute and maintain any actions or proceedings which it may deem necessary to protect, assert or enforce such rights or remedies. A waiver by the City of a breach shall not be construed as a waiver of any succeeding breach of the same or other covenants, conditions or agreements set forth in this Agreement.

14. CANCELLATION. In lieu of bringing an action to enforce the Agreement City may cancel this Agreement if City determines Owner has breached any of the conditions or covenants of this Agreement or has allowed the Historic Property to deteriorate to the point that it no longer meets the standards for a qualified historical property. City may also cancel this Agreement if it determines Owner has failed to rehabilitate the Historic Property in the manner specified in this Agreement.
15. NOTICE OF CANCELLATION. This Agreement cannot be canceled until after City has given notice and has held a public hearing as required by Government Code Section 50285. Notice of the hearing shall be mailed to the last known address of each owner of property within 300 feet of the Historic Property and shall be published in accordance with Government Code Section 6061.
16. CANCELLATION FEE. If City cancels this Agreement in accordance with Section 15 above, Owner shall pay a cancellation fee of twelve and one-half percent (12-1/2%) of the current fair market value of the Historic Property at the time of cancellation. The current fair market value shall be determined by the County Assessor as though the Historic Property were free of the restriction on the Historic Property imposed pursuant to this Agreement. The cancellation fee shall be paid to the County Auditor at such time and in such manner as the County Auditor shall prescribe.
17. NOTICES. All notices required by or provided for in the Agreement shall be given in writing and may be mailed or delivered in person at the address of the respective parties as specified below or at any other address as may be later specified by the parties. Deposit of notice in the mail, postage prepaid, shall be deemed receipt of the notice.

City of Orange
Attn.: City Clerk
300 E. Chapman Avenue
Orange, CA 92866

Paul Coleman and Elisabeth Lucas
1081 N. Granada Drive
Orange, CA 92869

18. NO COMPENSATION. Owner shall not receive any payment from the City in consideration of the obligations imposed under this Agreement. The Owner acknowledges and agrees that the consideration for the execution of this Agreement is the substantial public benefit to be derived therefrom and the advantage that will accrue to Owner as a result of the effect upon the assessed value of the Historic Property on account of the restrictions on the use and preservation of the Historic Property.

19. REMEDY IF AGREEMENT HELD NOT ENFORCEABLE. In the event it is finally determined this Agreement does not constitute an enforceable restriction within the meaning of the applicable provisions of the California Government Code and the California Revenue and Taxation Code, except for an unenforceability arising from the cancellation or nonrenewal of this Agreement, then this Agreement shall be null and void and without further effect and the Historic Property subject to this Agreement shall from that time be free from any restriction whatsoever under this Agreement without any payment or further act of the parties to this Agreement.

20. ACQUISITION OF PROPERTY BY EMINENT DOMAIN; CANCELLATION OF CONTRACT; INAPPLICABILITY TO DETERMINATION OF VALUE. In the event that the Historic Property is acquired in whole or part by eminent domain or other acquisition by any entity authorized to exercise the power of eminent domain, and the acquisition is determined by the City to frustrate the purpose of the Agreement, the Agreement shall be canceled and no fee shall be imposed under Section 17, above. The Agreement shall be deemed null and void for all purposes of determining the value of the Historic Property so acquired.

If, subsequent to the filing of an action in eminent domain, the proposed condemnation is abandoned by the condemning agency, the restrictions on the use of the Historic Property included in this Agreement shall, without further agreement of the parties, be reinstated and the terms of this Agreement shall continue in full force and effect.

21. EFFECT OF AGREEMENT. None of the terms, provisions or conditions of this Agreement shall be deemed to create a partnership between the parties hereto and any of their heirs, successors or assigns, nor shall such terms, provisions or conditions cause the parties hereto to be considered joint venturers or members of any joint enterprise.

22. SUCCESSORS AND ASSIGNS. This Agreement is binding upon and shall inure to the benefit of all successors in interest of the Owner, regardless of the tax exempt status of any subsequent owner. A successor in interest shall have the same rights and obligations under this Agreement as the original owner who entered into this Agreement.

23. REQUIREMENTS RELATED TO TRANSFER OF HISTORIC PROPERTY. In the event of any sale, transfer, assignment or conveyance of the Historic Property ("Transfer"), the Owner agrees that, at least thirty (30) days prior to such Transfer, it shall give written notice to the City of such proposed Transfer, including the name(s) of the transferee(s). In addition, the Owner and the proposed transferee(s) shall enter into and deliver to the City through the escrow for the Transfer of the Historic Property an assignment and assumption agreement in a form satisfactory to the City's Attorney or such other evidence as may be satisfactory to the City that the transferee(s) has (have) assumed the Owner's obligations set forth in this Agreement. Upon the Transfer of the Historic Property and the assumption of the obligations hereunder by the transferee(s), the Owner's liability for performance shall be terminated as to any obligation to be performed hereunder after the date of such Transfer.

24. RECORDATION. City shall record a copy of this Agreement with the Office of the County Recorder of the County of Orange.

25. AMENDMENTS. This Agreement may be amended, in whole or in part, only by a written and recorded instrument executed by the parties hereto, except that the Director of Community Development is authorized to amend the list of required projects in Exhibit D.
26. COUNTERPARTS. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original and all of which shall constitute one and the same agreement with the same effect as if all parties had signed the same signature page. Any signature page of this Agreement may be detached from any counterpart of this Agreement and re-attached to any other counterpart of this Agreement identical in form hereto but having attached to it one or more additional signature pages.
27. ADMINISTRATION. This Agreement shall be administered by the City's Director of Community Development (or his/her designated representative) following approval of this Agreement by the City. The City shall maintain authority of this Agreement through the City's Director of Community Development (or his/her authorized representative). The City's Director of Community Development shall have the authority to issue interpretations, waive provisions and enter into amendments of this Agreement on behalf of the City so long as such actions do not change the uses permitted on the Historic Property or the purpose of this Agreement. Such amendments may include extensions of time or amendments to the projects specified in Exhibit D. All other waivers or amendments shall require the written approval and consent of the City Council.

[Remainder of page intentionally left blank; signatures on next page]

IN WITNESS WHEREOF, the City and the Owner have executed this Agreement.

“OWNER”

Dated: _____, 2020

Paul Coleman

Dated: _____, 2020

Elisabeth Lucas

“CITY”

CITY OF ORANGE, a municipal corporation

Dated: _____, 2020

By: _____
Mark A. Murphy
Mayor

ATTEST:

APPROVED AS TO FORM:

Pamela Coleman
City Clerk

Mary E. Binning
Senior Assistant City Attorney

ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of _____

On _____ before me, _____,
a Notary Public in and for the State of California, personally appeared _____

_____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

EXHIBIT "A"

LEGAL DESCRIPTION OF HISTORIC PROPERTY

REAL PROPERTY IN THE CITY OF ORANGE, COUNTY OF ORANGE, STATE OF CALIFORNIA, DESCRIBED AS:

Lot 57 of Tract No. 4733, in the City of Orange, County of Orange, State of California, as shown on a map recorded in Book 177, Pages 7 to 10 of Miscellaneous Maps, in the office of the County Recorder of said County.

[APN 379-022-06]

EXHIBIT "B"

SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION

1. Every reasonable effort shall be made to provide a compatible use for a property, which requires a minimal alteration of the building structure, or site and its environment, or to use a property for its originally intended purpose.
2. The distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.
3. All buildings, structures, and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.
4. Changes which may have taken place in the course of time are evidence of the history and development of a building, structure or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.
5. Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure or site shall be treated with sensitivity.
6. Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.
7. The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.
8. Every reasonable effort shall be made to protect and preserve archeological resources affected by, or adjacent to, any project.
9. Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with the size, scale, color, material and character of the property, neighborhood or environment.
10. Wherever possible, new additions or alterations to structures shall be done in such a manner that, if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.

EXHIBIT “C”

CITY OF ORANGE HISTORIC PROPERTY **MAINTENANCE STANDARDS**

All buildings, structures, yards and other improvements shall be maintained in a manner which does not detract from the appearance of the immediate neighborhood. The following conditions are prohibited:

1. Dilapidated, deteriorating, or unrepaired structures, such as: fences, roofs, doors, walls and windows.
2. Publicly visible storage of scrap lumber, junk, trash or debris.
3. Publicly visible storage of abandoned, discarded or unused objects or equipment, such as automobiles, automobile parts, furniture, stoves, refrigerators, cans, containers or similar items.
4. Stagnant water or excavations, including pools or spas.
5. Any device, decoration, design, structure or vegetation that is unsightly by reason of its height, condition, or its inappropriate location.

EXHIBIT “D”

REHABILITATION/MAINTENANCE SCOPE OF WORK

[Attached.]

EXHIBIT "D"

REHABILITATION/MAINTENANCE SCOPE OF WORK

1081 N. Granada Drive

Priority	Description of Work	Cost Estimate	Completion Date
1.	Install downspouts at existing roofline penetrations.	\$500	2020
2.	Repair three Arcadia sliding doors on the courtyard elevations, including rollers, frames, and screens as needed.	\$1,500	2020
3.	Sand, paint, and seal atrium window frames on the north wall.	\$400	2020
4.	Selective patching and painting of west half of house after additional fasteners (nails) are added to complete recent siding installation.	\$3,000	2020
5.	Install new chimney cap.	\$200	2020
6.	Fix areas of dry rot on siding, beams, and trims as identified in the termite inspection report dated February 26, 2020.	\$1,420	2020
7.	Repair of three Arcadia sliding doors on the rear elevations of the house, including rollers, frames, and screens as needed.	\$1,500	2021
8.	Replace non-conforming single plane glass and confirming single pane glass at atrium with new.	\$5,000	2021
9.	A/C system resealing and balancing system on the west side of the house. Install new register, penetrate and reseal roof deck/roofing	\$1,750	2021
10.	Reapply PVC coating for foam roof system as part of regular required maintenance.	\$10,000	2021
11.	Replace undersized electrical connection to street to meet use safety standards, including	\$6,000	2021

	digging up and replacement of concrete in the side yard area.		
12.	Repair or replace water damaged siding on the east side of the house (north,south,east,west elevations and garage door)with Eichler tongue and groove plywood siding.	\$8,500	2022
13.	Install moment frame angles for additional support of northwest corner of the rear elevation where two glass panes meet.	\$7,500	2023
14.	Replace single pane glass windows on the rear elevation of the house with new glass to improve safety. Replacement glass shall comply with the Orange Eichler Design Standards to retain the aesthetic look of the house.	\$20,000	2023
15.	Replace incompatible bathroom door on west elevation with a new compatible door in compliance with the Orange Eichler Design Standards.	\$1,000	2023
16.	Annual maintenance of existing a/c system, including resealing and balancing system on the west side of the house.	\$1,500	2024
17.	Paint exterior of the house.	\$10,000	2025
18.	Maintenance and repair of metal window frames and trims on all elevations.	\$1,250	2026
TOTAL		\$81,020	

EXHIBIT “E”

HISTORIC PROPERTY INVENTORY FORM (DPR 523)

[Attached.]

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial ORA
NRHP Status Code 3D

Other Listings: _____
Review Code: _____ Reviewer: _____ Date: _____

Page 1 of 3

*Resource Name or #: GRANADA_N_1081__APN_379-022-06
(Assigned by Recorder)

P1. Other Identifier: Fairhills Tract

*P2. Location: Not for Publication Unrestricted

*a. County: Orange and (P2b and P2c or P2d. Attach a location map as necessary.)

*b. USGS 7.5' Quad: _____ Date: _____ T _____; R _____; 1/4 of _____ 1/4 of Sec _____; B.M. _____

c. Address: 1081 - N GRANADA DR, # _____ City: Orange Zip: 92869

d. UTM: (Give more than one for large and/or linear resources) Zone _____ ' _____ mE/ _____ mN

e. Other Locational Data:

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries. Continues on Pg.3.)

Materials: _____

Model OJ-1605

*P3b. Resource Attributes: (HP2)--Single family property
(List attributes and codes)

*P4. Resources Present: Building Structure Object Site Element of District District Other (Isolates, etc.)

P5b. Description of Photo: 2005
(View, date, accession #)



*P6. Date Constructed/ Age and Source:

1962 c

Historic Prehistoric Both

*P7. Owner and Address:

*P8. Recorded by: (Name, affiliation, and address)
D. Gest, P. LaValley

Chattel Architecture
13417 Ventura Blvd.
Sherman Oaks, CA 91423

*P9. Date Recorded:

January 2005

*P10. Survey Type: (Describe)

Reconnaissance

*P11. Report Citation: (Cite survey report and other sources, or enter "none.")

Orange County Assessor Records (2005). Chattel Architecture (2005)
Historic Resources Survey.

*Attachments: NONE Location Map Continuation Sheet(s) Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List): _____

DPR 523A (1/95)

*Required Information

Page 2 of 3

*Resource Name or #: GRANADA_N_1081__APN_379-022-06
(Assigned by Recorder)

B1. Historic Name: Unknown

B2. Common Name: _____

B3. Original Use: RES B4. Present Use: RES

*B5. Architectural Style: Mid-Century Modern

*B6. Construction History: (Construction date, alterations, and date of alterations) Date of Construction: 1962 Historic Prehistoric Both

*B7. Moved? No Yes Unknown Date: _____ Original Location: _____

*B8. Related Features: _____

*B9. Architect or Builder: Eichler Homes - A. Quincy Jones & Frederick E. Emmons

*B10. Significance: Theme: Architecture Area: City of Orange Property Type: Residence

Period of Significance: Eichler Tract (c. 1959 - 1965) Applicable Criteria: C

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity. Continues on Pg.4.)

Structural Integrity: Excellent Condition - Low level of alteration as of 2005.

Site Integrity: _____

Opportunities _____

B11. Additional Resource Attributes: (List attributes and codes) _____

*B12. References:
Orange Daily News.

B13. Remarks: (Continues on Pg.3.)
Status change since 1991 Survey: Not previously surveyed.

(Sketch Map with North arrow required.)

*Required Information

*B14. Evaluator: Robert Chattel
*Date of Evaluation: September 2005

(This space reserved for official comments.)
DPR 523B (1/95)

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # _____
HRI # _____
Trinomial ORA

Page 3 of 3

*Resource Name or #:
(Assigned by Recorder)

GRANADA_N_1081__APN_379-022-06

Recorded by:

D. Gest, P. LaValley
Chattel Architecture
13417 Ventura Blvd.
Sherman Oaks, CA 91423

Date Recorded: January 2005

Continuation Update

Years Surveyed: 2005, 2015

Description of Photo: _____

Listed in National Register: _____

General Plan: LDR # of Buildings: 1

Planning Zone: R-1-8 # of Stories: 1

Lot Acre: 0.2012 # of Units: 1

Principal Building Sqft: 2292

B6. Construction History (Continued from Pg.2):

B13. Remarks (Continued from Pg.2):

P3a. Description (Continued from Pg.1):



south elevation - entry

RECORDING REQUESTED BY
AND, WHEN RECORDED,
MAIL TO:

City Clerk
City of Orange
300 E. Chapman Avenue
Orange, California, 92866

Exempt from recording fees pursuant to
Gov. Code Sections 6103 and 27383

Property Address: 317 N. Cleveland Street
APN: 386-132-08
Mills Act Contract Number: 344.0-20

**HISTORIC PROPERTY PRESERVATION AGREEMENT
(MILLS ACT CONTRACT)**

THIS HISTORIC PROPERTY PRESERVATION AGREEMENT (“Agreement”) is made and entered into as of the date of execution by the City (“Effective Date”), by and between the CITY OF ORANGE, a municipal corporation (“City”), and EJM Capital LLC (“Owner”), with reference to the following:

RECITALS

WHEREAS, the Mills Act (Government Code Section 50280 *et seq.*) provides cities with the opportunity to contract with owners of qualified historical properties whereby the owner promises to preserve and rehabilitate the property in return for a potential reduced property tax assessment; and

WHEREAS, the City of Orange has established Historic Districts consisting of the Plaza Historic District, listed in the National Register of Historic Places; the Old Towne Orange Historic District, listed in the National Register of Historic Places; the local Old Towne Orange Historic District, designated by the Orange City Council; and the local Eichler Fairhaven, Fairhills, and Fairmeadow Historic Districts, designated by the Orange City Council; and the City desires to promote the character, quality of life, and historic features of said Districts to its citizens and visitors; and

WHEREAS, the City is dedicated to the protection and stabilization of property values through maintaining and upgrading its older housing stock, through the use of incentives such as the Mills Act; and

WHEREAS, the Mills Act also has beneficial effects on City businesses, economic stability and community pride by preserving important neighborhood historic resources; and

WHEREAS, the use of the Mills Act will fulfill one of the goals of the City’s 2010 General Plan Cultural Resources Element; specifically,

“Provide incentives and expand education efforts for historic preservation” (Goal 3.0, CR-22); and

WHEREAS, Owner possesses fee simple title in and to that certain real property, together with associated structures and improvements thereon, located at 317 N. Cleveland Street in the City of Orange, County of Orange, State of California, having Assessor’s Parcel Number 386-132-08 and more specifically described in Exhibit A, which exhibit is attached hereto and made a part hereof (“Historic Property”); and

WHEREAS, the Historic Property is a qualified historical property under the Mills Act in that it is privately owned property which is not exempt from property taxation and is either: individually designated or is a contributing property within a designated district which is listed in the National Register of Historic Places, California Register of Historical Resources or Register of Historical Landmarks, California Points of Historical Interest, or is a contributing property in a locally designated historic district; and

WHEREAS, Owner, in consideration for abiding by the terms of this Agreement shall be entitled to a reassessment of valuation of the Historic Property and any corresponding reduction in property taxes pursuant to the provisions of the California Revenue and Taxation Code; and

WHEREAS, it is the City’s expectation that the Owner will use the property tax savings accrued under this Agreement for improvements to the “Historic Property” (as defined below). To that end, as a condition of renewal, the City will require a revised schedule of improvements every ten years showing a plan for improvements commensurate with the tax savings; and

WHEREAS, the City and Owner for their mutual benefit, now desire to enter into this Agreement to limit the use of the Historic Property to prevent inappropriate alterations, to ensure that characteristics of historic significance are preserved and maintained in an exemplary manner, and to carry out the purposes of Article 12 (commencing with Section 50280) of Chapter 1, Part 1, Division 1 of Title 5 of the California Government Code and Article 1.9 (commencing with Section 439) of Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code.

AGREEMENT

NOW, THEREFORE, both Owner and City, in consideration of the mutual promises, covenants and conditions contained herein and the substantial public benefits to be derived therefrom, do hereby agree as follows:

1. **APPLICABLE LAWS.** This Agreement is made pursuant to California Government Code Sections 50280 through 50290 and Article 1.9 (commencing with Section 439) of Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code and is subject to all of the provisions of those statutes. To the extent any of the provisions in this Agreement are inconsistent with the aforementioned provisions of the Government and Revenue and Taxation Codes, they are superseded by those Code Sections.

2. ASSESSMENT OF VALUATION. Property tax relief afforded to Owner pursuant to Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code will be determined solely by the Orange County Office of the Assessor. City makes no representations regarding the actual tax savings any person may realize by entering into this Agreement.
3. PRESERVATION OF PROPERTY. Owner agrees to preserve and maintain the Historic Property and its character defining features. Character defining features include, but are not necessarily limited to, the general architectural form, style, materials, design, scale, details, mass, roofline and other aspects of the appearance of the exterior of the Historic Property. For purposes of identification of the Historic Property, the City's Official Historic Property Inventory Form (DPR 523) is attached as Exhibit E.

The *Secretary of the Interior's Standards for Rehabilitation* (Exhibit B) and City's minimum maintenance standards (Exhibit C), attached hereto and incorporated herein by reference, shall constitute the minimum standards and conditions for preservation and rehabilitation of the Historic Property, and shall apply to the Historic Property throughout the term of this Agreement. Owner shall, where necessary, rehabilitate the Historic Property to conform to the rules and regulations of the Office of Historic Preservation of the California Department of Parks and Recreation, the *Secretary of the Interior's Standards for Rehabilitation*, the California Historical Building Code, and the City of Orange's Historic Preservation Design Standards for Old Towne and Eichler Design Standards.

As consideration for the City to enter into this Agreement, the Owner agrees, at its own cost and expense, to complete, or cause to be completed, the work or improvements described in Exhibit D within the times established therefore in Exhibit D. The Owner shall secure any and all permits which may be required by the City or any other governmental agency affected by the construction of the work or improvements. The Owner accepts responsibility for and shall be responsible for identification of and compliance with all applicable laws pertaining to the construction and installation of the work or improvements described on Exhibit D and the contract or contracts pertaining thereto. The Owner will neither seek to hold nor hold the City liable for, and will hold the City harmless with respect to, any consequences of any failure by the Owner to correctly determine the applicability of any such requirements to any contract he/she/they enter into.

In addition to the foregoing, the Owner hereby agrees to and will comply with all applicable local, state, and federal statutes, regulations, rules, codes (including building codes), ordinances, and other requirements of governmental authorities now or hereafter in effect ("Applicable Laws") pertaining to the use of the Historic Property. Owner must give the City immediate written notice on Owner's becoming aware that the use or condition of the Historic Property is in violation of any Applicable Laws.

4. INSPECTIONS AND ANNUAL REPORTING. Owner agrees to permit the examination, by prior appointment, of the interior and exterior of the Historic Property by the City at a minimum every five (5) years during the Agreement term to determine Owner's compliance with the terms and provisions of this Agreement. Owner agrees to provide the City with a report as to the status of the Historic Property annually within thirty (30) days following each anniversary of the

Effective Date of this Agreement. The annual report shall provide substantiation reasonably satisfactory to the City's Historic Preservation Planner or in his/her absence the Director of Community Development that Owner has completed the work required by Exhibit D for the twelve month period preceding each anniversary of this Agreement, and whether the Historic Property has undergone any changed conditions, and whether Owner has received any public funds from other sources designated for the preservation or maintenance of the Historic Property and from whom such funds have been received.

5. PAYMENT OF ANNUAL FEE. The Owner shall pay the City an annual fee to cover administrative costs associated with this Agreement including but not limited to the reasonable cost of monitoring the Historic Property, performing required inspections, and enforcement of the Agreement. Said fee shall be payable to the City of Orange and shall be remitted to the Planning Division upon demand and prior to any required inspection. The amount of the annual inspection fee shall be established by the City and may be revised from time to time, which fee shall be set forth in the City's Master Schedule of Fees and Charges. Failure to pay the required fee within 45 days of the due date will be considered a willful breach of this Agreement and may result in cancellation of the Agreement in accordance with the cancellation terms detailed below.
6. TERM. The term of this Agreement is for a period of ten (10) years. The initial term of this Agreement shall be from September 8, 2020 to and including September 8, 2030.
7. AUTOMATIC RENEWAL. On each yearly anniversary of the Effective Date of this Agreement ("renewal date"), one year shall be added automatically to the initial term of this Agreement, unless notice of non-renewal is given as provided in this Agreement.
8. EFFECT OF OUTSIDE FUNDS. If Owner receives funds designated for the preservation or maintenance of the Historic Property from any other public agency, this Agreement shall not be renewed except upon the vote of the City Council.
9. NOTICE OF NONRENEWAL. If in any year either the Owner or City desires not to renew this Agreement, that party shall serve written notice of nonrenewal to the other party in advance of the annual renewal date. Unless the notice is served by Owner to City at least ninety (90) days, or by City to Owner at least sixty (60) days prior to the renewal date, one year shall automatically be added to the term of the Agreement. Within fifteen (15) days of receipt by Owner of a notice of nonrenewal from the City, Owner may make a written protest. Upon receipt of such a protest the City Council shall set a hearing prior to the expiration of the renewal date of this Agreement or toll the renewal date until such hearing can reasonably held. Owner may furnish the City Council with any information which the Owner deems relevant; and shall furnish the City Council with any information it may require. At any time prior to the renewal date, City may withdraw its notice of nonrenewal.
10. EFFECT OF NOTICE NOT TO RENEW. If in any year either party serves notice of intent not to renew this Agreement, this Agreement shall remain in effect for the balance of the period remaining since the original execution date if not yet renewed, or the last renewal date of the Agreement, as the case may be.

11. UPDATE OF IMPROVEMENT SCHEDULE. At least ninety (90) days prior to the tenth (10th) anniversary of the Effective Date of this Agreement, and ninety (90) days prior to every tenth (10th) anniversary thereafter, Owner shall provide City with an updated schedule of rehabilitation maintenance items for the City's review and approval. Such updated schedule shall contain a list of proposed improvements and/or revisions to be accomplished during the next succeeding ten (10) years of the Agreement and a schedule for the construction of such improvements. Within thirty (30) days after the City's receipt of said updated schedule, the City's Director of Community Development shall either approve or disapprove such proposed schedule of proposed improvements, or shall respond in writing by stating what further information, if any, the City reasonably requires in order to determine the request complete and determine whether or not to grant the requested approval. Upon receipt of such a response, the Owner shall promptly furnish to the City such further information as may be reasonably requested.

From time to time, at the request of the City's Director of Community Development (or his/her authorized representative), the Owner shall meet and confer with the City's Planner for Historic Preservation or in his/her absence the Director of Community Development (or his/her designee) regarding matters arising hereunder with respect to the work and improvements and the progress in constructing the same.

12. INDEPENDENT ADVICE OF COUNSEL. The Owner, and each of them, represent and declare that in executing this Agreement he/she/they have relied solely upon his/her/their own judgment, belief and knowledge, and the advice and recommendations of his/her/their own independently selected counsel, concerning the nature, extent and duration of his/her/their rights and claims, and that he/she/they have not been influenced to any extent whatsoever in executing the same by the City or by any person representing the City.

13. ENFORCEMENT OF AGREEMENT. If the City determines the owner has breached any of the conditions of the Agreement provided for or has allowed the property to deteriorate to the point it no longer meets the standards for a qualified historical property, the City shall either cancel the Agreement or bring any action in court necessary to enforce the Agreement including, but not limited to an action to enforce the Agreement by specific performance to cure, correct or remedy any breach of the terms of this Agreement, to recover damages for any breach, or to obtain any other remedy consistent with the purpose of this Agreement. In the event of a default under the provisions of this Agreement by Owner, City shall give written notice to Owner specifying the alleged grounds for the default. Said notice shall be given by registered or certified mail addressed to the address stated in this Agreement. If such violation(s) is not corrected to the reasonable satisfaction of the City within thirty (30) days from the receipt of the notice of violation, or within such reasonable time as may be required to cure the breach or default, provided that acts to cure, correct or remedy such breach or default are commenced within thirty (30) days and thereafter diligently pursued to completion, then City may, without further notice, institute legal action.

Except as otherwise expressly stated in this Agreement, the rights and remedies of the City are cumulative, and the exercise by the City of one or more of such rights or remedies shall not preclude the exercise by it, at the same or different times, of any other rights or remedies for the same default or any other default by the Owner. Any failure or delay by the City in asserting any

of its right and remedies as to a breach of any of the covenants, conditions or agreements set forth herein shall not operate as a waiver of such breach or of any such rights or remedies, or deprive the City of its right to institute and maintain any actions or proceedings which it may deem necessary to protect, assert or enforce such rights or remedies. A waiver by the City of a breach shall not be construed as a waiver of any succeeding breach of the same or other covenants, conditions or agreements set forth in this Agreement.

14. CANCELLATION. In lieu of bringing an action to enforce the Agreement City may cancel this Agreement if City determines Owner has breached any of the conditions or covenants of this Agreement or has allowed the Historic Property to deteriorate to the point that it no longer meets the standards for a qualified historical property. City may also cancel this Agreement if it determines Owner has failed to rehabilitate the Historic Property in the manner specified in this Agreement.
15. NOTICE OF CANCELLATION. This Agreement cannot be canceled until after City has given notice and has held a public hearing as required by Government Code Section 50285. Notice of the hearing shall be mailed to the last known address of each owner of property within 300 feet of the Historic Property and shall be published in accordance with Government Code Section 6061.
16. CANCELLATION FEE. If City cancels this Agreement in accordance with Section 15 above, Owner shall pay a cancellation fee of twelve and one-half percent (12-1/2%) of the current fair market value of the Historic Property at the time of cancellation. The current fair market value shall be determined by the County Assessor as though the Historic Property were free of the restriction on the Historic Property imposed pursuant to this Agreement. The cancellation fee shall be paid to the County Auditor at such time and in such manner as the County Auditor shall prescribe.
17. NOTICES. All notices required by or provided for in the Agreement shall be given in writing and may be mailed or delivered in person at the address of the respective parties as specified below or at any other address as may be later specified by the parties. Deposit of notice in the mail, postage prepaid, shall be deemed receipt of the notice.

City of Orange	EJM Capital LLC
Attn.: City Clerk	699 Diamond Street
300 E. Chapman Avenue	Laguna Beach, CA 92651
Orange, CA 92866	

18. NO COMPENSATION. Owner shall not receive any payment from the City in consideration of the obligations imposed under this Agreement. The Owner acknowledges and agrees that the consideration for the execution of this Agreement is the substantial public benefit to be derived therefrom and the advantage that will accrue to Owner as a result of the effect upon the assessed value of the Historic Property on account of the restrictions on the use and preservation of the Historic Property.

19. REMEDY IF AGREEMENT HELD NOT ENFORCEABLE. In the event it is finally determined this Agreement does not constitute an enforceable restriction within the meaning of the applicable provisions of the California Government Code and the California Revenue and Taxation Code, except for an unenforceability arising from the cancellation or nonrenewal of this Agreement, then this Agreement shall be null and void and without further effect and the Historic Property subject to this Agreement shall from that time be free from any restriction whatsoever under this Agreement without any payment or further act of the parties to this Agreement.

20. ACQUISITION OF PROPERTY BY EMINENT DOMAIN; CANCELLATION OF CONTRACT; INAPPLICABILITY TO DETERMINATION OF VALUE. In the event that the Historic Property is acquired in whole or part by eminent domain or other acquisition by any entity authorized to exercise the power of eminent domain, and the acquisition is determined by the City to frustrate the purpose of the Agreement, the Agreement shall be canceled and no fee shall be imposed under Section 17, above. The Agreement shall be deemed null and void for all purposes of determining the value of the Historic Property so acquired.

If, subsequent to the filing of an action in eminent domain, the proposed condemnation is abandoned by the condemning agency, the restrictions on the use of the Historic Property included in this Agreement shall, without further agreement of the parties, be reinstated and the terms of this Agreement shall continue in full force and effect.

21. EFFECT OF AGREEMENT. None of the terms, provisions or conditions of this Agreement shall be deemed to create a partnership between the parties hereto and any of their heirs, successors or assigns, nor shall such terms, provisions or conditions cause the parties hereto to be considered joint venturers or members of any joint enterprise.

22. SUCCESSORS AND ASSIGNS. This Agreement is binding upon and shall inure to the benefit of all successors in interest of the Owner, regardless of the tax exempt status of any subsequent owner. A successor in interest shall have the same rights and obligations under this Agreement as the original owner who entered into this Agreement.

23. REQUIREMENTS RELATED TO TRANSFER OF HISTORIC PROPERTY. In the event of any sale, transfer, assignment or conveyance of the Historic Property ("Transfer"), the Owner agrees that, at least thirty (30) days prior to such Transfer, it shall give written notice to the City of such proposed Transfer, including the name(s) of the transferee(s). In addition, the Owner and the proposed transferee(s) shall enter into and deliver to the City through the escrow for the Transfer of the Historic Property an assignment and assumption agreement in a form satisfactory to the City's Attorney or such other evidence as may be satisfactory to the City that the transferee(s) has (have) assumed the Owner's obligations set forth in this Agreement. Upon the Transfer of the Historic Property and the assumption of the obligations hereunder by the transferee(s), the Owner's liability for performance shall be terminated as to any obligation to be performed hereunder after the date of such Transfer.

24. RECORDATION. City shall record a copy of this Agreement with the Office of the County Recorder of the County of Orange.

25. AMENDMENTS. This Agreement may be amended, in whole or in part, only by a written and recorded instrument executed by the parties hereto, except that the Director of Community Development is authorized to amend the list of required projects in Exhibit D.
26. COUNTERPARTS. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original and all of which shall constitute one and the same agreement with the same effect as if all parties had signed the same signature page. Any signature page of this Agreement may be detached from any counterpart of this Agreement and re-attached to any other counterpart of this Agreement identical in form hereto but having attached to it one or more additional signature pages.
27. ADMINISTRATION. This Agreement shall be administered by the City's Director of Community Development (or his/her designated representative) following approval of this Agreement by the City. The City shall maintain authority of this Agreement through the City's Director of Community Development (or his/her authorized representative). The City's Director of Community Development shall have the authority to issue interpretations, waive provisions and enter into amendments of this Agreement on behalf of the City so long as such actions do not change the uses permitted on the Historic Property or the purpose of this Agreement. Such amendments may include extensions of time or amendments to the projects specified in Exhibit D. All other waivers or amendments shall require the written approval and consent of the City Council.

[Remainder of page intentionally left blank; signatures on next page]

IN WITNESS WHEREOF, the City and the Owner have executed this Agreement.

“OWNER”

Dated: _____, 2020

EJM Capital LLC

“CITY”

CITY OF ORANGE, a municipal corporation

Dated: _____, 2020

By: _____
Mark A. Murphy
Mayor

ATTEST:

APPROVED AS TO FORM:

Pamela Coleman
City Clerk

Mary E. Binning
Senior Assistant City Attorney

ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of _____

On _____ before me, _____,
a Notary Public in and for the State of California, personally appeared _____

_____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

EXHIBIT "A"

LEGAL DESCRIPTION OF HISTORIC PROPERTY

REAL PROPERTY IN THE CITY OF ORANGE, COUNTY OF ORANGE, STATE OF CALIFORNIA, DESCRIBED AS:

Lot 24 in Block "B" of Craddick's Subdivision of Parker & Stephens Addition of Orange, in the City of Orange, County of Orange, State of California, as per map recorded in Book 29, Page 100 of Miscellaneous records, in the Office of the County Recorder of Los Angeles County, and the portion of the north half of the alley adjoining said Lot 24, on the South lying between the Southerly prolongation of the Easterly and Westerly lines of said Lot 24, as said alley was abandoned by Resolution of the City Council of said City of Orange No. 991, a certified copy of which was recorded May 19, 1950, in Book 2015 Page 23 of Official Records.

[APN 386-132-08]

EXHIBIT "B"

SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION

1. Every reasonable effort shall be made to provide a compatible use for a property, which requires a minimal alteration of the building structure, or site and its environment, or to use a property for its originally intended purpose.
2. The distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.
3. All buildings, structures, and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.
4. Changes which may have taken place in the course of time are evidence of the history and development of a building, structure or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.
5. Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure or site shall be treated with sensitivity.
6. Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.
7. The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.
8. Every reasonable effort shall be made to protect and preserve archeological resources affected by, or adjacent to, any project.
9. Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with the size, scale, color, material and character of the property, neighborhood or environment.
10. Wherever possible, new additions or alterations to structures shall be done in such a manner that, if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.

EXHIBIT “C”

CITY OF ORANGE HISTORIC PROPERTY **MAINTENANCE STANDARDS**

All buildings, structures, yards and other improvements shall be maintained in a manner which does not detract from the appearance of the immediate neighborhood. The following conditions are prohibited:

1. Dilapidated, deteriorating, or unrepaired structures, such as: fences, roofs, doors, walls and windows.
2. Publicly visible storage of scrap lumber, junk, trash or debris.
3. Publicly visible storage of abandoned, discarded or unused objects or equipment, such as automobiles, automobile parts, furniture, stoves, refrigerators, cans, containers or similar items.
4. Stagnant water or excavations, including pools or spas.
5. Any device, decoration, design, structure or vegetation that is unsightly by reason of its height, condition, or its inappropriate location.

EXHIBIT “D”

REHABILITATION/MAINTENANCE SCOPE OF WORK

[Attached.]

EXHIBIT “D”

REHABILITATION/MAINTENANCE SCOPE OF WORK

317 N. Cleveland Street

Priority	Description of Work	Cost Estimate	Completion Date
1.	Install new central heating and air system.	\$12,000	2020
2.	Replace broken glass pane on window at southwest side of the front elevation.	\$120	2021
3.	Paint exterior of the house.	\$12,000	2021
4.	Repair of weather damaged fascia boards and rafter tails on the north and south elevations of the roofline.	\$4,000	2022
5.	Hire a structural engineer to investigate crack in slab concrete and sinking post at the southwest corner of the front porch.	\$15,000	2022
6.	Seismic retrofit for foundation of the house.	\$8,000	2029
7.	Roof replacement on the house with a new composition shingle roof system.	\$14,000	2029
TOTAL		\$65,120	

- 317-B N. Cleveland Street is not part of the Mills Act Contract as it is not a contributing historic building to the Old Towne Historic District.

EXHIBIT “E”

HISTORIC PROPERTY INVENTORY FORM (DPR 523)

[Attached.]

State of California - The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
 PRIMARY RECORD

Primary # 30-159377
 HRI # 038743, 111569
 Trinomial ORA
 NRHP Status Code 1D

Other Listings:

Review Code: _____

Reviewer: _____

Date: _____

Page 1 of 3

*Resource Name or #: _____
 (Assigned by Recorder)

CLEVELAND_N_317__APN_386-132-08

P1. Other Identifier: _____

*P2. Location: Not for Publication Unrestricted

*a. County: Orange and (P2b and P2c or P2d. Attach a location map as necessary.)

*b. USGS 7.5' Quad: _____ Date: _____ T _____ ; R _____ ; 1/4 of _____ 1/4 of Sec _____ ; B.M. _____

c. Address: 317 - N CLEVELAND ST, # _____ City: Orange Zip: 92866

d. UTM: (Give more than one for large and/or linear resources) Zone _____ ' _____ mE/ _____ mN

e. Other Locational Data: _____

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries. Continues on Pg.3.)

Materials: Frame - Wood siding

A single-story bungalow with wide lap siding and shallow-pitched, multi-gable roof. The main portion of the house is covered by a single gable roof with side-facing gables. A nearly full-width, front-facing gable forms the entry porch overhang. This is supported by tapered piers and features slatted wood in the upper gable face.

*P3b. Resource Attributes: (HP2)--Single family property
 (List attributes and codes)

*P4. Resources Present: Building Structure Object Site Element of District District Other (Isolates, etc.)

P5b. Description of Photo: 2005
 (View, date, accession #)

*P6. Date Constructed/ Age and Source:

1922

Historic Prehistoric Both

*P7. Owner and Address:

*P8: Recorded by: (Name, affiliation, and address)

D. Gest, P. LaValley, D. Matsumoto

Chattel Architecture
 13417 Ventura Blvd.
 Sherman Oaks, CA 91423

*P9. Date Recorded:

April, 2005

*P10. Survey Type: (Describe)

Reconnaissance



*P11. Report Citation: (Cite survey report and other sources, or enter "none.")

Orange County Assessor Records (2005). Chattel Architecture (2005) Historic Resources Survey. AEGIS (1991) Historic Building Inventory Update. Heritage Orange County, Inc. (1982) Orange Historic Survey.

*Attachments: NONE Location Map Continuation Sheet(s) Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List): _____

DPR 523A (1/95)

*Required Information

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
BUILDING, STRUCTURE, AND OBJECT RECORD

Primary # 30-159377
HRI # 038743, 111569
*NRHP Status Code 1D

Page 2 of 3

*Resource Name or #: CLEVELAND_N_317__APN_386-132-08
(Assigned by Recorder)

B1. Historic Name: Unknown

B2. Common Name: _____

B3. Original Use: RES

B4. Present Use: RES

*B5. Architectural Style: Craftsman Bungalow

*B6. Construction History: (Construction date, alterations, and date of alterations) Date of Construction: 1922 Historic Prehistoric Both

In 2005, converted existing detached 491 sqft garage into a accessory second unit, and built new detached garage.

*B7. Moved? No Yes Unknown Date: _____ Original Location: _____

*B8. Related Features: _____

*B9. Architect or Builder: Unknown

*B10. Significance: Theme: Architecture Area: City of Orange Property Type: Residence

Period of Significance: Old Towne: Interwar Development (c. 1921 - 1941) Applicable Criteria: AC

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity. Continues on Pg.4.)

Structural Integrity: Good Condition - No apparent change to original structure.

Site Integrity: _____

Opportunities: _____

B11. Additional Resource Attributes: (List attributes and codes) _____

*B12. References:

Orange Daily News.

B13. Remarks: (Continues on Pg.3.)

Status change since 1991 Survey: None.

Style previously noted in 1991 Survey as: Bungalow.

(Sketch Map with North arrow required.)

*B14. Evaluator: Robert Chattel

*Date of Evaluation: September, 2005

(This space reserved for official comments.)

DPR 523B (1/95)

*Required Information

State of California - The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
 CONTINUATION SHEET

Primary # 30-159377
 HRI # 038743, 111569
 Trinomial ORA

Page 3 of 3

*Resource Name or #:
 (Assigned by Recorder)

CLEVELAND_N_317__APN_386-132-08

Recorded by:

D. Gest, P. LaValley, D. Matsumoto
 Chattel Architecture
 13417 Ventura Blvd.
 Sherman Oaks, CA 91423

Date Recorded: April, 2005

Continuation Update

Years Surveyed: 1982, 1991, 2005

Description of Photo: 1991

Listed in National Register: 1997

General Plan: LDR # of Buildings: 1

Planning Zone: R-2-6 # of Stories: 1

Lot Acre: 0.1689 # of Units: 1

Principal Building Sqft: 1406

B6. Construction History (Continued from Pg.2):

B13. Remarks (Continued from Pg.2):

P3a. Description (Continued from Pg.1):





RECORDING REQUESTED BY
AND, WHEN RECORDED,
MAIL TO:

City Clerk
City of Orange
300 E. Chapman Avenue
Orange, California, 92866

Exempt from recording fees pursuant to
Gov. Code Sections 6103 and 27383

Property Address: 271 S. Grand Street
APN: 390-397-02
Mills Act Contract Number: 345.0-20

**HISTORIC PROPERTY PRESERVATION AGREEMENT
(MILLS ACT CONTRACT)**

THIS HISTORIC PROPERTY PRESERVATION AGREEMENT (“Agreement”) is made and entered into as of the date of execution by the City (“Effective Date”), by and between the CITY OF ORANGE, a municipal corporation (“City”), and Micha Investment Corporation, a California Corporation (“Owner”), with reference to the following:

RECITALS

WHEREAS, the Mills Act (Government Code Section 50280 *et seq.*) provides cities with the opportunity to contract with owners of qualified historical properties whereby the owner promises to preserve and rehabilitate the property in return for a potential reduced property tax assessment; and

WHEREAS, the City of Orange has established Historic Districts consisting of the Plaza Historic District, listed in the National Register of Historic Places; the Old Towne Orange Historic District, listed in the National Register of Historic Places; the local Old Towne Orange Historic District, designated by the Orange City Council; and the local Eichler Fairhaven, Fairhills, and Fairmeadow Historic Districts, designated by the Orange City Council; and the City desires to promote the character, quality of life, and historic features of said Districts to its citizens and visitors; and

WHEREAS, the City is dedicated to the protection and stabilization of property values through maintaining and upgrading its older housing stock, through the use of incentives such as the Mills Act; and

WHEREAS, the Mills Act also has beneficial effects on City businesses, economic stability and community pride by preserving important neighborhood historic resources; and

WHEREAS, the use of the Mills Act will fulfill one of the goals of the City’s 2010 General Plan Cultural Resources Element; specifically,

“Provide incentives and expand education efforts for historic preservation” (Goal 3.0, CR-22); and

WHEREAS, Owner possesses fee simple title in and to that certain real property, together with associated structures and improvements thereon, located at 271 S. Grand Street in the City of Orange, County of Orange, State of California, having Assessor’s Parcel Number 390-397-02 and more specifically described in Exhibit A, which exhibit is attached hereto and made a part hereof (“Historic Property); and

WHEREAS, the Historic Property is a qualified historical property under the Mills Act in that it is privately owned property which is not exempt from property taxation and is either: individually designated or is a contributing property within a designated district which is listed in the National Register of Historic Places, California Register of Historical Resources or Register of Historical Landmarks, California Points of Historical Interest, or is a contributing property in a locally designated historic district; and

WHEREAS, Owner, in consideration for abiding by the terms of this Agreement shall be entitled to a reassessment of valuation of the Historic Property and any corresponding reduction in property taxes pursuant to the provisions of the California Revenue and Taxation Code; and

WHEREAS, it is the City’s expectation that the Owner will use the property tax savings accrued under this Agreement for improvements to the “Historic Property” (as defined below). To that end, as a condition of renewal, the City will require a revised schedule of improvements every ten years showing a plan for improvements commensurate with the tax savings; and

WHEREAS, the City and Owner for their mutual benefit, now desire to enter into this Agreement to limit the use of the Historic Property to prevent inappropriate alterations, to ensure that characteristics of historic significance are preserved and maintained in an exemplary manner, and to carry out the purposes of Article 12 (commencing with Section 50280) of Chapter 1, Part 1, Division 1 of Title 5 of the California Government Code and Article 1.9 (commencing with Section 439) of Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code.

AGREEMENT

NOW, THEREFORE, both Owner and City, in consideration of the mutual promises, covenants and conditions contained herein and the substantial public benefits to be derived therefrom, do hereby agree as follows:

1. **APPLICABLE LAWS.** This Agreement is made pursuant to California Government Code Sections 50280 through 50290 and Article 1.9 (commencing with Section 439) of Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code and is subject to all of the provisions of those statutes. To the extent any of the provisions in this Agreement are inconsistent with the aforementioned provisions of the Government and Revenue and Taxation Codes, they are superseded by those Code Sections.

2. ASSESSMENT OF VALUATION. Property tax relief afforded to Owner pursuant to Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code will be determined solely by the Orange County Office of the Assessor. City makes no representations regarding the actual tax savings any person may realize by entering into this Agreement.
3. PRESERVATION OF PROPERTY. Owner agrees to preserve and maintain the Historic Property and its character defining features. Character defining features include, but are not necessarily limited to, the general architectural form, style, materials, design, scale, details, mass, roofline and other aspects of the appearance of the exterior of the Historic Property. For purposes of identification of the Historic Property, the City's Official Historic Property Inventory Form (DPR 523) is attached as Exhibit E.

The *Secretary of the Interior's Standards for Rehabilitation* (Exhibit B) and City's minimum maintenance standards (Exhibit C), attached hereto and incorporated herein by reference, shall constitute the minimum standards and conditions for preservation and rehabilitation of the Historic Property, and shall apply to the Historic Property throughout the term of this Agreement. Owner shall, where necessary, rehabilitate the Historic Property to conform to the rules and regulations of the Office of Historic Preservation of the California Department of Parks and Recreation, the *Secretary of the Interior's Standards for Rehabilitation*, the California Historical Building Code, and the City of Orange's Historic Preservation Design Standards for Old Towne and Eichler Design Standards.

As consideration for the City to enter into this Agreement, the Owner agrees, at its own cost and expense, to complete, or cause to be completed, the work or improvements described in Exhibit D within the times established therefore in Exhibit D. The Owner shall secure any and all permits which may be required by the City or any other governmental agency affected by the construction of the work or improvements. The Owner accepts responsibility for and shall be responsible for identification of and compliance with all applicable laws pertaining to the construction and installation of the work or improvements described on Exhibit D and the contract or contracts pertaining thereto. The Owner will neither seek to hold nor hold the City liable for, and will hold the City harmless with respect to, any consequences of any failure by the Owner to correctly determine the applicability of any such requirements to any contract he/she/they enter into.

In addition to the foregoing, the Owner hereby agrees to and will comply with all applicable local, state, and federal statutes, regulations, rules, codes (including building codes), ordinances, and other requirements of governmental authorities now or hereafter in effect ("Applicable Laws") pertaining to the use of the Historic Property. Owner must give the City immediate written notice on Owner's becoming aware that the use or condition of the Historic Property is in violation of any Applicable Laws.

4. INSPECTIONS AND ANNUAL REPORTING. Owner agrees to permit the examination, by prior appointment, of the interior and exterior of the Historic Property by the City at a minimum every five (5) years during the Agreement term to determine Owner's compliance with the terms and provisions of this Agreement. Owner agrees to provide the City with a report as to the status of the Historic Property annually within thirty (30) days following each anniversary of the

Effective Date of this Agreement. The annual report shall provide substantiation reasonably satisfactory to the City's Historic Preservation Planner or in his/her absence the Director of Community Development that Owner has completed the work required by Exhibit D for the twelve month period preceding each anniversary of this Agreement, and whether the Historic Property has undergone any changed conditions, and whether Owner has received any public funds from other sources designated for the preservation or maintenance of the Historic Property and from whom such funds have been received.

5. PAYMENT OF ANNUAL FEE. The Owner shall pay the City an annual fee to cover administrative costs associated with this Agreement including but not limited to the reasonable cost of monitoring the Historic Property, performing required inspections, and enforcement of the Agreement. Said fee shall be payable to the City of Orange and shall be remitted to the Planning Division upon demand and prior to any required inspection. The amount of the annual inspection fee shall be established by the City and may be revised from time to time, which fee shall be set forth in the City's Master Schedule of Fees and Charges. Failure to pay the required fee within 45 days of the due date will be considered a willful breach of this Agreement and may result in cancellation of the Agreement in accordance with the cancellation terms detailed below.
6. TERM. The term of this Agreement is for a period of ten (10) years. The initial term of this Agreement shall be from September 8, 2020 to and including September 8, 2030.
7. AUTOMATIC RENEWAL. On each yearly anniversary of the Effective Date of this Agreement ("renewal date"), one year shall be added automatically to the initial term of this Agreement, unless notice of non-renewal is given as provided in this Agreement.
8. EFFECT OF OUTSIDE FUNDS. If Owner receives funds designated for the preservation or maintenance of the Historic Property from any other public agency, this Agreement shall not be renewed except upon the vote of the City Council.
9. NOTICE OF NONRENEWAL. If in any year either the Owner or City desires not to renew this Agreement, that party shall serve written notice of nonrenewal to the other party in advance of the annual renewal date. Unless the notice is served by Owner to City at least ninety (90) days, or by City to Owner at least sixty (60) days prior to the renewal date, one year shall automatically be added to the term of the Agreement. Within fifteen (15) days of receipt by Owner of a notice of nonrenewal from the City, Owner may make a written protest. Upon receipt of such a protest the City Council shall set a hearing prior to the expiration of the renewal date of this Agreement or toll the renewal date until such hearing can reasonably held. Owner may furnish the City Council with any information which the Owner deems relevant; and shall furnish the City Council with any information it may require. At any time prior to the renewal date, City may withdraw its notice of nonrenewal.
10. EFFECT OF NOTICE NOT TO RENEW. If in any year either party serves notice of intent not to renew this Agreement, this Agreement shall remain in effect for the balance of the period remaining since the original execution date if not yet renewed, or the last renewal date of the Agreement, as the case may be.

11. UPDATE OF IMPROVEMENT SCHEDULE. At least ninety (90) days prior to the tenth (10th) anniversary of the Effective Date of this Agreement, and ninety (90) days prior to every tenth (10th) anniversary thereafter, Owner shall provide City with an updated schedule of rehabilitation maintenance items for the City's review and approval. Such updated schedule shall contain a list of proposed improvements and/or revisions to be accomplished during the next succeeding ten (10) years of the Agreement and a schedule for the construction of such improvements. Within thirty (30) days after the City's receipt of said updated schedule, the City's Director of Community Development shall either approve or disapprove such proposed schedule of proposed improvements, or shall respond in writing by stating what further information, if any, the City reasonably requires in order to determine the request complete and determine whether or not to grant the requested approval. Upon receipt of such a response, the Owner shall promptly furnish to the City such further information as may be reasonably requested.

From time to time, at the request of the City's Director of Community Development (or his/her authorized representative), the Owner shall meet and confer with the City's Planner for Historic Preservation or in his/her absence the Director of Community Development (or his/her designee) regarding matters arising hereunder with respect to the work and improvements and the progress in constructing the same.

12. INDEPENDENT ADVICE OF COUNSEL. The Owner, and each of them, represent and declare that in executing this Agreement he/she/they have relied solely upon his/her/their own judgment, belief and knowledge, and the advice and recommendations of his/her/their own independently selected counsel, concerning the nature, extent and duration of his/her/their rights and claims, and that he/she/they have not been influenced to any extent whatsoever in executing the same by the City or by any person representing the City.

13. ENFORCEMENT OF AGREEMENT. If the City determines the owner has breached any of the conditions of the Agreement provided for or has allowed the property to deteriorate to the point it no longer meets the standards for a qualified historical property, the City shall either cancel the Agreement or bring any action in court necessary to enforce the Agreement including, but not limited to an action to enforce the Agreement by specific performance to cure, correct or remedy any breach of the terms of this Agreement, to recover damages for any breach, or to obtain any other remedy consistent with the purpose of this Agreement. In the event of a default under the provisions of this Agreement by Owner, City shall give written notice to Owner specifying the alleged grounds for the default. Said notice shall be given by registered or certified mail addressed to the address stated in this Agreement. If such violation(s) is not corrected to the reasonable satisfaction of the City within thirty (30) days from the receipt of the notice of violation, or within such reasonable time as may be required to cure the breach or default, provided that acts to cure, correct or remedy such breach or default are commenced within thirty (30) days and thereafter diligently pursued to completion, then City may, without further notice, institute legal action.

Except as otherwise expressly stated in this Agreement, the rights and remedies of the City are cumulative, and the exercise by the City of one or more of such rights or remedies shall not preclude the exercise by it, at the same or different times, of any other rights or remedies for the same default or any other default by the Owner. Any failure or delay by the City in asserting any

of its right and remedies as to a breach of any of the covenants, conditions or agreements set forth herein shall not operate as a waiver of such breach or of any such rights or remedies, or deprive the City of its right to institute and maintain any actions or proceedings which it may deem necessary to protect, assert or enforce such rights or remedies. A waiver by the City of a breach shall not be construed as a waiver of any succeeding breach of the same or other covenants, conditions or agreements set forth in this Agreement.

14. CANCELLATION. In lieu of bringing an action to enforce the Agreement City may cancel this Agreement if City determines Owner has breached any of the conditions or covenants of this Agreement or has allowed the Historic Property to deteriorate to the point that it no longer meets the standards for a qualified historical property. City may also cancel this Agreement if it determines Owner has failed to rehabilitate the Historic Property in the manner specified in this Agreement.
15. NOTICE OF CANCELLATION. This Agreement cannot be canceled until after City has given notice and has held a public hearing as required by Government Code Section 50285. Notice of the hearing shall be mailed to the last known address of each owner of property within 300 feet of the Historic Property and shall be published in accordance with Government Code Section 6061.
16. CANCELLATION FEE. If City cancels this Agreement in accordance with Section 15 above, Owner shall pay a cancellation fee of twelve and one-half percent (12-1/2%) of the current fair market value of the Historic Property at the time of cancellation. The current fair market value shall be determined by the County Assessor as though the Historic Property were free of the restriction on the Historic Property imposed pursuant to this Agreement. The cancellation fee shall be paid to the County Auditor at such time and in such manner as the County Auditor shall prescribe.
17. NOTICES. All notices required by or provided for in the Agreement shall be given in writing and may be mailed or delivered in person at the address of the respective parties as specified below or at any other address as may be later specified by the parties. Deposit of notice in the mail, postage prepaid, shall be deemed receipt of the notice.

City of Orange
Attn.: City Clerk
300 E. Chapman Avenue
Orange, CA 92866

Micha Investment Corporation
351 Hospital Road #507
Newport Beach, CA 92663

18. NO COMPENSATION. Owner shall not receive any payment from the City in consideration of the obligations imposed under this Agreement. The Owner acknowledges and agrees that the consideration for the execution of this Agreement is the substantial public benefit to be derived therefrom and the advantage that will accrue to Owner as a result of the effect upon the assessed value of the Historic Property on account of the restrictions on the use and preservation of the Historic Property.

19. REMEDY IF AGREEMENT HELD NOT ENFORCEABLE. In the event it is finally determined this Agreement does not constitute an enforceable restriction within the meaning of the applicable provisions of the California Government Code and the California Revenue and Taxation Code, except for an unenforceability arising from the cancellation or nonrenewal of this Agreement, then this Agreement shall be null and void and without further effect and the Historic Property subject to this Agreement shall from that time be free from any restriction whatsoever under this Agreement without any payment or further act of the parties to this Agreement.

20. ACQUISITION OF PROPERTY BY EMINENT DOMAIN; CANCELLATION OF CONTRACT; INAPPLICABILITY TO DETERMINATION OF VALUE. In the event that the Historic Property is acquired in whole or part by eminent domain or other acquisition by any entity authorized to exercise the power of eminent domain, and the acquisition is determined by the City to frustrate the purpose of the Agreement, the Agreement shall be canceled and no fee shall be imposed under Section 17, above. The Agreement shall be deemed null and void for all purposes of determining the value of the Historic Property so acquired.

If, subsequent to the filing of an action in eminent domain, the proposed condemnation is abandoned by the condemning agency, the restrictions on the use of the Historic Property included in this Agreement shall, without further agreement of the parties, be reinstated and the terms of this Agreement shall continue in full force and effect.

21. EFFECT OF AGREEMENT. None of the terms, provisions or conditions of this Agreement shall be deemed to create a partnership between the parties hereto and any of their heirs, successors or assigns, nor shall such terms, provisions or conditions cause the parties hereto to be considered joint venturers or members of any joint enterprise.

22. SUCCESSORS AND ASSIGNS. This Agreement is binding upon and shall inure to the benefit of all successors in interest of the Owner, regardless of the tax exempt status of any subsequent owner. A successor in interest shall have the same rights and obligations under this Agreement as the original owner who entered into this Agreement.

23. REQUIREMENTS RELATED TO TRANSFER OF HISTORIC PROPERTY. In the event of any sale, transfer, assignment or conveyance of the Historic Property ("Transfer"), the Owner agrees that, at least thirty (30) days prior to such Transfer, it shall give written notice to the City of such proposed Transfer, including the name(s) of the transferee(s). In addition, the Owner and the proposed transferee(s) shall enter into and deliver to the City through the escrow for the Transfer of the Historic Property an assignment and assumption agreement in a form satisfactory to the City's Attorney or such other evidence as may be satisfactory to the City that the transferee(s) has (have) assumed the Owner's obligations set forth in this Agreement. Upon the Transfer of the Historic Property and the assumption of the obligations hereunder by the transferee(s), the Owner's liability for performance shall be terminated as to any obligation to be performed hereunder after the date of such Transfer.

24. RECORDATION. City shall record a copy of this Agreement with the Office of the County Recorder of the County of Orange.

25. AMENDMENTS. This Agreement may be amended, in whole or in part, only by a written and recorded instrument executed by the parties hereto, except that the Director of Community Development is authorized to amend the list of required projects in Exhibit D.
26. COUNTERPARTS. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original and all of which shall constitute one and the same agreement with the same effect as if all parties had signed the same signature page. Any signature page of this Agreement may be detached from any counterpart of this Agreement and re-attached to any other counterpart of this Agreement identical in form hereto but having attached to it one or more additional signature pages.
27. ADMINISTRATION. This Agreement shall be administered by the City's Director of Community Development (or his/her designated representative) following approval of this Agreement by the City. The City shall maintain authority of this Agreement through the City's Director of Community Development (or his/her authorized representative). The City's Director of Community Development shall have the authority to issue interpretations, waive provisions and enter into amendments of this Agreement on behalf of the City so long as such actions do not change the uses permitted on the Historic Property or the purpose of this Agreement. Such amendments may include extensions of time or amendments to the projects specified in Exhibit D. All other waivers or amendments shall require the written approval and consent of the City Council.

[Remainder of page intentionally left blank; signatures on next page]

IN WITNESS WHEREOF, the City and the Owner have executed this Agreement.

“OWNER”

Dated: _____, 2020

Micha Investment Corporation

“CITY”

CITY OF ORANGE, a municipal corporation

Dated: _____, 2020

By: _____
Mark A. Murphy
Mayor

ATTEST:

APPROVED AS TO FORM:

Pamela Coleman
City Clerk

Mary E. Binning
Senior Assistant City Attorney

ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of _____

On _____ before me, _____,
a Notary Public in and for the State of California, personally appeared _____

_____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

EXHIBIT "A"

LEGAL DESCRIPTION OF HISTORIC PROPERTY

REAL PROPERTY IN THE CITY OF ORANGE, COUNTY OF ORANGE, STATE OF CALIFORNIA, DESCRIBED AS:

Lot 41 of Tract CZ Culver Home Tract in the City of Orange, County of Orange, State of California, as per map recorded in Book 15, Page 23, Inclusive of Miscellaneous Maps, in the office of the County recorder of said Orange County.

[APN 390-397-02]

EXHIBIT "B"

SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION

1. Every reasonable effort shall be made to provide a compatible use for a property, which requires a minimal alteration of the building structure, or site and its environment, or to use a property for its originally intended purpose.
2. The distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.
3. All buildings, structures, and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.
4. Changes which may have taken place in the course of time are evidence of the history and development of a building, structure or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.
5. Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure or site shall be treated with sensitivity.
6. Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.
7. The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.
8. Every reasonable effort shall be made to protect and preserve archeological resources affected by, or adjacent to, any project.
9. Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with the size, scale, color, material and character of the property, neighborhood or environment.
10. Wherever possible, new additions or alterations to structures shall be done in such a manner that, if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.

EXHIBIT “C”

CITY OF ORANGE HISTORIC PROPERTY **MAINTENANCE STANDARDS**

All buildings, structures, yards and other improvements shall be maintained in a manner which does not detract from the appearance of the immediate neighborhood. The following conditions are prohibited:

1. Dilapidated, deteriorating, or unrepaired structures, such as: fences, roofs, doors, walls and windows.
2. Publicly visible storage of scrap lumber, junk, trash or debris.
3. Publicly visible storage of abandoned, discarded or unused objects or equipment, such as automobiles, automobile parts, furniture, stoves, refrigerators, cans, containers or similar items.
4. Stagnant water or excavations, including pools or spas.
5. Any device, decoration, design, structure or vegetation that is unsightly by reason of its height, condition, or its inappropriate location.

EXHIBIT “D”

REHABILITATION/MAINTENANCE SCOPE OF WORK

[Attached.]

EXHIBIT “D”

REHABILITATION/MAINTENANCE SCOPE OF WORK

271 S. Grand Street

Priority	Description of Work	Cost Estimate	Completion Date
1.	Paint exterior of the house and repair of weather damaged wood siding as needed.	\$12,000	2021
2.	Refinishing/repairing of original hardwood floors in the original footprint of the house, excluding 1970s rear addition flooring.	\$15,000	2022
3.	Replacement of central air conditioning condenser at the end of its service life and install split system air conditioning system.	\$16,000	2025
4.	Preparation of an updated termite inspection report, termite treatment, and repair of dry rot damage as recommended in the report. Cost estimate based on estimates provided in termite treatment report dated 2/26/2020.	\$6,000	2025
5.	Seismic retrofit for foundation of the house.	\$15,000	2025
TOTAL		\$52,200	

EXHIBIT “E”

HISTORIC PROPERTY INVENTORY FORM (DPR 523)

[Attached.]

State of California - The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
 PRIMARY RECORD

Primary # 30-159006
 HRI # 038372
 Trinomial ORA
 NRHP Status Code 1D

Other Listings:

Review Code: _____

Reviewer: _____

Date: _____

Page 1 of 3

*Resource Name or #: _____
 (Assigned by Recorder)

GRAND_S_271__APN_390-397-02

P1. Other Identifier: _____

*P2. Location: Not for Publication Unrestricted

*a. County: Orange and (P2b and P2c or P2d. Attach a location map as necessary.)

*b. USGS 7.5' Quad: _____ Date: _____ T _____ ; R _____ ; 1/4 of _____ 1/4 of Sec _____ ; B.M. _____

c. Address: 271 - S GRAND ST, # _____ City: Orange Zip: 92866

d. UTM: (Give more than one for large and/or linear resources) Zone _____ ' _____ mE/ _____ mN

e. Other Locational Data: _____

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries. Continues on Pg.3.)

Materials: Frame - Wood siding

A single-story house with clapboard siding and pyramidal roof. There is a smaller dormer gable projection on the front portion of the roof which includes saw-tooth shingles and a framed attic vent. Main entry is beneath a recessed corner porch supported by wood posts.

*P3b. Resource Attributes: (HP2)--Single family property
 (List attributes and codes)

*P4. Resources Present: Building Structure Object Site Element of District District Other (Isolates, etc.)



*P5b. Description of Photo: 2005
 (View, date, accession #)

*P6. Date Constructed/ Age and Source:

1904

Historic Prehistoric Both

*P7. Owner and Address:

*P8: Recorded by: (Name, affiliation, and address)

D. Gest, P. LaValley, D. Matsumoto

Chattel Architecture

13417 Ventura Blvd.

Sherman Oaks, CA 91423

*P9. Date Recorded:

May, 2005

*P10. Survey Type: (Describe)

Reconnaissance

*P11. Report Citation: (Cite survey report and other sources, or enter "none.")

Orange County Assessor Records (2005). Chattel Architecture (2005) Historic Resources Survey. AEGIS (1991) Historic Building Inventory Update. Heritage Orange County, Inc. (1982) Orange Historic Survey.

*Attachments: NONE Location Map Continuation Sheet(s) Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List): _____

DPR 523A (1/95)

*Required Information

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
BUILDING, STRUCTURE, AND OBJECT RECORD

Primary # 30-159006
HRI # 038372
*NRHP Status Code 1D

Page 2 of 3

*Resource Name or #: GRAND_S_271__APN_390-397-02
(Assigned by Recorder)

B1. Historic Name: L.E. and E. Rails House

B2. Common Name:

B3. Original Use: RES B4. Present Use: RES

*B5. Architectural Style: Hip Roof Cottage

*B6. Construction History: (Construction date, alterations, and date of alterations) Date of Construction: 1904 Historic Prehistoric Both

*B7. Moved? No Yes Unknown Date: Original Location:

*B8. Related Features:

*B9. Architect or Builder: Unknown

*B10. Significance: Theme: Architecture Area: City of Orange Property Type: Residence

Period of Significance: Old Towne: Early Settlement (c. 1870 - 1920) Applicable Criteria: AC

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity. Continues on Pg.4.)

Structural Integrity: Good Condition - No apparent change to original structure.

Site Integrity:

Opportunities:

The original owners were L. E. and Mrs. E. Rails. Mr. Rails was a mason.

B11. Additional Resource Attributes: (List attributes and codes)

*B12. References:

Orange Daily News.

B13. Remarks: (Continues on Pg.3.)

Status change since 1991 Survey: None.

(Sketch Map with North arrow required.)

*B14. Evaluator: Robert Chattel

*Date of Evaluation: September, 2005

(This space reserved for official comments.)

DPR 523B (1/95)

*Required Information

State of California - The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
 CONTINUATION SHEET

Primary # 30-159006
 HRI # 038372
 Trinomial ORA

Page 3 of 3

*Resource Name or #:
 (Assigned by Recorder)

GRAND_S_271__APN_390-397-02

Recorded by:

D. Gest, P. LaValley, D. Matsumoto
 Chattel Architecture
 13417 Ventura Blvd.
 Sherman Oaks, CA 91423

Date Recorded: May, 2005

Continuation Update

Years Surveyed: 1982, 1991, 2005

Description of Photo: 1991

Listed in National Register: 1997

General Plan: LDR # of Buildings: 1

Planning Zone: R-2-6 # of Stories: 1

Lot Acre: 0.1484 # of Units: 1

Principal Building Sqft: 1107

B6. Construction History (Continued from Pg.2):

B13. Remarks (Continued from Pg.2):

P3a. Description (Continued from Pg.1):





RECORDING REQUESTED BY
AND, WHEN RECORDED,
MAIL TO:

City Clerk
City of Orange
300 E. Chapman Avenue
Orange, California, 92866

Exempt from recording fees pursuant to
Gov. Code Sections 6103 and 27383

Property Address: 169 N. Harwood Street
APN: 386-073-02
Mills Act Contract Number: 346.0-20

**HISTORIC PROPERTY PRESERVATION AGREEMENT
(MILLS ACT CONTRACT)**

THIS HISTORIC PROPERTY PRESERVATION AGREEMENT (“Agreement”) is made and entered into as of the date of execution by the City (“Effective Date”), by and between the CITY OF ORANGE, a municipal corporation (“City”), and EJM Capital, LLC, a California Limited Liability Company (“Owner”), with reference to the following:

RECITALS

WHEREAS, the Mills Act (Government Code Section 50280 *et seq.*) provides cities with the opportunity to contract with owners of qualified historical properties whereby the owner promises to preserve and rehabilitate the property in return for a potential reduced property tax assessment; and

WHEREAS, the City of Orange has established Historic Districts consisting of the Plaza Historic District, listed in the National Register of Historic Places; the Old Towne Orange Historic District, listed in the National Register of Historic Places; the local Old Towne Orange Historic District, designated by the Orange City Council; and the local Eichler Fairhaven, Fairhills, and Fairmeadow Historic Districts, designated by the Orange City Council; and the City desires to promote the character, quality of life, and historic features of said Districts to its citizens and visitors; and

WHEREAS, the City is dedicated to the protection and stabilization of property values through maintaining and upgrading its older housing stock, through the use of incentives such as the Mills Act; and

WHEREAS, the Mills Act also has beneficial effects on City businesses, economic stability and community pride by preserving important neighborhood historic resources; and

WHEREAS, the use of the Mills Act will fulfill one of the goals of the City’s 2010 General Plan Cultural Resources Element; specifically,

“Provide incentives and expand education efforts for historic preservation” (Goal 3.0, CR-22); and

WHEREAS, Owner possesses fee simple title in and to that certain real property, together with associated structures and improvements thereon, located at 169 N. Harwood Street in the City of Orange, County of Orange, State of California, having Assessor’s Parcel Number 386-073-02 and more specifically described in Exhibit A, which exhibit is attached hereto and made a part hereof (“Historic Property”); and

WHEREAS, the Historic Property is a qualified historical property under the Mills Act in that it is privately owned property which is not exempt from property taxation and is either: individually designated or is a contributing property within a designated district which is listed in the National Register of Historic Places, California Register of Historical Resources or Register of Historical Landmarks, California Points of Historical Interest, or is a contributing property in a locally designated historic district; and

WHEREAS, Owner, in consideration for abiding by the terms of this Agreement shall be entitled to a reassessment of valuation of the Historic Property and any corresponding reduction in property taxes pursuant to the provisions of the California Revenue and Taxation Code; and

WHEREAS, it is the City’s expectation that the Owner will use the property tax savings accrued under this Agreement for improvements to the “Historic Property” (as defined below). To that end, as a condition of renewal, the City will require a revised schedule of improvements every ten years showing a plan for improvements commensurate with the tax savings; and

WHEREAS, the City and Owner for their mutual benefit, now desire to enter into this Agreement to limit the use of the Historic Property to prevent inappropriate alterations, to ensure that characteristics of historic significance are preserved and maintained in an exemplary manner, and to carry out the purposes of Article 12 (commencing with Section 50280) of Chapter 1, Part 1, Division 1 of Title 5 of the California Government Code and Article 1.9 (commencing with Section 439) of Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code.

AGREEMENT

NOW, THEREFORE, both Owner and City, in consideration of the mutual promises, covenants and conditions contained herein and the substantial public benefits to be derived therefrom, do hereby agree as follows:

1. **APPLICABLE LAWS.** This Agreement is made pursuant to California Government Code Sections 50280 through 50290 and Article 1.9 (commencing with Section 439) of Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code and is subject to all of the provisions of those statutes. To the extent any of the provisions in this Agreement are inconsistent with the aforementioned provisions of the Government and Revenue and Taxation Codes, they are superseded by those Code Sections.

2. ASSESSMENT OF VALUATION. Property tax relief afforded to Owner pursuant to Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code will be determined solely by the Orange County Office of the Assessor. City makes no representations regarding the actual tax savings any person may realize by entering into this Agreement.
3. PRESERVATION OF PROPERTY. Owner agrees to preserve and maintain the Historic Property and its character defining features. Character defining features include, but are not necessarily limited to, the general architectural form, style, materials, design, scale, details, mass, roofline and other aspects of the appearance of the exterior of the Historic Property. For purposes of identification of the Historic Property, the City's Official Historic Property Inventory Form (DPR 523) is attached as Exhibit E.

The *Secretary of the Interior's Standards for Rehabilitation* (Exhibit B) and City's minimum maintenance standards (Exhibit C), attached hereto and incorporated herein by reference, shall constitute the minimum standards and conditions for preservation and rehabilitation of the Historic Property, and shall apply to the Historic Property throughout the term of this Agreement. Owner shall, where necessary, rehabilitate the Historic Property to conform to the rules and regulations of the Office of Historic Preservation of the California Department of Parks and Recreation, the *Secretary of the Interior's Standards for Rehabilitation*, the California Historical Building Code, and the City of Orange's Historic Preservation Design Standards for Old Towne and Eichler Design Standards.

As consideration for the City to enter into this Agreement, the Owner agrees, at its own cost and expense, to complete, or cause to be completed, the work or improvements described in Exhibit D within the times established therefore in Exhibit D. The Owner shall secure any and all permits which may be required by the City or any other governmental agency affected by the construction of the work or improvements. The Owner accepts responsibility for and shall be responsible for identification of and compliance with all applicable laws pertaining to the construction and installation of the work or improvements described on Exhibit D and the contract or contracts pertaining thereto. The Owner will neither seek to hold nor hold the City liable for, and will hold the City harmless with respect to, any consequences of any failure by the Owner to correctly determine the applicability of any such requirements to any contract he/she/they enter into.

In addition to the foregoing, the Owner hereby agrees to and will comply with all applicable local, state, and federal statutes, regulations, rules, codes (including building codes), ordinances, and other requirements of governmental authorities now or hereafter in effect ("Applicable Laws") pertaining to the use of the Historic Property. Owner must give the City immediate written notice on Owner's becoming aware that the use or condition of the Historic Property is in violation of any Applicable Laws.

4. INSPECTIONS AND ANNUAL REPORTING. Owner agrees to permit the examination, by prior appointment, of the interior and exterior of the Historic Property by the City at a minimum every five (5) years during the Agreement term to determine Owner's compliance with the terms and provisions of this Agreement. Owner agrees to provide the City with a report as to the status of the Historic Property annually within thirty (30) days following each anniversary of the

Effective Date of this Agreement. The annual report shall provide substantiation reasonably satisfactory to the City's Historic Preservation Planner or in his/her absence the Director of Community Development that Owner has completed the work required by Exhibit D for the twelve month period preceding each anniversary of this Agreement, and whether the Historic Property has undergone any changed conditions, and whether Owner has received any public funds from other sources designated for the preservation or maintenance of the Historic Property and from whom such funds have been received.

5. PAYMENT OF ANNUAL FEE. The Owner shall pay the City an annual fee to cover administrative costs associated with this Agreement including but not limited to the reasonable cost of monitoring the Historic Property, performing required inspections, and enforcement of the Agreement. Said fee shall be payable to the City of Orange and shall be remitted to the Planning Division upon demand and prior to any required inspection. The amount of the annual inspection fee shall be established by the City and may be revised from time to time, which fee shall be set forth in the City's Master Schedule of Fees and Charges. Failure to pay the required fee within 45 days of the due date will be considered a willful breach of this Agreement and may result in cancellation of the Agreement in accordance with the cancellation terms detailed below.
6. TERM. The term of this Agreement is for a period of ten (10) years. The initial term of this Agreement shall be from September 8, 2020 to and including September 8, 2030.
7. AUTOMATIC RENEWAL. On each yearly anniversary of the Effective Date of this Agreement ("renewal date"), one year shall be added automatically to the initial term of this Agreement, unless notice of non-renewal is given as provided in this Agreement.
8. EFFECT OF OUTSIDE FUNDS. If Owner receives funds designated for the preservation or maintenance of the Historic Property from any other public agency, this Agreement shall not be renewed except upon the vote of the City Council.
9. NOTICE OF NONRENEWAL. If in any year either the Owner or City desires not to renew this Agreement, that party shall serve written notice of nonrenewal to the other party in advance of the annual renewal date. Unless the notice is served by Owner to City at least ninety (90) days, or by City to Owner at least sixty (60) days prior to the renewal date, one year shall automatically be added to the term of the Agreement. Within fifteen (15) days of receipt by Owner of a notice of nonrenewal from the City, Owner may make a written protest. Upon receipt of such a protest the City Council shall set a hearing prior to the expiration of the renewal date of this Agreement or toll the renewal date until such hearing can reasonably held. Owner may furnish the City Council with any information which the Owner deems relevant; and shall furnish the City Council with any information it may require. At any time prior to the renewal date, City may withdraw its notice of nonrenewal.
10. EFFECT OF NOTICE NOT TO RENEW. If in any year either party serves notice of intent not to renew this Agreement, this Agreement shall remain in effect for the balance of the period remaining since the original execution date if not yet renewed, or the last renewal date of the Agreement, as the case may be.

11. UPDATE OF IMPROVEMENT SCHEDULE. At least ninety (90) days prior to the tenth (10th) anniversary of the Effective Date of this Agreement, and ninety (90) days prior to every tenth (10th) anniversary thereafter, Owner shall provide City with an updated schedule of rehabilitation maintenance items for the City's review and approval. Such updated schedule shall contain a list of proposed improvements and/or revisions to be accomplished during the next succeeding ten (10) years of the Agreement and a schedule for the construction of such improvements. Within thirty (30) days after the City's receipt of said updated schedule, the City's Director of Community Development shall either approve or disapprove such proposed schedule of proposed improvements, or shall respond in writing by stating what further information, if any, the City reasonably requires in order to determine the request complete and determine whether or not to grant the requested approval. Upon receipt of such a response, the Owner shall promptly furnish to the City such further information as may be reasonably requested.

From time to time, at the request of the City's Director of Community Development (or his/her authorized representative), the Owner shall meet and confer with the City's Planner for Historic Preservation or in his/her absence the Director of Community Development (or his/her designee) regarding matters arising hereunder with respect to the work and improvements and the progress in constructing the same.

12. INDEPENDENT ADVICE OF COUNSEL. The Owner, and each of them, represent and declare that in executing this Agreement he/she/they have relied solely upon his/her/their own judgment, belief and knowledge, and the advice and recommendations of his/her/their own independently selected counsel, concerning the nature, extent and duration of his/her/their rights and claims, and that he/she/they have not been influenced to any extent whatsoever in executing the same by the City or by any person representing the City.

13. ENFORCEMENT OF AGREEMENT. If the City determines the owner has breached any of the conditions of the Agreement provided for or has allowed the property to deteriorate to the point it no longer meets the standards for a qualified historical property, the City shall either cancel the Agreement or bring any action in court necessary to enforce the Agreement including, but not limited to an action to enforce the Agreement by specific performance to cure, correct or remedy any breach of the terms of this Agreement, to recover damages for any breach, or to obtain any other remedy consistent with the purpose of this Agreement. In the event of a default under the provisions of this Agreement by Owner, City shall give written notice to Owner specifying the alleged grounds for the default. Said notice shall be given by registered or certified mail addressed to the address stated in this Agreement. If such violation(s) is not corrected to the reasonable satisfaction of the City within thirty (30) days from the receipt of the notice of violation, or within such reasonable time as may be required to cure the breach or default, provided that acts to cure, correct or remedy such breach or default are commenced within thirty (30) days and thereafter diligently pursued to completion, then City may, without further notice, institute legal action.

Except as otherwise expressly stated in this Agreement, the rights and remedies of the City are cumulative, and the exercise by the City of one or more of such rights or remedies shall not preclude the exercise by it, at the same or different times, of any other rights or remedies for the same default or any other default by the Owner. Any failure or delay by the City in asserting any

of its right and remedies as to a breach of any of the covenants, conditions or agreements set forth herein shall not operate as a waiver of such breach or of any such rights or remedies, or deprive the City of its right to institute and maintain any actions or proceedings which it may deem necessary to protect, assert or enforce such rights or remedies. A waiver by the City of a breach shall not be construed as a waiver of any succeeding breach of the same or other covenants, conditions or agreements set forth in this Agreement.

14. CANCELLATION. In lieu of bringing an action to enforce the Agreement City may cancel this Agreement if City determines Owner has breached any of the conditions or covenants of this Agreement or has allowed the Historic Property to deteriorate to the point that it no longer meets the standards for a qualified historical property. City may also cancel this Agreement if it determines Owner has failed to rehabilitate the Historic Property in the manner specified in this Agreement.
15. NOTICE OF CANCELLATION. This Agreement cannot be canceled until after City has given notice and has held a public hearing as required by Government Code Section 50285. Notice of the hearing shall be mailed to the last known address of each owner of property within 300 feet of the Historic Property and shall be published in accordance with Government Code Section 6061.
16. CANCELLATION FEE. If City cancels this Agreement in accordance with Section 15 above, Owner shall pay a cancellation fee of twelve and one-half percent (12-1/2%) of the current fair market value of the Historic Property at the time of cancellation. The current fair market value shall be determined by the County Assessor as though the Historic Property were free of the restriction on the Historic Property imposed pursuant to this Agreement. The cancellation fee shall be paid to the County Auditor at such time and in such manner as the County Auditor shall prescribe.
17. NOTICES. All notices required by or provided for in the Agreement shall be given in writing and may be mailed or delivered in person at the address of the respective parties as specified below or at any other address as may be later specified by the parties. Deposit of notice in the mail, postage prepaid, shall be deemed receipt of the notice.

City of Orange	EJM Capital LLC
Attn.: City Clerk	699 Diamond Street
300 E. Chapman Avenue	Laguna Beach, CA 92651
Orange, CA 92866	

18. NO COMPENSATION. Owner shall not receive any payment from the City in consideration of the obligations imposed under this Agreement. The Owner acknowledges and agrees that the consideration for the execution of this Agreement is the substantial public benefit to be derived therefrom and the advantage that will accrue to Owner as a result of the effect upon the assessed value of the Historic Property on account of the restrictions on the use and preservation of the Historic Property.

19. REMEDY IF AGREEMENT HELD NOT ENFORCEABLE. In the event it is finally determined this Agreement does not constitute an enforceable restriction within the meaning of the applicable provisions of the California Government Code and the California Revenue and Taxation Code, except for an unenforceability arising from the cancellation or nonrenewal of this Agreement, then this Agreement shall be null and void and without further effect and the Historic Property subject to this Agreement shall from that time be free from any restriction whatsoever under this Agreement without any payment or further act of the parties to this Agreement.

20. ACQUISITION OF PROPERTY BY EMINENT DOMAIN; CANCELLATION OF CONTRACT; INAPPLICABILITY TO DETERMINATION OF VALUE. In the event that the Historic Property is acquired in whole or part by eminent domain or other acquisition by any entity authorized to exercise the power of eminent domain, and the acquisition is determined by the City to frustrate the purpose of the Agreement, the Agreement shall be canceled and no fee shall be imposed under Section 17, above. The Agreement shall be deemed null and void for all purposes of determining the value of the Historic Property so acquired.

If, subsequent to the filing of an action in eminent domain, the proposed condemnation is abandoned by the condemning agency, the restrictions on the use of the Historic Property included in this Agreement shall, without further agreement of the parties, be reinstated and the terms of this Agreement shall continue in full force and effect.

21. EFFECT OF AGREEMENT. None of the terms, provisions or conditions of this Agreement shall be deemed to create a partnership between the parties hereto and any of their heirs, successors or assigns, nor shall such terms, provisions or conditions cause the parties hereto to be considered joint venturers or members of any joint enterprise.

22. SUCCESSORS AND ASSIGNS. This Agreement is binding upon and shall inure to the benefit of all successors in interest of the Owner, regardless of the tax exempt status of any subsequent owner. A successor in interest shall have the same rights and obligations under this Agreement as the original owner who entered into this Agreement.

23. REQUIREMENTS RELATED TO TRANSFER OF HISTORIC PROPERTY. In the event of any sale, transfer, assignment or conveyance of the Historic Property ("Transfer"), the Owner agrees that, at least thirty (30) days prior to such Transfer, it shall give written notice to the City of such proposed Transfer, including the name(s) of the transferee(s). In addition, the Owner and the proposed transferee(s) shall enter into and deliver to the City through the escrow for the Transfer of the Historic Property an assignment and assumption agreement in a form satisfactory to the City's Attorney or such other evidence as may be satisfactory to the City that the transferee(s) has (have) assumed the Owner's obligations set forth in this Agreement. Upon the Transfer of the Historic Property and the assumption of the obligations hereunder by the transferee(s), the Owner's liability for performance shall be terminated as to any obligation to be performed hereunder after the date of such Transfer.

24. RECORDATION. City shall record a copy of this Agreement with the Office of the County Recorder of the County of Orange.

25. AMENDMENTS. This Agreement may be amended, in whole or in part, only by a written and recorded instrument executed by the parties hereto, except that the Director of Community Development is authorized to amend the list of required projects in Exhibit D.
26. COUNTERPARTS. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original and all of which shall constitute one and the same agreement with the same effect as if all parties had signed the same signature page. Any signature page of this Agreement may be detached from any counterpart of this Agreement and re-attached to any other counterpart of this Agreement identical in form hereto but having attached to it one or more additional signature pages.
27. ADMINISTRATION. This Agreement shall be administered by the City's Director of Community Development (or his/her designated representative) following approval of this Agreement by the City. The City shall maintain authority of this Agreement through the City's Director of Community Development (or his/her authorized representative). The City's Director of Community Development shall have the authority to issue interpretations, waive provisions and enter into amendments of this Agreement on behalf of the City so long as such actions do not change the uses permitted on the Historic Property or the purpose of this Agreement. Such amendments may include extensions of time or amendments to the projects specified in Exhibit D. All other waivers or amendments shall require the written approval and consent of the City Council.

[Remainder of page intentionally left blank; signatures on next page]

IN WITNESS WHEREOF, the City and the Owner have executed this Agreement.

“OWNER”

Dated: _____, 2020

EJM Capital LLC

“CITY”

CITY OF ORANGE, a municipal corporation

Dated: _____, 2020

By: _____
Mark A. Murphy
Mayor

ATTEST:

APPROVED AS TO FORM:

Pamela Coleman
City Clerk

Mary E. Binning
Senior Assistant City Attorney

ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of _____

On _____ before me, _____,
a Notary Public in and for the State of California, personally appeared _____

_____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

EXHIBIT "A"

LEGAL DESCRIPTION OF HISTORIC PROPERTY

REAL PROPERTY IN THE CITY OF ORANGE, COUNTY OF ORANGE, STATE OF CALIFORNIA, DESCRIBED AS:

Lot 16 in Block "A" of Henry Grote's Addition of Orange, in the City of Orange, County of Orange, State of California, as per map recorded in Book 386, Page 7, of Miscellaneous Maps in the office of the County Recorder of Orange County.

[APN 386-073-02]

EXHIBIT "B"

SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION

1. Every reasonable effort shall be made to provide a compatible use for a property, which requires a minimal alteration of the building structure, or site and its environment, or to use a property for its originally intended purpose.
2. The distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.
3. All buildings, structures, and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.
4. Changes which may have taken place in the course of time are evidence of the history and development of a building, structure or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.
5. Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure or site shall be treated with sensitivity.
6. Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.
7. The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.
8. Every reasonable effort shall be made to protect and preserve archeological resources affected by, or adjacent to, any project.
9. Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with the size, scale, color, material and character of the property, neighborhood or environment.
10. Wherever possible, new additions or alterations to structures shall be done in such a manner that, if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.

EXHIBIT “C”

CITY OF ORANGE HISTORIC PROPERTY **MAINTENANCE STANDARDS**

All buildings, structures, yards and other improvements shall be maintained in a manner which does not detract from the appearance of the immediate neighborhood. The following conditions are prohibited:

1. Dilapidated, deteriorating, or unrepaired structures, such as: fences, roofs, doors, walls and windows.
2. Publicly visible storage of scrap lumber, junk, trash or debris.
3. Publicly visible storage of abandoned, discarded or unused objects or equipment, such as automobiles, automobile parts, furniture, stoves, refrigerators, cans, containers or similar items.
4. Stagnant water or excavations, including pools or spas.
5. Any device, decoration, design, structure or vegetation that is unsightly by reason of its height, condition, or its inappropriate location.

EXHIBIT “D”

REHABILITATION/MAINTENANCE SCOPE OF WORK

[Attached.]

EXHIBIT “D”

REHABILITATION/MAINTENANCE SCOPE OF WORK

169 N. Harwood Street

Priority	Description of Work	Cost Estimate	Completion Date
1.	Replace jalousie-style garden window on south elevation first floor with a new wood frame window to match existing historic windows.	\$1,800	2021
2.	Replace first floor window on front elevation with a 9-over-1 light double hung window to match other windows on the house.	\$3,000	2021
3.	Replace non-compatible rear door on the first floor with a door consistent with the requirements of the Historic Preservation Design Standards for Old Towne	\$1,200	2021
4.	Paint exterior of the house.	\$12,000	2022
5.	Investigate the cause of cracked exterior plaster on the north elevation, east elevation roofline, and chimney, and repair as needed.	\$15,000	2025
6.	Seismic retrofit for foundation of the house and install vent screens for all foundation openings.	\$15,000	2025
TOTAL		\$48,000	

- 171 N. Harwood Street is not included in the Mills Act Contract because it is not a contributing historic building to the Old Towne Historic District.

EXHIBIT “E”

HISTORIC PROPERTY INVENTORY FORM (DPR 523)

[Attached.]

State of California - The Resources Agency
 DEPARTMENT OF PARKS AND RECREATION
 PRIMARY RECORD

Primary # 30-159054
 HRI # 038420
 Trinomial ORA
 NRHP Status Code 1D

Other Listings:

Review Code: _____

Reviewer: _____

Date: _____

Page 1 of 3

*Resource Name or #: _____
 (Assigned by Recorder)

HARWOOD_S_169__APN_390-443-14

P1. Other Identifier: _____

*P2. Location: Not for Publication Unrestricted

*a. County: Orange and (P2b and P2c or P2d. Attach a location map as necessary.)

*b. USGS 7.5' Quad: _____ Date: _____ T _____ ; R _____ ; 1/4 of _____ 1/4 of Sec _____ ; B.M. _____

c. Address: 169 - S HARWOOD ST, # _____ City: Orange Zip: 92866

d. UTM: (Give more than one for large and/or linear resources) Zone _____ ' _____ mE/ _____ mN

e. Other Locational Data: _____

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries. Continues on Pg.3.)

Materials: Frame - Wood siding

A single-story clapboard house with modified box plan and multi-planed roof. Entry is via a corner recessed porch supported by Classical columns. Two smaller gables are present, one on the front and one on the side. Each is embellished with ornamental shingles.

*P3b. Resource Attributes: (HP2)--Single family property
 (List attributes and codes)

*P4. Resources Present: Building Structure Object Site Element of District District Other (Isolates, etc.)



P5b. Description of Photo: 2005
 (View, date, accession #)

*P6. Date Constructed/ Age and Source:

1909

Historic Prehistoric Both

*P7. Owner and Address:

*P8: Recorded by: (Name, affiliation, and address)

D. Gest, P. LaValley, D. Matsumoto

Chattel Architecture
 13417 Ventura Blvd.
 Sherman Oaks, CA 91423

*P9. Date Recorded:

April, 2005

*P10. Survey Type: (Describe)

Reconnaissance

*P11. Report Citation: (Cite survey report and other sources, or enter "none.")

Orange County Assessor Records (2005). Chattel Architecture (2005) Historic Resources Survey. AEGIS (1991) Historic Building Inventory Update. Heritage Orange County, Inc. (1982) Orange Historic Survey.

*Attachments: NONE Location Map Continuation Sheet(s) Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List): _____

DPR 523A (1/95)

*Required Information

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
BUILDING, STRUCTURE, AND OBJECT RECORD

Primary # 30-159054
HRI # 038420
*NRHP Status Code 1D

Page 2 of 3

*Resource Name or #: HARWOOD_S_169__APN_390-443-14
(Assigned by Recorder)

B1. Historic Name: Unknown

B2. Common Name:

B3. Original Use: RES B4. Present Use: RES

*B5. Architectural Style: Hip Roof Cottage

*B6. Construction History: (Construction date, alterations, and date of alterations) Date of Construction: 1909 Historic Prehistoric Both

*B7. Moved? No Yes Unknown Date: Original Location:

*B8. Related Features:

*B9. Architect or Builder: Unknown

*B10. Significance: Theme: Architecture Area: City of Orange Property Type: Residence

Period of Significance: Old Towne: Early Settlement (c. 1870 - 1920) Applicable Criteria: AC

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity. Continues on Pg.4.)

Structural Integrity: Excellent Condition - Minor and reversible or appropriate changes to original structure.

Site Integrity: Accessory structure or major addition that compromises the scale or association with the site.

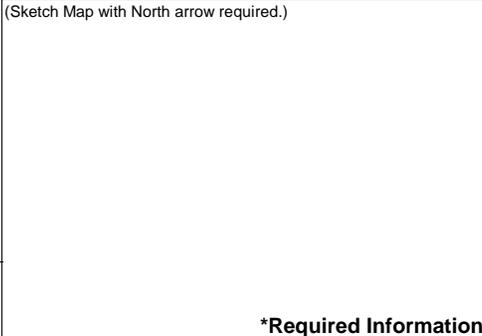
Opportunities:

B11. Additional Resource Attributes: (List attributes and codes)

*B12. References:
Orange Daily News.

B13. Remarks: (Continues on Pg.3.)
Status change since 1991 Survey: None.

(Sketch Map with North arrow required.)



*Required Information

*B14. Evaluator: Robert Chattel
*Date of Evaluation: September, 2005

(This space reserved for official comments.)

DPR 523B (1/95)

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # 30-159054
HRI # 038420
Trinomial ORA

Page 3 of 3

*Resource Name or #:
(Assigned by Recorder)

HARWOOD_S_169__APN_390-443-14

Recorded by:

D. Gest, P. LaValley, D. Matsumoto
Chattel Architecture
13417 Ventura Blvd.
Sherman Oaks, CA 91423

Date Recorded: April, 2005

Continuation Update

Years Surveyed: 1982, 1991, 2005

Description of Photo: 1991

Listed in National Register: 1997

General Plan: LDR # of Buildings: _____

Planning Zone: R-2-6 # of Stories: 1

Lot Acre: 0.184 # of Units: 2

Principal Building Sqft: 1033

B6. Construction History (Continued from Pg.2):

B13. Remarks (Continued from Pg.2):

P3a. Description (Continued from Pg.1):





RECORDING REQUESTED BY
AND, WHEN RECORDED,
MAIL TO:

City Clerk
City of Orange
300 E. Chapman Avenue
Orange, California, 92866

Exempt from recording fees pursuant to
Gov. Code Sections 6103 and 27383

Property Address: 545 E. Jefferson Avenue
APN: 386-141-20
Mills Act Contract Number: 347.0-20

**HISTORIC PROPERTY PRESERVATION AGREEMENT
(MILLS ACT CONTRACT)**

THIS HISTORIC PROPERTY PRESERVATION AGREEMENT (“Agreement”) is made and entered into as of the date of execution by the City (“Effective Date”), by and between the CITY OF ORANGE, a municipal corporation (“City”), and Micha, Rettenmaier, Brown, & Lacey, a California Partnership DBPP Trust (“Owner”), with reference to the following:

RECITALS

WHEREAS, the Mills Act (Government Code Section 50280 *et seq.*) provides cities with the opportunity to contract with owners of qualified historical properties whereby the owner promises to preserve and rehabilitate the property in return for a potential reduced property tax assessment; and

WHEREAS, the City of Orange has established Historic Districts consisting of the Plaza Historic District, listed in the National Register of Historic Places; the Old Towne Orange Historic District, listed in the National Register of Historic Places; the local Old Towne Orange Historic District, designated by the Orange City Council; and the local Eichler Fairhaven, Fairhills, and Fairmeadow Historic Districts, designated by the Orange City Council; and the City desires to promote the character, quality of life, and historic features of said Districts to its citizens and visitors; and

WHEREAS, the City is dedicated to the protection and stabilization of property values through maintaining and upgrading its older housing stock, through the use of incentives such as the Mills Act; and

WHEREAS, the Mills Act also has beneficial effects on City businesses, economic stability and community pride by preserving important neighborhood historic resources; and

WHEREAS, the use of the Mills Act will fulfill one of the goals of the City’s 2010 General Plan Cultural Resources Element; specifically,

“Provide incentives and expand education efforts for historic preservation” (Goal 3.0, CR-22); and

WHEREAS, Owner possesses fee simple title in and to that certain real property, together with associated structures and improvements thereon, located at 545 E. Jefferson Avenue in the City of Orange, County of Orange, State of California, having Assessor’s Parcel Number 386-141-20 and more specifically described in Exhibit A, which exhibit is attached hereto and made a part hereof (“Historic Property”); and

WHEREAS, the Historic Property is a qualified historical property under the Mills Act in that it is privately owned property which is not exempt from property taxation and is either: individually designated or is a contributing property within a designated district which is listed in the National Register of Historic Places, California Register of Historical Resources or Register of Historical Landmarks, California Points of Historical Interest, or is a contributing property in a locally designated historic district; and

WHEREAS, Owner, in consideration for abiding by the terms of this Agreement shall be entitled to a reassessment of valuation of the Historic Property and any corresponding reduction in property taxes pursuant to the provisions of the California Revenue and Taxation Code; and

WHEREAS, it is the City’s expectation that the Owner will use the property tax savings accrued under this Agreement for improvements to the “Historic Property” (as defined below). To that end, as a condition of renewal, the City will require a revised schedule of improvements every ten years showing a plan for improvements commensurate with the tax savings; and

WHEREAS, the City and Owner for their mutual benefit, now desire to enter into this Agreement to limit the use of the Historic Property to prevent inappropriate alterations, to ensure that characteristics of historic significance are preserved and maintained in an exemplary manner, and to carry out the purposes of Article 12 (commencing with Section 50280) of Chapter 1, Part 1, Division 1 of Title 5 of the California Government Code and Article 1.9 (commencing with Section 439) of Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code.

AGREEMENT

NOW, THEREFORE, both Owner and City, in consideration of the mutual promises, covenants and conditions contained herein and the substantial public benefits to be derived therefrom, do hereby agree as follows:

1. **APPLICABLE LAWS.** This Agreement is made pursuant to California Government Code Sections 50280 through 50290 and Article 1.9 (commencing with Section 439) of Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code and is subject to all of the provisions of those statutes. To the extent any of the provisions in this Agreement are inconsistent with the aforementioned provisions of the Government and Revenue and Taxation Codes, they are superseded by those Code Sections.

2. ASSESSMENT OF VALUATION. Property tax relief afforded to Owner pursuant to Chapter 3, Part 2 of Division 1 of the California Revenue and Taxation Code will be determined solely by the Orange County Office of the Assessor. City makes no representations regarding the actual tax savings any person may realize by entering into this Agreement.
3. PRESERVATION OF PROPERTY. Owner agrees to preserve and maintain the Historic Property and its character defining features. Character defining features include, but are not necessarily limited to, the general architectural form, style, materials, design, scale, details, mass, roofline and other aspects of the appearance of the exterior of the Historic Property. For purposes of identification of the Historic Property, the City's Official Historic Property Inventory Form (DPR 523) is attached as Exhibit E.

The *Secretary of the Interior's Standards for Rehabilitation* (Exhibit B) and City's minimum maintenance standards (Exhibit C), attached hereto and incorporated herein by reference, shall constitute the minimum standards and conditions for preservation and rehabilitation of the Historic Property, and shall apply to the Historic Property throughout the term of this Agreement. Owner shall, where necessary, rehabilitate the Historic Property to conform to the rules and regulations of the Office of Historic Preservation of the California Department of Parks and Recreation, the *Secretary of the Interior's Standards for Rehabilitation*, the California Historical Building Code, and the City of Orange's Historic Preservation Design Standards for Old Towne and Eichler Design Standards.

As consideration for the City to enter into this Agreement, the Owner agrees, at its own cost and expense, to complete, or cause to be completed, the work or improvements described in Exhibit D within the times established therefore in Exhibit D. The Owner shall secure any and all permits which may be required by the City or any other governmental agency affected by the construction of the work or improvements. The Owner accepts responsibility for and shall be responsible for identification of and compliance with all applicable laws pertaining to the construction and installation of the work or improvements described on Exhibit D and the contract or contracts pertaining thereto. The Owner will neither seek to hold nor hold the City liable for, and will hold the City harmless with respect to, any consequences of any failure by the Owner to correctly determine the applicability of any such requirements to any contract he/she/they enter into.

In addition to the foregoing, the Owner hereby agrees to and will comply with all applicable local, state, and federal statutes, regulations, rules, codes (including building codes), ordinances, and other requirements of governmental authorities now or hereafter in effect ("Applicable Laws") pertaining to the use of the Historic Property. Owner must give the City immediate written notice on Owner's becoming aware that the use or condition of the Historic Property is in violation of any Applicable Laws.

4. INSPECTIONS AND ANNUAL REPORTING. Owner agrees to permit the examination, by prior appointment, of the interior and exterior of the Historic Property by the City at a minimum every five (5) years during the Agreement term to determine Owner's compliance with the terms and provisions of this Agreement. Owner agrees to provide the City with a report as to the status of the Historic Property annually within thirty (30) days following each anniversary of the

Effective Date of this Agreement. The annual report shall provide substantiation reasonably satisfactory to the City's Historic Preservation Planner or in his/her absence the Director of Community Development that Owner has completed the work required by Exhibit D for the twelve month period preceding each anniversary of this Agreement, and whether the Historic Property has undergone any changed conditions, and whether Owner has received any public funds from other sources designated for the preservation or maintenance of the Historic Property and from whom such funds have been received.

5. PAYMENT OF ANNUAL FEE. The Owner shall pay the City an annual fee to cover administrative costs associated with this Agreement including but not limited to the reasonable cost of monitoring the Historic Property, performing required inspections, and enforcement of the Agreement. Said fee shall be payable to the City of Orange and shall be remitted to the Planning Division upon demand and prior to any required inspection. The amount of the annual inspection fee shall be established by the City and may be revised from time to time, which fee shall be set forth in the City's Master Schedule of Fees and Charges. Failure to pay the required fee within 45 days of the due date will be considered a willful breach of this Agreement and may result in cancellation of the Agreement in accordance with the cancellation terms detailed below.
6. TERM. The term of this Agreement is for a period of ten (10) years. The initial term of this Agreement shall be from September 8, 2020 to and including September 8, 2030.
7. AUTOMATIC RENEWAL. On each yearly anniversary of the Effective Date of this Agreement ("renewal date"), one year shall be added automatically to the initial term of this Agreement, unless notice of non-renewal is given as provided in this Agreement.
8. EFFECT OF OUTSIDE FUNDS. If Owner receives funds designated for the preservation or maintenance of the Historic Property from any other public agency, this Agreement shall not be renewed except upon the vote of the City Council.
9. NOTICE OF NONRENEWAL. If in any year either the Owner or City desires not to renew this Agreement, that party shall serve written notice of nonrenewal to the other party in advance of the annual renewal date. Unless the notice is served by Owner to City at least ninety (90) days, or by City to Owner at least sixty (60) days prior to the renewal date, one year shall automatically be added to the term of the Agreement. Within fifteen (15) days of receipt by Owner of a notice of nonrenewal from the City, Owner may make a written protest. Upon receipt of such a protest the City Council shall set a hearing prior to the expiration of the renewal date of this Agreement or toll the renewal date until such hearing can reasonably held. Owner may furnish the City Council with any information which the Owner deems relevant; and shall furnish the City Council with any information it may require. At any time prior to the renewal date, City may withdraw its notice of nonrenewal.
10. EFFECT OF NOTICE NOT TO RENEW. If in any year either party serves notice of intent not to renew this Agreement, this Agreement shall remain in effect for the balance of the period remaining since the original execution date if not yet renewed, or the last renewal date of the Agreement, as the case may be.

11. UPDATE OF IMPROVEMENT SCHEDULE. At least ninety (90) days prior to the tenth (10th) anniversary of the Effective Date of this Agreement, and ninety (90) days prior to every tenth (10th) anniversary thereafter, Owner shall provide City with an updated schedule of rehabilitation maintenance items for the City's review and approval. Such updated schedule shall contain a list of proposed improvements and/or revisions to be accomplished during the next succeeding ten (10) years of the Agreement and a schedule for the construction of such improvements. Within thirty (30) days after the City's receipt of said updated schedule, the City's Director of Community Development shall either approve or disapprove such proposed schedule of proposed improvements, or shall respond in writing by stating what further information, if any, the City reasonably requires in order to determine the request complete and determine whether or not to grant the requested approval. Upon receipt of such a response, the Owner shall promptly furnish to the City such further information as may be reasonably requested.

From time to time, at the request of the City's Director of Community Development (or his/her authorized representative), the Owner shall meet and confer with the City's Planner for Historic Preservation or in his/her absence the Director of Community Development (or his/her designee) regarding matters arising hereunder with respect to the work and improvements and the progress in constructing the same.

12. INDEPENDENT ADVICE OF COUNSEL. The Owner, and each of them, represent and declare that in executing this Agreement he/she/they have relied solely upon his/her/their own judgment, belief and knowledge, and the advice and recommendations of his/her/their own independently selected counsel, concerning the nature, extent and duration of his/her/their rights and claims, and that he/she/they have not been influenced to any extent whatsoever in executing the same by the City or by any person representing the City.

13. ENFORCEMENT OF AGREEMENT. If the City determines the owner has breached any of the conditions of the Agreement provided for or has allowed the property to deteriorate to the point it no longer meets the standards for a qualified historical property, the City shall either cancel the Agreement or bring any action in court necessary to enforce the Agreement including, but not limited to an action to enforce the Agreement by specific performance to cure, correct or remedy any breach of the terms of this Agreement, to recover damages for any breach, or to obtain any other remedy consistent with the purpose of this Agreement. In the event of a default under the provisions of this Agreement by Owner, City shall give written notice to Owner specifying the alleged grounds for the default. Said notice shall be given by registered or certified mail addressed to the address stated in this Agreement. If such violation(s) is not corrected to the reasonable satisfaction of the City within thirty (30) days from the receipt of the notice of violation, or within such reasonable time as may be required to cure the breach or default, provided that acts to cure, correct or remedy such breach or default are commenced within thirty (30) days and thereafter diligently pursued to completion, then City may, without further notice, institute legal action.

Except as otherwise expressly stated in this Agreement, the rights and remedies of the City are cumulative, and the exercise by the City of one or more of such rights or remedies shall not preclude the exercise by it, at the same or different times, of any other rights or remedies for the same default or any other default by the Owner. Any failure or delay by the City in asserting any

of its right and remedies as to a breach of any of the covenants, conditions or agreements set forth herein shall not operate as a waiver of such breach or of any such rights or remedies, or deprive the City of its right to institute and maintain any actions or proceedings which it may deem necessary to protect, assert or enforce such rights or remedies. A waiver by the City of a breach shall not be construed as a waiver of any succeeding breach of the same or other covenants, conditions or agreements set forth in this Agreement.

14. CANCELLATION. In lieu of bringing an action to enforce the Agreement City may cancel this Agreement if City determines Owner has breached any of the conditions or covenants of this Agreement or has allowed the Historic Property to deteriorate to the point that it no longer meets the standards for a qualified historical property. City may also cancel this Agreement if it determines Owner has failed to rehabilitate the Historic Property in the manner specified in this Agreement.

15. NOTICE OF CANCELLATION. This Agreement cannot be canceled until after City has given notice and has held a public hearing as required by Government Code Section 50285. Notice of the hearing shall be mailed to the last known address of each owner of property within 300 feet of the Historic Property and shall be published in accordance with Government Code Section 6061.

16. CANCELLATION FEE. If City cancels this Agreement in accordance with Section 15 above, Owner shall pay a cancellation fee of twelve and one-half percent (12-1/2%) of the current fair market value of the Historic Property at the time of cancellation. The current fair market value shall be determined by the County Assessor as though the Historic Property were free of the restriction on the Historic Property imposed pursuant to this Agreement. The cancellation fee shall be paid to the County Auditor at such time and in such manner as the County Auditor shall prescribe.

17. NOTICES. All notices required by or provided for in the Agreement shall be given in writing and may be mailed or delivered in person at the address of the respective parties as specified below or at any other address as may be later specified by the parties. Deposit of notice in the mail, postage prepaid, shall be deemed receipt of the notice.

City of Orange
Attn.: City Clerk
300 E. Chapman Avenue
Orange, CA 92866

Micha, Rettenmaier, Brown & Lacey, a
California Partnership
699 Diamond Street
Laguna Beach, CA 92651

18. NO COMPENSATION. Owner shall not receive any payment from the City in consideration of the obligations imposed under this Agreement. The Owner acknowledges and agrees that the consideration for the execution of this Agreement is the substantial public benefit to be derived therefrom and the advantage that will accrue to Owner as a result of the effect upon the assessed value of the Historic Property on account of the restrictions on the use and preservation of the Historic Property.

19. REMEDY IF AGREEMENT HELD NOT ENFORCEABLE. In the event it is finally determined this Agreement does not constitute an enforceable restriction within the meaning of the applicable provisions of the California Government Code and the California Revenue and Taxation Code, except for an unenforceability arising from the cancellation or nonrenewal of this Agreement, then this Agreement shall be null and void and without further effect and the Historic Property subject to this Agreement shall from that time be free from any restriction whatsoever under this Agreement without any payment or further act of the parties to this Agreement.

20. ACQUISITION OF PROPERTY BY EMINENT DOMAIN; CANCELLATION OF CONTRACT; INAPPLICABILITY TO DETERMINATION OF VALUE. In the event that the Historic Property is acquired in whole or part by eminent domain or other acquisition by any entity authorized to exercise the power of eminent domain, and the acquisition is determined by the City to frustrate the purpose of the Agreement, the Agreement shall be canceled and no fee shall be imposed under Section 17, above. The Agreement shall be deemed null and void for all purposes of determining the value of the Historic Property so acquired.

If, subsequent to the filing of an action in eminent domain, the proposed condemnation is abandoned by the condemning agency, the restrictions on the use of the Historic Property included in this Agreement shall, without further agreement of the parties, be reinstated and the terms of this Agreement shall continue in full force and effect.

21. EFFECT OF AGREEMENT. None of the terms, provisions or conditions of this Agreement shall be deemed to create a partnership between the parties hereto and any of their heirs, successors or assigns, nor shall such terms, provisions or conditions cause the parties hereto to be considered joint venturers or members of any joint enterprise.

22. SUCCESSORS AND ASSIGNS. This Agreement is binding upon and shall inure to the benefit of all successors in interest of the Owner, regardless of the tax exempt status of any subsequent owner. A successor in interest shall have the same rights and obligations under this Agreement as the original owner who entered into this Agreement.

23. REQUIREMENTS RELATED TO TRANSFER OF HISTORIC PROPERTY. In the event of any sale, transfer, assignment or conveyance of the Historic Property ("Transfer"), the Owner agrees that, at least thirty (30) days prior to such Transfer, it shall give written notice to the City of such proposed Transfer, including the name(s) of the transferee(s). In addition, the Owner and the proposed transferee(s) shall enter into and deliver to the City through the escrow for the Transfer of the Historic Property an assignment and assumption agreement in a form satisfactory to the City's Attorney or such other evidence as may be satisfactory to the City that the transferee(s) has (have) assumed the Owner's obligations set forth in this Agreement. Upon the Transfer of the Historic Property and the assumption of the obligations hereunder by the transferee(s), the Owner's liability for performance shall be terminated as to any obligation to be performed hereunder after the date of such Transfer.

24. RECORDATION. City shall record a copy of this Agreement with the Office of the County Recorder of the County of Orange.

25. AMENDMENTS. This Agreement may be amended, in whole or in part, only by a written and recorded instrument executed by the parties hereto, except that the Director of Community Development is authorized to amend the list of required projects in Exhibit D.
26. COUNTERPARTS. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original and all of which shall constitute one and the same agreement with the same effect as if all parties had signed the same signature page. Any signature page of this Agreement may be detached from any counterpart of this Agreement and re-attached to any other counterpart of this Agreement identical in form hereto but having attached to it one or more additional signature pages.
27. ADMINISTRATION. This Agreement shall be administered by the City's Director of Community Development (or his/her designated representative) following approval of this Agreement by the City. The City shall maintain authority of this Agreement through the City's Director of Community Development (or his/her authorized representative). The City's Director of Community Development shall have the authority to issue interpretations, waive provisions and enter into amendments of this Agreement on behalf of the City so long as such actions do not change the uses permitted on the Historic Property or the purpose of this Agreement. Such amendments may include extensions of time or amendments to the projects specified in Exhibit D. All other waivers or amendments shall require the written approval and consent of the City Council.

[Remainder of page intentionally left blank; signatures on next page]

IN WITNESS WHEREOF, the City and the Owner have executed this Agreement.

“OWNER”

Dated: _____, 2020

Micha, Rettenmaier, Brown & Lacey

“CITY”

CITY OF ORANGE, a municipal corporation

Dated: _____, 2020

By: _____
Mark A. Murphy
Mayor

ATTEST:

APPROVED AS TO FORM:

Pamela Coleman
City Clerk

Mary E. Binning
Senior Assistant City Attorney

ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of _____

On _____ before me, _____,
a Notary Public in and for the State of California, personally appeared _____

_____ who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

EXHIBIT "A"

LEGAL DESCRIPTION OF HISTORIC PROPERTY

REAL PROPERTY IN THE CITY OF ORANGE, COUNTY OF ORANGE, STATE OF CALIFORNIA, DESCRIBED AS:

Lot 13 of Tract No. 571 in the City of Orange, County of Orange, State of California, as per map recorded in Book 18 Page(s) 43 of Miscellaneous Maps in the Office of the County Recorder of said County.

[APN 386-141-20]

EXHIBIT "B"

SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION

1. Every reasonable effort shall be made to provide a compatible use for a property, which requires a minimal alteration of the building structure, or site and its environment, or to use a property for its originally intended purpose.
2. The distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.
3. All buildings, structures, and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.
4. Changes which may have taken place in the course of time are evidence of the history and development of a building, structure or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.
5. Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure or site shall be treated with sensitivity.
6. Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.
7. The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.
8. Every reasonable effort shall be made to protect and preserve archeological resources affected by, or adjacent to, any project.
9. Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with the size, scale, color, material and character of the property, neighborhood or environment.
10. Wherever possible, new additions or alterations to structures shall be done in such a manner that, if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.

EXHIBIT “C”

CITY OF ORANGE HISTORIC PROPERTY MAINTENANCE STANDARDS

All buildings, structures, yards and other improvements shall be maintained in a manner which does not detract from the appearance of the immediate neighborhood. The following conditions are prohibited:

1. Dilapidated, deteriorating, or unrepaired structures, such as: fences, roofs, doors, walls and windows.
2. Publicly visible storage of scrap lumber, junk, trash or debris.
3. Publicly visible storage of abandoned, discarded or unused objects or equipment, such as automobiles, automobile parts, furniture, stoves, refrigerators, cans, containers or similar items.
4. Stagnant water or excavations, including pools or spas.
5. Any device, decoration, design, structure or vegetation that is unsightly by reason of its height, condition, or its inappropriate location.

EXHIBIT “D”

REHABILITATION/MAINTENANCE SCOPE OF WORK

[Attached.]

EXHIBIT “D”

REHABILITATION/MAINTENANCE SCOPE OF WORK

545 E. Jefferson Avenue

Priority	Description of Work	Cost Estimate	Completion Date
1.	Repair of exterior sun damaged and/or dry rot on wood fascia boards, siding, and window sills as needed on all four elevations.	\$2,500	2021
2.	Paint exterior of the house.	\$15,000	2022
3.	Maintenance on all double hung sash and casement windows, including repair of glazing and sash weights to ensure proper operability.	\$3,000	2023
4.	Replace glass block bathroom window on east elevation with new compatible window in conformance with the <i>Historic Preservation Design Standards for Old Towne</i>	\$1,800	2024
5.	Seismic retrofit for foundation of the house and install vent screens on all foundation openings.	\$15,000	2025
TOTAL		\$37,300	

- 547 E. Jefferson Avenue is not included in the Mills Act Contract as it is not a contributing historic building to the Old Towne Historic District.

EXHIBIT “E”

HISTORIC PROPERTY INVENTORY FORM (DPR 523)

[Attached.]

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # 30-159453
HRI # 038819
Trinomial ORA
NRHP Status Code 1D

Other Listings:

Review Code: _____

Reviewer: _____

Date: _____

Page 1 of 3

*Resource Name or #:
(Assigned by Recorder)

JEFFERSON_E_545__APN_386-141-20

P1. Other Identifier: _____

*P2. Location: Not for Publication Unrestricted

*a. County: Orange and (P2b and P2c or P2d. Attach a location map as necessary.)

*b. USGS 7.5' Quad: _____ Date: _____ T _____ ; R _____ ; 1/4 of _____ 1/4 of Sec _____ ; B.M. _____

c. Address: 545 - E JEFFERSON AVE, # _____ City: Orange Zip: 92866

d. UTM: (Give more than one for large and/or linear resources) Zone _____ ' _____ mE/ _____ mN

e. Other Locational Data: _____

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries. Continues on Pg.3.)

Materials: Frame - Wood siding

A single-story clapboard house built on an L-plan with a steep-pitched, multi-gable roof. Entry is at the apex of the ell via a small entry portico. The house incorporates Provincial Revival influences through its massing and refined profile with steep-pitched gables.

*P3b. Resource Attributes: (HP2)--Single family property
(List attributes and codes)

*P4. Resources Present: Building Structure Object Site Element of District District Other (Isolates, etc.)

P5b. Description of Photo: 2005
(View, date, accession #)



*P6. Date Constructed/ Age and Source:

1920 c

Historic Prehistoric Both

*P7. Owner and Address:

*P8: Recorded by: (Name, affiliation, and address)

D. Gest, P. LaValley, D. Matsumoto

Chattel Architecture

13417 Ventura Blvd.

Sherman Oaks, CA 91423

*P9. Date Recorded:

April, 2005

*P10. Survey Type: (Describe)

Reconnaissance

*P11. Report Citation: (Cite survey report and other sources, or enter "none.")

Orange County Assessor Records (2005). Chattel Architecture (2005) Historic Resources Survey. AEGIS (1991) Historic Building Inventory Update. Heritage Orange County, Inc. (1982) Orange Historic Survey.

*Attachments: NONE Location Map Continuation Sheet(s) Building, Structure, and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record
 Artifact Record Photograph Record Other (List): _____

DPR 523A (1/95)

*Required Information

Page 2 of 3

*Resource Name or #: JEFFERSON_E_545__APN_386-141-20
(Assigned by Recorder)

B1. Historic Name: Unknown

B2. Common Name:

B3. Original Use: RES

B4. Present Use: RES

*B5. Architectural Style: Provincial Revival

*B6. Construction History: (Construction date, alterations, and date of alterations) Date of Construction: 1920 c Historic Prehistoric Both

*B7. Moved? No Yes Unknown Date: Original Location:

*B8. Related Features:

*B9. Architect or Builder: Unknown

*B10. Significance: Theme: Architecture Area: City of Orange Property Type: Residence

Period of Significance: Old Towne: Early Settlement (c. 1870 - 1920) Applicable Criteria: AC

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity. Continues on Pg.4.)

Structural Integrity: Excellent Condition - No apparent change to original structure.

Site Integrity:

Opportunities:

B11. Additional Resource Attributes: (List attributes and codes)

*B12. References:

Orange Daily News.

B13. Remarks: (Continues on Pg.3.)

Status change since 1991 Survey: None.

(Sketch Map with North arrow required.)

*B14. Evaluator: Robert Chattel

*Date of Evaluation: September, 2005

(This space reserved for official comments.)

DPR 523B (1/95)

*Required Information

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # 30-159453
HRI # 038819
Trinomial ORA

Page 3 of 3

*Resource Name or #:
(Assigned by Recorder)

JEFFERSON_E_545__APN_386-141-20

Recorded by:

D. Gest, P. LaValley, D. Matsumoto
Chattel Architecture
13417 Ventura Blvd.
Sherman Oaks, CA 91423

Date Recorded: April, 2005

Continuation Update

Years Surveyed: 1982, 1991, 2005

Description of Photo: 1991

Listed in National Register: 1997

General Plan: LDR # of Buildings: 1

Planning Zone: R-1-6 # of Stories: 1

Lot Acre: 0.1379 # of Units: 1

Principal Building Sqft: 785

B6. Construction History (Continued from Pg.2):



B13. Remarks (Continued from Pg.2):

P3a. Description (Continued from Pg.1):

EXHIBIT “F”

CERTIFICATION OF TRUST

[Attached.]





Agenda Item

City Council

Item #: 3.24.

9/8/2020

File #: 20-056

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Bonnie Hagan, Assistant City Manager / Community Services Director

1. SUBJECT

Award of Contract to J.B. Bostick Company, Inc. for Parking Lot Pavement Rehabilitation at Olive and Grijalva Parks; Bid No. 20-21.10.

2. SUMMARY

As part of a multi-year capital project to maintain park parking lots, the proposed contract includes asphalt and concrete removal, repair, maintenance and striping of parking lots and access drives at Olive and Grijalva Parks.

3. RECOMMENDED ACTION

Approve contract with J.B. Bostick Company, Inc. in the amount not to exceed \$174,300 for parking lot pavement rehabilitation; and authorize the Mayor and City Clerk to execute on behalf of the City.

4. FISCAL IMPACT

The total expenditure for this contract is \$174,300 and will be funded in Parking Lot Pavement Rehabilitation (Project 30053) through Park Acquisition-Infill (510).

5. STRATEGIC PLAN GOALS

Goal 3: Enhance and Promote Quality of Life in the Community

a: Renovate, maintain, develop, and/or expand public use spaces and places.

6. DISCUSSION AND BACKGROUND

Maintaining the safety and integrity of park facilities, including park parking lots, are a priority. Pavement maintenance and rehabilitation are important aspects of keeping facilities in good functioning condition and attractive for visitors. The Parking Lot Pavement Rehabilitation (Project 30053), a multi-year effort to address repair and maintenance needs at each of the parks based on current conditions, was originally approved by City Council in 2015.

Parks completed to date include Killefer Park in 2017, and Eisenhower and El Camino Real Parks in 2019. Yorba and Shaffer Parks parking lots were completed within recent capital improvement projects that included complete park renovations.

Olive Park and Grijalva Park are the next parks scheduled for pavement rehabilitation this fiscal year

based on current conditions. Grijalva Park, built in 2004, the Grijalva Park Sports Center, built in 2010, and Olive Park renovated in 1990 (built in 1975) have not had any pavement improvements since constructed.

Pavement at both parks have areas in varying degree of degradation that will be treated differently depending on their condition. The scope of work under this contract will consist of removal and replacement in limited areas, located mostly at Olive Park. Other areas in both parks will include grind and overlay with new asphalt. Many areas will only require slurry and seal, with all areas to have new striping and ADA upgrades as required.

Staff issued a request for bids for Parking Lot Pavement Rehabilitation Bid 20-21.10. Thirteen bids were received with bid amounts ranging from \$166,000 to \$388,868. A bid abstract summarizing all bids submitted is attached. The lowest responsible bid is from J.B. Bostick Company, Inc. in the amount of \$166,000. This amount is well below staff's estimate and a very competitive price. Staff verified the qualifications of the contractor with references provided for similar work, including the parking lot pavement renovation successfully completed at Killefer Park in 2017.

A 5% contingency in the amount of \$8,300 is included in the proposed contract to cover unforeseen conditions or minor additional work. The total not to exceed amount of the proposed contract is \$174,300. Park Acquisition (510) funding is available within the Capital Improvement Program budget for Parking Lot Pavement Rehabilitation (Project 30053).

Handy Park will have its parking lot completely reconstructed next as part of the Handy Park Maintenance Renovation project beginning later this fiscal year. The parks which remain to have parking lots rehabilitated include El Modena Park, Fred Barrera Park, McPherson Athletic Facility, Santiago Hills Park, Serrano Park and Steve Ambriz Memorial Park. These parking lots will be addressed in following years and prioritized based on condition.

7. ATTACHMENTS

- Bid Abstract
- Contract with JB Bostick Inc. for Parking Lot Pavement Rehabilitation



Agenda Item

City Council

Item #: 3.24.

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7. ATTACHMENTS

- Bid Abstract
- Contract with JB Bostick Inc. for Parking Lot Pavement Rehabilitation

**Project: Parking Lot Pavement Rehabilitation
at Olive and Grijalva Parks**

**BID ABSTRACT SUMMARY
Bid No. 20-21.10**

**Date Advertised: 7/30/2020
Bid Due Date: 8/13/2020
Engineer's Cost Estimate: \$350,000**

Company/ Contractor	JB Bostick Company, Inc.	United Paving Co.	El Camino Asphalt Paving Corp.	Century Paving, Inc.	NPG, Inc.	Prestige Paving Company	MVC Enterprise, Inc.	All American Asphalt	Ben's Asphalt	Excel Paving	Pave West, Inc.	Hardy & Harper, Inc.	CEM Construction Corp.
City (Location of Company)	Anaheim, Ca.	Corona, Ca.	Orange, Ca.	La Mirada, Ca.	Perris, Ca.	Corona, Ca.	Temecula, Ca.	Corona, Ca.	Santa Ana, Ca.	Long Beach, Ca.	Artesia, Ca.	Lake Forest, Ca.	Downey, Ca.
Olive Bid Amount	\$51,000	\$66,755	\$65,700	\$66,792	\$45,000	\$59,334	\$93,500	\$91,816	\$97,830	\$74,000	\$80,912.90	\$111,000	\$61,335
Grijalva Bid Amount	\$115,000	\$110,690	\$133,853	\$137,685	\$149,444	\$191,361	\$179,500	\$183,370	\$177,820	\$206,820	\$253,578	\$252,000	\$327,533
Total Bid Amount	\$166,000	\$177,445	\$199,553	\$204,477	\$239,444	\$250,695	\$273,000	\$275,186	\$275,650	\$280,820	\$334,490.90	\$363,000	\$388,868
	Recommended Award												

CONTRACT

[Parking Lot Pavement Rehabilitation at Olive and Grijalva Parks (Bid No. 20-21.10)]

THIS CONTRACT (the "Contract") is made and entered into as of _____, 2020 ("Effective Date") by and between the CITY OF ORANGE, a municipal corporation ("City"), and J.B. BOSTICK COMPANY INC., a California corporation ("Contractor"), who agree as follows.

ARTICLE 1 Work Performed

a. For and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by City, and under the conditions expressed in the two (2) bonds presented to City with this Contract and incorporated herein by this reference, Contractor hereby agrees to and shall do all the work and furnish all the labor, materials, tools and equipment, except such as are mentioned in the specifications to be furnished by City to Contractor, necessary to complete in good workmanship and substantial manner the work (the "Work") described in:

(1) The Request for Bid which includes Construction Plans and Contractor's bid (Exhibit A);

(2) The latest edition of the "City of Orange Standard Plans and Specifications" (the "Orange Book") with the term "Engineer," as used in the Orange Book and in this Contract, to specifically include the City Engineer (or his/her designee);

(3) City of Orange Park Development Standards and Specifications;

(4) The "Standard Specifications for Public Works Construction" (the "Green Book"), and all amendments thereto.

b. Contractor acknowledges that it has received the Plans from City and that a complete copy of the Plans are in its possession and are hereby specifically referred to and by such reference made a part hereof. The Orange Book, Green Book and City of Orange Standard Special Provisions and Standard Plans are on file with City's Community Services Director and are hereby specifically referred to and by such reference made a part hereof. Contractor hereby acknowledges that it has read, reviewed and understands the Plans, the Orange Book, the Green Book, the Special Provisions, the Standard Plans, as they relate to the Work, all of which documents shall be referred to herein collectively as the "Plans and Specifications."

c. Contractor acknowledges the provisions of Chapter 8.28 of the Orange Municipal Code which requires, among other things, that Contractor utilize City's exclusive solid waste hauler for the rental of bins for trash and debris removal and imposes mandatory recycling requirements for self-hauled construction and demolition waste. The terms and conditions set forth in this Contract shall control over any terms and conditions in the Plans and Specifications to the contrary.

d. The Work shall be performed in conformity with the Plans and Specifications and the Bid Proposal and all applicable laws, including any and all applicable federal and state labor laws and standards and applicable prevailing wage requirements and any and all state, federal and local statutes, regulations and ordinances relating to the protection of human health or the environment.

e. Unless and until otherwise notified in writing by City's Public Works Director, City's Sr. Landscape Project Coordinator, Don Equitz ("Authorized City Representative"), shall be the person to whom Contractor will report for the performance of the Work hereunder. It is understood that Contractor's performance hereunder shall be under the direction and supervision of the Authorized City Representative or such other person as City's Community Services Director may designate from time to time, that Contractor shall coordinate the Work hereunder with the Authorized City Representative to the extent required by the Authorized City Representative, and that all performances required hereunder by Contractor shall be performed to the satisfaction of the Authorized City Representative or City's Community Services Director.

f. It is expressly agreed by and between the parties hereto that should there be any conflict between the terms of this instrument and Contractor's Bid Proposal, then this instrument shall control and nothing herein shall be considered as an acceptance of the said terms of said Bid Proposal conflicting herewith.

ARTICLE 2 Commencement of Work

Contractor shall commence the Work provided for in this Contract within fifteen (15) days of the date of the issuance by City of a Notice to Proceed and diligently prosecute completion of the Work within thirty-five (35) working days from such date, unless legal extension is granted in accordance with the terms set forth in the Green Book. Time is of the essence in this Contract. Contractor shall do all things necessary and incidental to the prosecution of Contractor's Work.

ARTICLE 3 Compensation

a. Contractor agrees to receive and accept an amount not to exceed ONE HUNDRED SIXTY-SIX THOUSAND DOLLARS and 00/100 (\$166,000.00) as compensation for furnishing all materials and doing all the Work contemplated and embraced in this Contract. Said compensation covers (1) all loss or damage arising out of the nature of the Work, from the acts of the elements; (2) any unforeseen difficulties or obstructions which may arise or be encountered in the prosecution of the Work until its acceptance by City, other than as provided below; (3) all risks of every description connected with the Work; (4) all expenses incurred by or in consequence of the suspension or discontinuance of the Work; and (5) well and faithfully completing the Work, and for the whole thereof, in the manner and according to the Plans and Specifications, and requirements of the Authorized City Representative under them. Retention amounts shall be withheld from progress payments as required by law unless Contractor provides securities in lieu of retention.

b. In addition to the scheduled Work to be performed by the Contractor, the parties recognize that additional, unforeseen work and services may be required by the Authorized City Representative. In anticipation of such contingencies, the sum of EIGHT THOUSAND THREE HUNDRED DOLLARS and 00/100 (\$8,300.00) has been added to the total compensation of this Contract. The Authorized City Representative may approve the additional work and the actual costs incurred by the Contractor in performance of additional work or services in accordance with such amount as the Authorized City Representative and the Contractor may agree upon in advance. Said additional work or services and the amount of compensation therefor, up to the amount of the authorized contingency, shall be memorialized in the form of a Contract Amendment approved by the City Manager on a form acceptable to the City Attorney. The Contractor agrees to perform only that work or those services that are specifically requested by the Authorized City Representative. Any and all additional work and services performed under this Contract shall be completed in such sequence as to assure their completion as expeditiously as is consistent with professional skill and care in accordance with a cost estimate or proposal submitted to and approved by the Authorized City Representative prior to the commencement of such Work or services.

c. The total amount of compensation under this Contract, including contingencies, shall not exceed ONE HUNDRED SEVENTY-FOUR THOUSAND THREE HUNDRED DOLLARS and 00/100 (\$174,300.00).

ARTICLE 4 Licenses

Contractor represents that it and any subcontractors it may engage, possess any and all licenses which are required under state or federal law to perform the Work contemplated by this Contract and that Contractor and subcontractors shall maintain all appropriate licenses, including a City of Orange business license, at its cost, during the performance of this Contract.

ARTICLE 5 Guarantees

a. Contractor guarantees the construction and installation of all Work included in the Plans and Specifications for which Contractor has been awarded this Contract.

b. Should any of the materials or equipment installed pursuant to this Contract prove defective or should the Work as a whole prove defective, due to faulty equipment, workmanship, materials furnished or methods of installations, or should said Work or any part thereof fail to function properly, as designed, due to any of the above causes within twelve (12) months after the date on which said Work is accepted by City, Contractor shall make repairs and furnish such materials and equipment as are necessary to be furnished and installed within fifteen (15) calendar days after the receipt of a demand from City.

c. Said Work will be deemed defective within the meaning of this guarantee in the event that it fails to function as originally intended either by the Plans and Specifications of this Contract or by the manufacturer(s) of the equipment incorporated into the Work.

d. In the event repairs are not made within fifteen (15) calendar days after Contractor's receipt of a demand from City, City shall have the unqualified option to make any needed repairs or replacements itself or by any other contractor. Contractor shall reimburse City, upon demand, for all expenses incurred in restoring said Work to the condition contemplated in this Contract, including the cost of any equipment or materials replaced.

e. It is understood that emergency repairs may, by necessity, be made by City. Therefore, when defective equipment, materials or workmanship result in emergency repairs by City, Contractor shall reimburse City, upon demand, for all expenses incurred. Emergency repairs will be deemed as those repairs determined by City's Director of Public Works to be necessary due to an immediate detriment to the health, safety, welfare or convenience of the residents of City.

ARTICLE 6 Water Quality

a. The Santa Ana Regional Water Quality Control Board ("RWQCB") has issued National Pollutant Discharge Elimination System ("NPDES") Permit No. R8-2009-0030 (the "Permit"), which governs storm water and non-storm water discharges resulting from municipal activities performed by City or its contractors. In order to comply with the Permit requirements, the County of Orange has prepared a Drainage Area Management Plan ("DAMP"), containing Model Maintenance Procedures with Best Management Practices ("BMPs") that City and its contractors must adhere to. The Model Maintenance Procedures contain pollution prevention and source control techniques to minimize the impact of those activities upon dry-weather urban runoff, storm water runoff, and receiving water quality. Examples include: wash water from cleaning of sidewalks or parking lots must be collected and disposed of in the sewer or landscaped areas.

b. The Permit, the DAMP and the Model Maintenance Procedures are on file in the office of City's Director of Public Works. Contractor hereby acknowledges that it has read, reviewed and understands the Permit, the DAMP and the Model Maintenance Procedures, as they relate to the Work and hereby shall perform the Work in conformance therewith.

ARTICLE 7 Independent Contractor; Contractor not Agent

a. At all times during the term of this Contract, Contractor shall be an independent contractor and not an employee of City. City shall have the right to control Contractor only insofar as the result of Contractor's services rendered pursuant to this Contract. City shall not have the right to control the means by which Contractor accomplishes services rendered pursuant to this Contract. Contractor shall, at its sole cost and expense, furnish all facilities, materials and equipment which may be required for furnishing services pursuant to this Contract. Contractor

shall be solely responsible for, and shall indemnify, defend and save City harmless from all matters relating to the payment of its subcontractors, agents and employees, including compliance with social security, withholding and all other wages, salaries, benefits, taxes, exactions, and regulations of any nature whatsoever. Contractor acknowledges that Contractor and any subcontractors, agents or employees employed by Contractor shall not, under any circumstances, be considered employees of City, and that they shall not be entitled to any of the benefits or rights afforded employees of City, including, but not limited to, sick leave, vacation leave, holiday pay, Public Employees Retirement System benefits, or health, life, dental, long-term disability or workers' compensation insurance benefits.

b. Except as City may specify in writing, Contractor shall have no authority, express or implied, to act on behalf of City in any capacity whatsoever as an agent. Contractor shall have no authority, express or implied, to bind City to any obligation whatsoever.

ARTICLE 8

Public Work; Prevailing Wage

a. The Work which is the subject of this Contract is a “public work,” as that term is defined in Section 1720 of the California Labor Code, for which prevailing wages must be paid. To the extent Contractor’s employees will perform any work that falls within any of the classifications for which the Department of Labor Relations of the State of California promulgates prevailing wage determinations, Contractor hereby agrees that Contractor, and any subcontractor under it, shall pay not less than the specified prevailing rates of wages to all such workers. The general prevailing wage determinations for crafts can be located on the website of the Department of Industrial Relations (www.dir.ca.gov/DLSR). Additionally, to perform work under this Contract, Contractor must meet all State registration requirements and criteria, including project compliance monitoring.

b. Attached hereto as Attachment No. 1 and incorporated herein by this reference is a copy of the provisions of Sections 1725.5, 1771, 1771.1, 1771.4, 1775, 1776, 1777.5, 1813 and 1815 of the California Labor Code. Contractor hereby acknowledges that it has read, reviewed and understands those provisions of the Labor Code and shall prosecute and complete the Work under this Contract in strict compliance with all of those terms and provisions.

c. Contractor shall secure the payment of compensation to its employees in accordance with the provisions of Section 3700 of the California Labor Code. Accordingly, and as required by Section 1861 of the California Labor Code, Contractor hereby certifies as follows:

“I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract.”

d. Contractor shall indemnify, protect, defend and hold harmless City and its officers, employees, contractors and agents, with counsel reasonably acceptable to City, from and against

any and all loss, liability, damage, claim, cost, expense, and/or “increased costs” (including reasonable attorney’s fees, court and litigation costs, and fees of expert witnesses) which result or arise in any way from the noncompliance by Contractor of any applicable local, state and/or federal law, including, without limitation, any applicable federal and/or state labor laws (including, without limitation, the requirement to pay state prevailing wages). It is agreed by the parties that, in connection with the construction of the Work which is the subject of this Contract, Contractor shall bear all risks of payment or non-payment of state prevailing wages. “Increased costs” as used in this paragraph shall have the meaning ascribed to it in Labor Code Section 1781, as the same may be enacted, adopted or amended from time to time. The foregoing indemnity shall survive termination of this Contract.

ARTICLE 9 Equal Employment Opportunity

During the performance of this Contract, Contractor agrees as follows:

a. Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law. Contractor shall ensure that applicants are employed and that employees are treated during employment, without regard to their race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law. Such actions shall include, but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation and selection for training, including apprenticeship. Contractor shall post in conspicuous places, available to employees and applicants for employment, a notice setting forth provisions of this non-discrimination clause.

b. Contractor shall, in all solicitations and advertisements for employees placed by, or on behalf of Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law.

c. Contractor shall cause the foregoing paragraphs (a) and (b) to be inserted in all subcontracts for any Work covered by this Contract, provided that the foregoing provisions shall not apply to subcontracts for standard commercial supplies or raw materials.

ARTICLE 10 Conflicts of Interest

Contractor agrees that it shall not make, participate in the making, or in any way attempt to use its position as a contractor to influence any decision of City in which Contractor knows or has reason to know that Contractor, its officers, partners, or employees have a financial interest as defined in Section 87103 of the Government Code. Contractor further agrees that it shall not be eligible to work as the builder for any project for which the design work is part of this Contract.

ARTICLE 11
Indemnity

Contractor shall defend, indemnify and hold harmless City and its officers, officials, agents, and employees from and against:

a. Any and all claims, liabilities, losses, damages, penalties, costs or expenses (including reasonable attorneys' fees and court costs) which City may directly or indirectly sustain or suffer arising from or as a result of the death of any person or any accident, injury, loss or damage whatsoever caused to any person or the property of any person which shall occur on or adjacent to the real property which is the subject of this Contract, or in connection with performance of this Contract which may be directly or indirectly caused by the acts or omissions of Contractor or its officers, employees, contractors or agents, or as a consequence of any use, generation, manufacture, storage, disposal, release or threatened release of a hazardous waste or substance. Contractor shall not be responsible for (and such indemnity shall not apply to) any willful misconduct, negligence or breach of this Contract by City or its officers, officials, agents, and employees. The foregoing indemnity shall survive termination of this Contract.

b. Any and all claims under workers' compensation acts and other employee benefit acts with respect to Contractor's employees or Contractor's subcontractor's employees arising out of Contractor's Work under this Contract, including any and all claims under any law pertaining to Contractor's status as an independent contractor.

ARTICLE 12
Insurance

a. Contractor shall procure and maintain for the duration of this Contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Work hereunder and the results of that Work by Contractor, its agents, representatives, employees or subcontractors.

b. Contractor shall maintain the following minimum amount of insurance: the greater of either the limits set forth in (1) through (4), below; or all of the insurance coverage and/or limits carried by or available to Contractor.

- | | | |
|-----------------------|-------------|--|
| (1) General Liability | \$2,000,000 | per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit. |
|-----------------------|-------------|--|

g. All insurance procured and maintained by Contractor shall be issued by insurers admitted to conduct the pertinent line of insurance business in California and having a rating of Grade A or better and Class VII or better by the latest edition of Best Key Rating Guide.

h. Contractor shall immediately notify City if any required insurance lapses or is otherwise modified and cease performance of this Contract unless otherwise directed by City. In such a case, City may procure insurance or self-insure the risk and charge Contractor for such costs and any and all damages resulting therefrom by way of set-off from any sums owed Contractor.

i. Contractor agrees that in the event of loss due to any of the perils for which it has agreed to provide insurance, Contractor shall look solely to its insurance for recovery. Contractor hereby grants to City, on behalf of any insurer providing insurance to either Contractor or City with respect to the services of Contractor herein, a waiver of any right to subrogation which any such insurer may acquire against City by virtue of the payment of any loss under such insurance. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of City for all Work performed by Contractor, its employees, agents and subcontractors. Contractor shall obtain any other endorsement that may be necessary to effect this waiver of subrogation.

j. Contractor shall require and verify that all subcontractors maintain insurance meeting all of the requirements stated herein.

ARTICLE 13 Termination

City, acting through its City Manager or his/her designee, reserves the right to terminate this Contract for any reason by giving five (5) days' written notice of intent to terminate to Contractor. Upon receipt of notice, Contractor shall immediately cease work, unless the notice provides otherwise. Should City terminate this Contract, City shall pay Contractor for services satisfactorily provided and all allowable reimbursements incurred to the date of termination in compliance with this Contract, unless such termination shall be for cause, in which event City may withhold any disputed compensation. City shall not be liable for any claim of lost profits.

ARTICLE 14 Maintenance and Inspection of Records

In accordance with generally accepted accounting principles, Contractor and its subcontractors shall maintain reasonably full and complete books, documents, papers, accounting records and other information (collectively, the "records") pertaining to the costs of and completion of services performed under this Contract. During the term of this Contract and for a period of three (3) years after termination or completion of this Contract, City shall have the right to inspect and/or audit Contractor's records pertaining to the performance of this Contract at Contractor's office. Contractor shall make available all such records for inspection or audit at its offices during normal business hours and upon three (3) days' notice from City, and copies thereof shall be furnished if requested.

ARTICLE 15
Compliance with Laws

a. Contractor shall be knowledgeable of and comply with all local, state and federal laws pertaining to the subject matter hereof or in any way regulating the activities undertaken by Contractor or any subcontractor hereunder.

b. Contractor represents and warrants that it:

(1) Has complied and shall at all times during the term of this Contract comply, in all respects, with all immigration laws, regulations, statutes, rules, codes, and orders, including, without limitation, the Immigration Reform and Control Act of 1986 (IRCA); and

(2) Has not and will not knowingly employ any individual to perform services under this Contract who is ineligible to work in the United States or under the terms of this Contract; and

(3) Has properly maintained, and shall at all times during the term of this Contract properly maintain, all related employment documentation records including, without limitation, the completion and maintenance of the Form I-9 for each of Contractor's employees; and

(4) Has responded, and shall at all times during the term of this Contract respond, in a timely fashion to any government inspection requests relating to immigration law compliance and/or Form I-9 compliance and/or worksite enforcement by the Department of Homeland Security, the Department of Labor, or the Social Security Administration.

c. Contractor shall require all subcontractors and/or subconsultants to make the same representations and warranties required by this Article 15 when hired to perform services under this Contract.

d. Contractor shall, upon request of City, provide a list of all employees working under this Contract and shall provide, to the reasonable satisfaction of City, verification that all such employees are eligible to work in the United States. All costs associated with such verification shall be borne by Contractor. Once such request has been made, Contractor may not change employees working under this Contract without written notice to City, accompanied by the verification required herein for such employees. Contractor shall require all subcontractors and/or sub-consultants to make the same verification when hired to perform services under this Contract.

e. If Contractor, or a subcontractor or subconsultant, knowingly employs an employee providing Work under this Contract who is not authorized to work in the United States, and/or fails to follow federal laws to determine the status of such employee, such shall constitute a material breach of this Contract and may be cause for immediate termination of this Contract by City.

f. Contractor shall indemnify and hold City, its officials and employees harmless for, of and from any loss, including but not limited to fines, penalties and corrective measures, City

may sustain by reason of Contractor's failure to comply with said laws, rules and regulations in connection with the performance of this Contract.

ARTICLE 16
Governing Law and Venue

This Contract shall be construed in accordance with and governed by the laws of the State of California and Contractor shall submit to the jurisdiction of California courts. Venue for any dispute arising under this Contract shall be in Orange County, California.

ARTICLE 17
Integration and Amendment

a. This Contract constitutes the entire agreement of the parties. No other agreement, oral or written, pertaining to the Work to be performed under this Contract shall be of any force or effect unless it is in writing and signed by both parties. Any Work performed which is inconsistent with or in violation of the provisions of this Contract shall not be compensated.

b. Amendments to this Contract must be in writing and signed by both parties. The City Manager is authorized to execute amendments to this Contract up to the amounts specified in Chapter 3.08 of the Orange Municipal Code.

ARTICLE 18
Notice

Except as otherwise provided herein, all notices required under this Contract shall be in writing and delivered personally, by e-mail, or by first class mail, postage prepaid, to each party at the address listed below. Either party may change the notice address by notifying the other party in writing. Notices shall be deemed received upon receipt of same or within three (3) days of deposit in the U.S. Mail, whichever is earlier. Notices sent by e-mail shall be deemed received on the date of the e-mail transmission.

“CONTRACTOR”

J. B. Bostick Company, Inc.
2870 E. La Cresta Avenue
Anaheim, CA 92806
Attn: Gregory Beckner

Telephone: 714-238-2121
E-Mail: greg@jbbostick.com

“CITY”

City of Orange
300 E. Chapman Avenue
Orange, CA 92866-1591
Attn: Don Equitz

Telephone: 714-744-6464
E-Mail: dequitz@cityoforange.org

**ARTICLE 19
Claim Resolution**

City and Contractor agree that the claim resolution process applicable to any claim by Contractor in connection with the Work provided herein shall be subject to the procedures set forth in California Public Contract Code Section 9204, attached hereto as Attachment No. 2, and incorporated herein by this reference.

**ARTICLE 20
Counterparts**

This Contract may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Signatures transmitted via facsimile and electronic mail shall have the same effect as original signatures.

“CITY”

CITY OF ORANGE, a municipal corporation

By: _____
Mark A. Murphy
Mayor of the City of Orange

CONTRACT, BONDS AND INSURANCE
APPROVED BY:

ATTEST:

Mary E. Binning
Senior Assistant City Attorney

Pamela Coleman, City Clerk

“CONTRACTOR”

J. B. BOSTICK COMPANY, INC.,
a California corporation

[Note: Signature of Chairman of the Board, President or Vice President is required]

By: _____
Printed Name: _____
Title: _____

[Note: Signature of Secretary, Assistant Secretary, Chief Financial Officer or Assistant Treasurer is also required]

By: _____
Printed Name: _____
Title: _____

EXHIBIT “A”

**REQUEST FOR BIDS, CONTRACTOR’S BID AND
CONSTRUCTION PLANS**

[Behind this sheet.]



CITY OF ORANGE

COMMUNITY SERVICES DEPARTMENT

www.cityoforange.org

PHONE: (714) 744-7274 • FAX: (714) 744-7251

COMMUNITY SERVICES DEPARTMENT

230 E. Chapman Ave.
Orange, CA 92866
(714) 744-7274

REQUEST FOR BID (RFB) NO. 20-21.10

PARKING LOT PAVEMENT REHABILITATION AT OLIVE and GRIJALVA PARKS

Due Date: Thursday, August 13, 2020 - 2:00 pm (Pacific Time)

The documents contained in this Request for Bid document are considered to be the invitation and not the full final representation of the documents needed to submit a successful response to the bid or proposal described herein.

Interested bidders should subscribe to receive bid updates and notifications via the City's website <https://www.cityoforange.org/Bids.aspx?CatID=17> (two step verification required) as well as emailing CommServBids@cityoforange.org to be added to the contact list for this specific bidder's list in order to receive emailed updates of any revised/additional information and addenda.

It is the responsibility of the interested bidder to request being added to the bidder's list and to check the website frequently to look for any additional updates.

PROJECT NAME: **Parking Lot Pavement Rehabilitation at Olive and Grijalva Parks**

Location Address: Olive Park- 2841 N. Glassell St., Orange 92865
Grijalva Park- 368 N. Prospect Ave., Orange 92869

Contact Name: Don Equitz Sr. Landscape Project Coordinator City of Orange
Phone #: 714-532-6464 office 714-438-9617 cell
E-Mail Address: dequitz@cityoforange.org



CITY OF ORANGE

COMMUNITY SERVICES DEPARTMENT www.cityoforange.org PHONE: (714) 744-7274 • FAX: (714) 744-7251

COMMUNITY SERVICES DEPARTMENT

230 E. Chapman Ave.
Orange, CA 92866
(714) 744-7274

REQUEST FOR BID (RFB) NO. 20-21.10

PARKING LOT PAVEMENT REHABILITATION AT OLIVE and GRIJALVA PARKS

July 30, 2020

PROJECT NAME: Parking Lot Pavement Rehabilitation at Olive and Grijalva Parks

Location Address: Olive Park- 2841 N. Glassell St., Orange 92865
Grijalva Park- 368 N. Prospect Ave., Orange 92869

Contact Name: Don Equitz Sr. Landscape Project Coordinator City of Orange
Phone #: 714-532-6464 office 714-438-9617 cell
E-Mail Address: dequitz@cityoforange.org

PROJECT DESCRIPTION:

The City of Orange, CA, a Municipal Corporation, is inviting qualified asphalt companies to provide asphalt and concrete removal, repair, maintenance and striping per specifications within this RFB.

GENERAL PROVISIONS:

1. A non-mandatory job walk has been scheduled for **August 4, 2020 at 9:00** a.m. at Olive Park (first stop) parking area. Attendees will proceed to Grijalva Park (second stop) following Olive Park site visit.
2. NOTE: All construction work shall be performed in adherence to the City of Orange Public Works Standard Plans and Specifications (available at the Public Works counter for NON-REFUNDABLE charge of \$12.00 (\$15.00 if mailed) and the current edition of the "Green Book" for 'Standard Specifications for Public Works Construction'.
3. Contractor shall, at all times, carry valid insurance, which meets all City of Orange insurance requirements as outlined in Attachment No. 3.
4. Contractor shall pay prevailing wages per the current Department of Industrial Relations wage rate (including all scheduled increases) and furnish Certified Payroll Reports for all workdays.
5. The contractor is responsible for carrying all pertinent licenses/permits for accomplishing this work. Contractors bidding for work on this project must hold an active State of California Contractors License; minimum license requirement to be one of the following, A, B, C-12.
6. All maintenance work shall conform to the specifications contained in the RFB and any subsequent agreements.
7. Contractor shall be required to provide a \$1,500.00 deposit for use of a City water meter on a City fire hydrant if required. Contractor shall be charged \$2.75/day for water meter rental and shall be responsible for all water charges associated with project. Consumption charges of \$2.59 per hundred cubic feet of water apply.
8. Working hours will be per City of Orange ordinance; 7:00 am till 4:00 pm. Weekend work will only take place with permission from the City of Orange.
9. All vehicles used by the contractor are to be identified with door signs (approx. 20" x 16", magnetic sign okay) or equivalent with the company name and phone number. These need to be visible from both sides of said vehicle.
10. Uniforms: All of contractor's employees shall wear appropriate uniforms at all times while on duty. Uniforms must have the contractor's name.
11. Background/Security: All personnel engaged in performance of this work shall be employees of the contractor and as such shall be warranted to possess sufficient experience and security records to perform this work.

SCOPE OF WORK AND PROJECT SPECIFICATIONS:**SITE PREPARATION:**

1. Supply all equipment and labor necessary for the demolition/preparation of the existing asphalt and/or concrete, and all work as described in the within this RFB.
2. The contractor is responsible for making himself familiar with all existing site conditions at the City of Orange Grijalva and Olive Park sites including all ingress/egress access and all amenities that are to be protected, as well as existing landscape spaces that are to be protected in place.
3. At the conclusion of each day's work, the contractor shall remove all tools and equipment from the project site. The project site shall be left each day in a clean, neat and safe condition. The Contractor may arrange for a locked storage bin to be kept on site (s) for tools and/or equipment storage.

DEMOLITION:

1. Provide demolition/removal of all asphalt and/or concrete as specified within this RFB.

ASPHALT, CONCRETE PAVING AND SUBSEQUENT WORK:

In addition, the following work and clarifications are included in the Specifications.

- 1.0 The protection of all existing improvements, including valve cans and meter boxes, and all work being done by the Contractor, shall be the responsibility of the Contractor until such time as the work is completed and accepted by the Owner. A pre-construction job walk will be required prior to any work being done.
- 2.0 A schedule of work shall be submitted with response to this RFB and approved by the City of Orange prior to beginning the work. Hours of work are 7:00 AM to 4:00 PM. All work shall be phased with phasing to be approved by the City of Orange. Flaggers will be required when traffic is reduced to one lane to ensure safe access around the work area. All flagging and traffic control operations shall be included in the various bid items and no additional compensation will be provided.
- 3.0 Remove & Replace Damaged Asphalt Surfacing (Digout Areas) – Areas that are marked out for removal and replacement will be removed by first saw cutting a straight vertical cut a minimum of two (2) inches in depth around the perimeter of the area and then the existing asphalt pavement and any underlying base shall be removed to a depth of six (6) inches. (If a cold planer is used for the removal then saw-cutting will not be required). The subgrade will be compacted using a roller and/or a whacker or vibraplate to provide a firm and unyielding surface prior to the placement of the hot mix asphalt (HMA) base course, per Greenbook Section 301-1.3. The HMA will be placed in two lifts using ¾" HMA per Greenbook Section 203-6.4 Type B for the base course, four (4) inches in depth. The finish course of HMA shall be Greenbook Section 203-6.4 Type C1. All edges of the newly placed HMA shall be sealed with asphalt emulsion and a light coating of sand. The finished surface shall be at the same elevation as the adjacent asphalt.
- 4.0 Cold Mill 3" & Place 3" HMA w/FortaFi Fibers - Grind & Overlay – Areas designated to be cold milled and overlaid shall be cold milled to a depth of 3" over the entire area. The area shall be cleaned of all loose materials and then tacked with asphalt emulsion at the rate 0.05 to 0.07 gallons per square yard. Asphalt emulsion shall be diluted no more than an 80/20 mix. Once the tack coat has broken a new layer of HMA shall be placed in one lift. The HMA will conform to Greenbook Section 203-6.4 Type B with added Forta-Fi Asphalt Fibers (or equal) per the manufacturer's recommendations. (See attached Forta-Fi brochure).
- 5.0 Crack Repair – All cracks 3/8" to 1" in width shall be cleaned of all vegetation and loose material to a depth equal to or greater than the width of the crack. CRAFCO Parking Lot Sealant No. 34200 (or equal) shall be used per the manufacturer's recommendations. The finished crack fill material shall be at the same elevation as the adjacent asphalt. Any crack filled areas that become depressed in excess of ¼" will have additional crack fill

material placed to fill the depressed areas. Crack filling shall take place after all asphalt repairs have been made.

- 6.0 Remove Asphalt 6" & Replace With 6" PCC – Asphalt that is designated to be removed and replaced with Portland Cement Concrete (PCC) shall be excavated 6" and the subgrade will then be compacted to a minimum of 95% relative compaction. Reinforcing steel will be required using No. 4 rebar placed at a maximum of 18" on center on all flat work. Wherever new PCC joins existing PCC, the existing PCC will be drilled and doweled. PCC shall be 520-C-2500 and be placed at a minimum of 5½" in thickness on all flat work. Curing compound will be required. Transverse expansion joints shall be installed per plan set to minimize cracking. Longitudinal and transverse weakened plane joints shall also be constructed to minimize cracking. Protection against unwanted initials and writing in the newly place PCC shall be the responsibility of the contractor. A light broom finish will be used.
- 7.0 Install New Speed Humps – New speed humps shall be installed at designated locations per plan set. The speed humps shall be uniform in construction and shall be the width of the road and twelve (12') feet by three (3") inches in height per the attached cross section.
- 8.0 Remove & Replace Cracked Concrete Swale & Apron – The existing PCC swale and apron shall be removed and replaced with new Portland Cement Concrete (PCC) in the same configuration as the existing. After removal of the existing, the subgrade will be compacted to a minimum of 95% relative compaction. Reinforcing steel will be required using No. 4 rebar placed at a maximum of 18" on center. Wherever new PCC joins existing PCC, the existing PCC will be drilled and doweled. PCC shall be 520-C-2500 and be placed at a minimum of 5½" in thickness. Curing compound will be required. Transverse expansion joints shall be installed to minimize cracking. Longitudinal and transverse weakened plane joints shall also be constructed to minimize cracking. A light broom finish will be used. Protection against unwanted initials and writing in the newly place PCC shall be the responsibility of the contractor.
- 9.0 Remove & Replace Cracked Concrete Curb & Gutter – The existing PCC curb & gutter shall be removed and replaced with new Portland Cement Concrete (PCC) in the same configuration as the existing. Specific attention to ensuring that positive drainage is achieved is the responsibility of the contractor. After removal of the existing, the subgrade will be compacted to a minimum of 95% relative compaction. Reinforcing steel will be required using No. 4 rebar placed at a maximum of 18" on center. Wherever new PCC joins existing PCC, the existing PCC will be drilled and doweled. PCC shall be 520-C-2500. Expansion joints shall be installed to minimize cracking. After a curing period, the curb shall be backfilled to match the new curb elevation. Protection against unwanted initials and writing in the newly place PCC shall be the responsibility of the contractor.
- 10.0 Seal Coat - The seal coat will be placed on the asphalt pavement after a minimum four week curing period of any newly placed asphalt. Seal Coat shall be one coat. 2% Latex and fine mesh sand at the rate of two (2) to three (3) pounds per gallon of seal coat material shall be uniformly added to the seal coat material. The seal coat will be placed per Greenbook Specification 302-8.

- 11.0 Alternate Second Coat of Seal – The alternate second coat of seal shall be placed without any added Latex or fine mesh sand. The first coat of seal shall be completely dry before the second application is placed.
- 12.0 Re-Stripe – All pavement striping and markers/lettering shall be replaced per plan set in the existing locations and pattern as shown in plan, including red fire lane and ADA markings. Paint shall be applied per the manufacturer's recommendations for single coat applications and per Greenbook Section 210, including reflective material per Section 210-1.6.5. Temporary striping shall be placed on any asphalt repair area where the existing has been removed. Permanent striping will take place after the seal coat is completed. New speed humps shall be striped per the same pattern as existing speed humps.
- 13.0 Contractor to submit a mix design, for all concrete and/or asphalt, for approval prior to work commencing.

SPECIAL INSTRUCTIONS:

1. Contractor to submit a 10% Bid Bond with bid package.
2. This project requires a payment bond.
3. This project is subject to a 5% retention.
4. **The contractor is required to provide with the submittal of bid not less than three references indicating:**
 - A description of work including location/address and approximate cost of job.
 - A contact name, phone number and email address for City of Orange staff to contact and verify work experience.
 - Work references must demonstrate commensurate/equal type of experience and skill.
 - The contractor is required to provide the name, title, telephone number and email address of the individual to whom correspondence and communication should be directed during the duration of this work. Said individual is to have full knowledge of this work and the ability to consult/discuss with the City.
5. The City reserves the right to reject any contractor who they feel does not meet a qualifying work experience or satisfying references.
6. The City reserves the right to reject at any time any or all bids, or parts thereof, and to waive any variances, technicalities and informalities which do not impair the quality, or performance of the project.
7. All square foot and linear foot totals listed in this RFB, location/quantity charts and/or plans are approximate. The contractor is responsible for all measurements (linear and square foot) included in this bidding package and/or approved plans.
8. The contractor is responsible for the repair of any existing site amenities, concrete, landscape, irrigation lines or sprinklers that are damaged during the implementation of this work. Any and all replacement work will be performed to the satisfaction of the City of Orange. Any damages to City or residential property resulting from the contractors work shall be repaired or replaced at the contractor's expense to the satisfaction of the City of Orange.
9. If/when street closures are required in completion of this work; the contractor must first gain permission from the City of Orange Traffic Division and will be responsible for preparation/submittal/approval of any required and/or related 'Traffic Control Plan'. The

Contractor will also be responsible to follow guidelines for interior streets and/or general traffic control as specified within the 'California Watch Manual'.

10. The contractor is required to provide and post appropriate signage directing/re directing any and all pedestrian traffic in appropriate directions, per City of Orange.
11. All work as described within this RFB shall be completed by the final day of the approved schedule. Any work that is not completed, per the scheduled end date, will have Liquidated Damages assessed in the amount of \$500.00 per working day. A working day is understood to be Monday through Friday; not including weekends, holidays and rain delay days.

Location and Quantity Charts:

1. See **Attachment 1** for quantities and square footage maps and charts for Olive and Grijalva Parks.

Site Plans:

1. See **Attachment 2** for site plans for Olive and Grijalva Parks.

TIME LINE (APPROXIMATE):

- | | |
|--|------------------------------|
| 1. Job walk: | August 4, 2020 at 9:00 am. |
| 2. Deadline for questions regarding project/RFB: | August 6, 2020 by 2:00 p.m. |
| 3. Bids due/bid opening: | August 13, 2020 by 2:00 p.m. |
| 4. Presentation to City Council: | September 8, 2020 |
| 5. Notice to Proceed: | TBD |
| 6. Work to be completed by: | 35 working days from NTP |

BID SUBMISSION:

Provide response to the above REQUEST FOR BIDS on attached Bid Sheet and *return all pages of the Request for Bids (including the scope and specification sections) references, and bid bond.* Bids must be received on **August 13, 2020 by 2:00 P.M.** at the City of Orange City Clerk's Office (300 E. Chapman Ave., Orange, CA 92866). Responses may be sent via U.S. Mail, or delivered personally to the above address. **Please provide three copies of bid packets. Bid packets must be labelled appropriately: RFB 20-21.10 Parking Lot Rehabilitation at Olive and Grijalva Parks.**

The City reserves the right to reject any and all **Bids** and any item on items therein, and to waive any non-conformity of **Bids** with this Request for Bids, whether of a technical or substantive nature, as the interest of the City may require.



CITY OF ORANGE

COMMUNITY SERVICES DEPARTMENT www.cityoforange.org PHONE: (714) 744-7274 • FAX: (714) 744-7251

ADDENDUM #1
For
Request for Bid (RFB)
Bid No. 20-21.10

Parking Lot Pavement Rehabilitation at
Olive and Grijalva Parks

August 6, 2020

This addendum serves as written notice of the following corrections, clarifications, additions and/or deletions to any and all copies of the Request for Bid (Bid No. 20-21.10).

Regarding the Bid Bond Form.

1. An updated Bid Bond form is attached to this addendum. The original "Cash Deposit In Lieu of Contract Bonds" form has been updated to the "Alternative Security in Lieu of Bid Bond" form, which is also attached. Bid numbers on both attached forms reflect the correct bid number.

Engineer's Estimate

1. The Engineer's estimate for this project is \$350,000.

The following information is included to re-iterate the project details that were previously distributed under the cancelled bid number for this project:

Job Walk Comments:

1. The concrete quantities near the waste receptacles in the approved plans for Olive Park differ from the quantities chart included in the RFB for that same location. The quantities outlined in the approved plans for Olive Park are the actual quantities required for the project.
2. City permits are required for this job, but the associated fees will be waived for this project.
3. Traffic control plans will be needed for both job sites.

Regarding Submitted Questions:

1. **Specify what asphalt mix for speed bumps?**
 - Greenbook Section 203-6.4 C1 – Open Medium

2. **Existing trash truck pad at Olive Park to be remove and replaced (please confirm)?**
 - The existing concrete pad at the trash dumpster area at Olive is to be removed. New concrete paving is to be installed per layout on page #2 of the Olive Park site plan and per specifications on page #4 of the RFB.
3. **Specify paving section for Tree root damage AC. Is it 4" or 6"? How many lifts? On sheets 19 & 20 it states "TREE ROOT DAMAGE R/R ASPHALT 4".**
 - Remove & Replace Tree Root Damaged Asphalt – Areas that are marked out for removal and replacement due to tree root damage will be removed by first saw cutting a straight vertical cut a minimum of two (2) inches in depth around the perimeter of the area and then the existing asphalt pavement and tree roots and any underlying base shall be removed to a depth of four (4") inches. (If a cold planer is used for the removal then saw-cutting will not be required). The subgrade will be compacted using a roller and/or a whacker or vibraplate to provide a firm and unyielding surface prior to the placement of the hot mix asphalt (HMA) base course, per Greenbook Section 301-1.3. The HMA will be placed in two lifts using ¾" HMA per Greenbook Section 203-6.4 Type B for the base course, two and half to three (2½" to 3") inches in depth. The finish course of HMA shall be Greenbook Section 203-6.4 Type C1 one to one and a half (1" to 1½") inches in depth . All edges of the newly placed HMA shall be sealed with asphalt emulsion and a light coating of sand. The finished surface shall be at the same elevation as the adjacent asphalt.
4. **Per job walk today a second coat of slurry seal and seal coat will not be necessary (please confirm).**
 - The bid item is for one coat.
5. **Per job walk today the Seal coat and restripe application at Grijalva Park shall be bid for a min of (2) PHASES (please confirm).**
 - *Seal Coat and restripe shall be done in a minimum of two phases/moves.*
6. **Before production will the city delineate the proposed repairs with marking paint? Or responsibility of contactor (please confirm)?**
 - All areas of repair shall be painted out for the preconstruction job walk.
7. **The instructions for bidding state that we need to include 3 copies of our bid docs. Just to be clear only one original with wet signatures is required.**
 - At least one bid submission packet needs to be an original with signatures. The other two can be photocopies (stamp or initial photocopies to identify them as the Contractor's submitted packets). Only one bond packet per type is required with original signatures. All documents can be placed in a single envelope for submission.

Notice to bidders:

- Bids due date is **August 13, 2020 at 2:00 p.m.**

Respectfully Submitted,

Don Equitz
Sr. Landscape Project Coordinator
dequitz@cityoforange.org

**RFB 20-21.10 Parking Lot Pavement Rehabilitation
at Olive and Grijalva Parks**

BID SHEET

Date: 8/11/2020

Bid Submitted by: James B. Bostick

Company Name: J B Bostick Company, Inc.

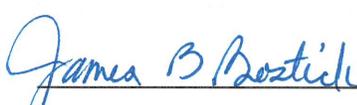
Address: 2870 E. La Cresta Avenue

Anaheim, CA 92806

Phone #: (714) 238-2121

E-mail Address: jim@jbbostick.com greg@jbbostick.com

Contact Name: James B. Bostick Gregory Beckner

		Julia Rae Stokes, Secretary James B. Bostick, President
Signature of Responsible Officer or Employee		Print Name

The stated bid amount below constitutes the total dollar amount to perform the work described in the above scope of services to include all that is required to provide the work product and/or install all materials required to complete the work to a professional workmanship standard, and to install and apply all materials per all manufacturer's specifications and recommendations.

Contractor represents and warrants that it has thoroughly investigated and considered the scope of services and fully understands the difficulties and restrictions in performing the work. Contractor represents that it is experienced in performing the work and will follow professional standards in performance of the work. All services provided shall conform to all federal, state and local laws, rules and regulations and to the best professional standards and practices.

BID AMOUNT-OLIVE PARK (Lump sum): \$ 51,000.00

BID AMOUNT-GRIJALVA PARK (Lump sum): \$ 115,000.00

Addendum #1 / Dated: August 6, 2020

Issued in triplicate original

Bond No. N/A

**CALIFORNIA PUBLIC WORKS
BID BOND**

TO WHOM IT MAY CONCERN:

WE, J B Bostick Company, Inc. (CONTRACTOR) as Principal, and The Ohio Casualty Insurance Company (SURETY), a Corporation organized and existing under the laws of the State of New Hampshire and authorized to transact business in the State of California, as Surety, are held and firmly bound unto the **CITY OF ORANGE**, hereinafter called the Obligee, for the penal sum of **Ten Percent (10%) of the Amount of the Bid** as described herein and we each of us bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, by this Bid Bond.

WHEREAS, the Principal is herewith submitting a proposal (bid) for **RFB 20-21.10 Parking Lot Pavement Rehabilitation at Olive and Grijalva Parks**

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH that if the Principal shall be awarded the contract, and the Principal does within the period specified therefor, or, if no period be specified, within ten (10) days after the notice of such award, enter into a contract and give bond or bonds as specified in the bidding or contract documents with good and sufficient surety of adequate financial size category rating acceptable to the Obligee for the faithful performance of the contract and for the prompt payment of labor and material furnished in the prosecution thereof, then this obligation shall be null and void. Otherwise the Principal and the Surety will pay to the Obligee the difference in money between the amount of the bid of the Principal and the amount for which the Obligee may legally contract with another party to perform the work if the latter amount be in excess of the former. In no event shall the liability hereunder exceed the penal sum hereof.

SIGNED AND SEALED this 12th day of August, 2020.

J B Bostick Company, Inc.
CONTRACTOR

The Ohio Casualty Insurance Company
NAME OF SURETY

BY: Julia Rae Stokes
SECRETARY/TREASURER

BY: Elizabeth Colodi
ATTORNEY-IN-FACT

BY: James B Bostick
PRESIDENT/VICE PRESIDENT

NOTARY ACKNOWLEDGEMENTS ATTACHED

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

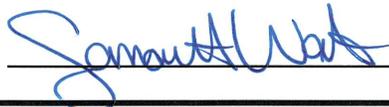
State of California
County of Butte)

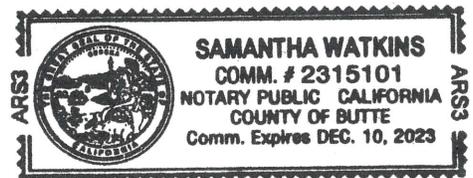
On August 12, 2020 before me, Samantha Watkins, Notary Public
(insert name and title of the officer)

personally appeared Elizabeth Collodi,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are
subscribed to the within instrument and acknowledged to me that he/she/they executed the same in
his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the
person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing
paragraph is true and correct.

WITNESS my hand and official seal.

Signature  (Seal)





This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: 8203471 - 971829

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Stephanie Agapoff, Breanna Boatright, Elizabeth Collodi, Michael Feeney, Dineen Fraser, Claudine Gordon, Katherine Gordon, John Hopkins, Jennifer Lakmann, Kris Lopes, Kristie Phillips, Deanna Quintero, Renee Ramsey, Marissa Robinson, Mike Taylor, Peggy Trusty, Sara Walliser, K. Corey Ward, Phil Watkins, John J. Weber, Mindy Whitehouse, Steven L. Williams

all of the city of Chico state of CA each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 16th day of April, 2020.



Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: David M. Carey

David M. Carey, Assistant Secretary

State of PENNSYLVANIA ss
County of MONTGOMERY

On this 16th day of April, 2020 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at King of Prussia, Pennsylvania, on the day and year first above written.



COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Teresa Pastella, Notary Public
Upper Merion Twp., Montgomery County
My Commission Expires March 28, 2021
Member, Pennsylvania Association of Notaries

By: Teresa Pastella

Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS: Section 12. Power of Attorney.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 12th day of August, 2020.



By: Renee C. Llewellyn

Renee C. Llewellyn, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of Orange)

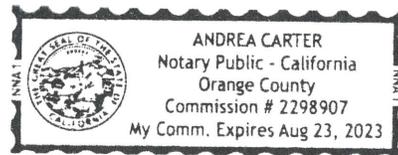
On August 13, 2020 before me, Andrea Carter, Notary Public
(insert name and title of the officer)

personally appeared James B Bostick,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature 



(Seal)

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of Orange

On August 13, 2020 before me, Andrea Carter, Notary Public
(insert name and title of the officer)

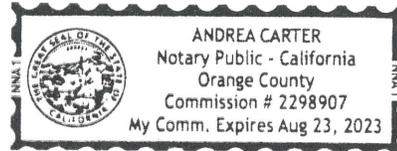
personally appeared Julia Rae-Stokes,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature 

(Seal)





BOSTICK COMPANY, INC.

ASPHALT PAVING CONTRACTORS LICENSE #341573

2870 EAST LA CRESTA, ANAHEIM, CALIFORNIA 92806

(714) 238-2121
1 (800) 246-PAVE
Fax (714) 238-2142

August 11, 2020

City of Orange
230 E. Chapman Avenue
Orange, CA 92866

RE: Parking Lot Pavement Rehabilitation at Olive and Grijalva Parks / Bid No.: 20-21.10

Three References: Moreno Valley USD, Santa Ana USD, Temecula Valley USD – Unit Bid Contracts

Moreno Valley Unified School District

Description of Work: Bid No. 18-19-18 ASPHALT & CONCRETE UNIT BID PRICE **

<u>Location:</u>	<u>Address:</u>	<u>Approx. Cost of Job:</u>
Hidden Springs ES	9801 Hidden Springs Drive, Moreno Valley, CA 92557	\$ 134,797.00
Landmark ES	15261 Legendary Drive, Moreno Valley, CA 92555	\$ 151,087.50
Hendrick Ranch ES	25570 Brodiaea Avenue, Moreno Valley, CA 92553	\$ 102,600.00
Valley View High School	13135 Nason Street, Moreno Valley, CA 92555	\$ 44,185.50
<u>Contact Name / Title:</u>	<u>Phone Number:</u>	<u>Email:</u>
Carmen M. Ochoa, Purchasing Specialist	(951) 571-7500 x- 17972	cmochoa@mvusd.net

Santa Ana Unified School District

Description of Work: Bid No.: 18-17 / 2017 UNIT PRICE BID FOR ASPHALT AND REPAIRS **

<u>Location:</u>	<u>Address:</u>	<u>Approx. Cost of Job:</u>
Adeline C. Walker ES	811 E. Bishop Street, Santa Ana, CA 92701	\$ 103,260.00
Jim Thorpe Fundamental ES	2450 W. Alton Avenue, Santa Ana, CA 92704	\$ 63,169.00
Roosevelt Elementary School	501 Halladay Street, Santa Ana, CA 92701	\$ 111,671.28
Santa Ana Unified District Office	1601 East Chestnut Avenue, Santa Ana, CA 92701	\$ 169,765.00
<u>Contact Name / Title:</u>	<u>Phone Number:</u>	<u>Email:</u>
Fentriss Winn, Manager, Building Services	(714) 796-9074	fentriss.winn@sausd.us
Andy Putney, Director of Construction	(714) 480-5350	andy.putney@sausd.us

Temecula Valley Unified School District

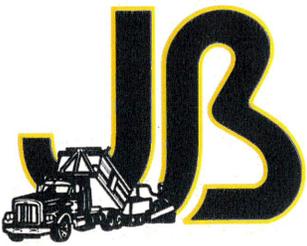
Description of Work: Project No. 2018-19-13022 **

Bid No.: 2019-20-101 / ASPHALT PAVING, SEALCOATING & REPAIR / DISTRICTWIDE

<u>Location:</u>	<u>Address:</u>	<u>Approx. Cost of Job:</u>
Vail ES – Basketball Court	29835 Mira Loma Drive, Temecula, CA 92592	\$ 123,500.00
Paloma Elementary School	42940 Via Rami, Temecula, CA 92592	\$ 104,134.00
Pauba Valley ES	33125 Regina Drive, Temecula, CA 92592	\$ 52,305.00
Sparkman Alternative Education Center	43890 Margarita Rd, Temecula, CA 92592	\$ 124,044.26
<u>Contact Name / Title:</u>	<u>Phone Number:</u>	<u>Email:</u>
John Miller, Maintenance Coordinator	(951) 377-2872	jmiller1@tvusd.us
Keith Brennan, Purchasing Buyer	(951) 506-7972	kbrennan@tvusd.us

****Asphalt:** Removal & Replacement, Grading, Resurface, Petromat Fabric Overlay, Skin Patching, Seal Coating, Striping, ADA Compliance work. (full service paving company)

Concrete: Repairs, Removal & Replacement (sidewalks, gutters, flowline, etc.), ADA Handicap Ramps.



BOSTICK COMPANY, INC.

ASPHALT PAVING CONTRACTORS LICENSE #341573
2870 EAST LA CRESTA, ANAHEIM, CALIFORNIA 92806

(714) 238-2121
1 (800) 246-PAVE
Fax (714) 238-2142

August 11, 2020

City of Orange
230 E. Chapman Avenue
Orange, CA 92866

RE: Parking Lot Pavement Rehabilitation at Olive and Grijalva Parks / Bid No.: 20-21.10

□ The contractor is required to provide the name, title, telephone number and email address of the individual to whom correspondence and communication should be directed during the duration of this work. Said individual is to have full knowledge of this work and the ability to consult/discuss with the City.

Name: Gregory Beckner
Title: Project Manager / Estimator
Telephone Number: (714) 488-0899 ext: 12 / Cell: (714) 488-0899
Email Address: greg@jbbostick.com

CITY OF ORANGE

COMMUNITY SERVICES DEPARTMENT
 230 E. CHAPMAN AVENUE
 ORANGE, CALIFORNIA 92866-1591
 (714) 744-7274

J B Bostick Company, Inc.

Company Name (Bidder)

TO THE CITY COUNCIL OF THE CITY OF ORANGE:

In compliance with the notice inviting bids, plans, specifications and other contract documents for the construction of **Bid No. 20-21.10: Parking Lot Pavement Rehabilitation at Olive and Grijalva Parks**, the undersigned has carefully examined: the location of the proposed work, character, quality and quantity of work to be performed, conditions to be encountered, materials to be furnished and as to the requirements of the plans, specifications and other contract documents; agrees that submission of a proposal shall be considered prima facie evidence that the bidder has made such examination; and proposes to furnish all labor, materials, tools, and equipment necessary to complete the work in accordance with said plans, specifications and other contract documents at the following unit or lump sum prices set forth in the schedule.

If awarded the contract, the undersigned agrees to commence the work under the contract within fifteen (15) days after the date of contract, and complete said work within **thirty five (35) working days** from the first day of commencement of such work unless legal extension is granted in accordance with the terms set forth in the specifications. If undersigned is awarded more than one zone, the work must be completed consecutively.

The undersigned agrees that the foregoing estimate of quantities of work to be done and materials to be furnished are approximate only, being given as basis for the comparison of bids.

The undersigned agrees that the City will not be held responsible if any of the approximate quantities shown in the foregoing proposal shall be found incorrect, and shall not make any claim for damages or for loss of profits because of a difference between the quantities of the various classes of work as estimated and the work actually done. If any error, omission or mis-statement shall be discovered in the estimated quantities, it shall not invalidate this contract or release the undersigned from the execution and completion of the whole or part of the work herein specified, in accordance with the specifications and the plans herein mentioned and the prices herein agreed upon and fixed therefore, or excuse him from any of the obligations or liabilities hereunder, or entitle him to any damages or compensation otherwise than as provided for in this contract.

The undersigned agrees that the City shall have the right to increase or decrease the quantity of any bid item or portion of the work or to omit portions of the work as may be deemed necessary or expedient, and that the payment for incidental items of work not separately provided in the proposal shall be considered included in the price bid for other various items of work.

Accompanying this proposal is Bidder's Bond (\$ Equivalent / \$1,600.00)

NOTICE: Insert the words "Cash", "Certified Check", or "Bidder's Bond", as the case may be, in an amount equal to at least 10 percent of the total bid price, payable to the City of Orange to guarantee that the bidder will, if awarded the contract, promptly execute such contract in accordance with the

proposal and in the manner and form required by the contract documents, and will furnish good and sufficient bonds for the faithful performance of the same.

The undersigned deposits the above named security as a proposal guaranty and agrees that it shall be forfeited to the City of Orange as liquidated damages in case this proposal is withdrawn by the undersigned and the undersigned shall fail to execute a contract for doing said work and to furnish good and sufficient bonds in the form set forth in the specifications and contract documents of the City, with surety satisfactory to the City within 15 days after the bidder has received written notice of the award of the contract; otherwise, said security shall be returned to the undersigned.

Bidder hereby declares in writing, under penalty of perjury that all employees who will be performing labor, maintenance, delivery, installation or repair, will be those who are legally entitled to live and work in the United States. Further, the bidder as employer agrees to provide documentary proof of such eligibility (when requested by the City of any other authorized entity or agency).

Bids are to be submitted for the entire work. The bidder shall set forth for each unit basis item of work a unit price and a total for the item, and for each lump sum item a total for the item, all in clearly legible figures in the respective spaces provided for that purpose. In the case of unit basis items, the amount set forth under the "Item Total" column shall be the product of the unit price bid and the estimated quantity for the item. In case of discrepancy between the unit price and the total set forth for a unit basis item, the unit price shall prevail, except as provided in (a) or (b), as follows:

(a) If the amount set forth as a unit price is unreadable or otherwise unclear, or is omitted, or is the same as the amount as the entry in the item total column, then the amount set forth in the item total column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price;

(b) (Decimal Errors) If the product of the entered unit price and the estimated quantity is exactly off by a factor of ten, one hundred, etc., or one-tenth, or one-hundredth, etc. from the entered total, the discrepancy will be resolved by using the entered unit price or item total, whichever most closely approximates percentage wise the unit price or item total in the City of Orange Final Estimate of cost.

If both the unit price and the item total are unreadable or otherwise unclear, or are omitted, the bid may be deemed irregular. Likewise if the item total for a lump sum item is unreadable or otherwise unclear, or is omitted, the bid may be deemed irregular unless the project being bid has only a single item and a clear, readable total bid is provided.

Symbols such as commas and dollar signs will be ignored and have no mathematical significance in establishing any unit price or item total or lump sums. Written unit prices, item totals and lump sums will be interpreted according to the number of digits and, if applicable, decimal placement. Cents symbols also have no significance in establishing any unit price or item total since all figures are assumed to be expressed in dollars and/or decimal fractions of a dollar. Bids on lump sum items shall be item totals only; if any unit price for a lump sum item is included in a bid and it differs from the item total, the items total shall prevail.

The foregoing provisions for the resolution of specific irregularities cannot be so comprehensive as to cover every omission, inconsistency, error or other irregularity which may occur in a bid. Any situation not specifically provided for will be determined in the discretion of the City of Orange, and that discretion will be exercised in the manner deemed by the City of Orange, to best protect the public interest in the prompt and economical completion of the work. The decision of the City of Orange respecting the amount of a bid, or the existence or treatment of an irregularity in a bid, shall be final.

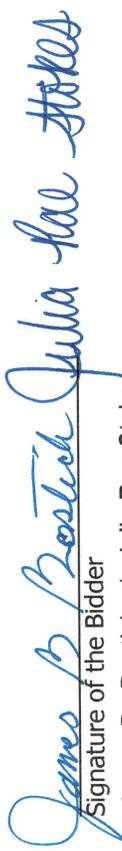
LIST OF SUBCONTRACTS

- A. The undersigned intends to subcontract a portion of this project to the following subcontracts (Note: Refer to Section 2.3 of the Standard Specifications and Section 4100 through 4113 of the California Contract Code for **SUBCONTRACT DISCLOSURE REQUIREMENTS**).

NAME OF SUBCONTRACTOR AND ADDRESS	LICENSE NO.	BID ITEM NUMBER(S)	PERCENT OF BID ITEM SUBBED	CHECK IF SPECIALITY	DESCRIBE WORK WHEN LESS THAN 100% OF WORK IS SUBBED	\$ AMOUNT BASED ON BID AMOUNT
Falcon Striping, Inc. - 260 Glider Circle, Corona, CA 92880	991209	N/A	8 %		Striping	\$ 13,280.00
Road Works, Inc. - 303 Short Street, Pomona, CA 91768	561431	N/A	4 1/2%		Crack Fill	\$ 7,500.00

- B. The undersigned **DOES NOT INTEND** to subcontract any portion of this project.

NOTE: The bidder shall check Box A or B as applicable. If the bidder does not check either box, it will be deemed that he has checked Box B.


 Signature of the Bidder
 James B. Bostick / Julia Rae Stokes
 President Secretary

PUBLIC CONTRACT CODE

Public Contract Code Section 10285.1 Statement

In conformance with Public Contract Code Section 10285.1 (Chapter 376, Stats. 1985), the bidder hereby declares under penalty of perjury under the laws of the State of California that the bidder has ____, has not been convicted

within the preceding three years of any offenses referred to in that section, including any charge of fraud, bribery, collusion, conspiracy, or any other act in violation of any state or Federal antitrust law in connection with the bidding upon, award of, or performance of, any public works contract, as defined in Public Contract Code Section 1101, with any public entity, as defined in Public Contract Code Section 1100, including the Regents of the University of California or the Trustees of the California State University. The term "bidder" is understood to include any partner, member, officer, director, responsible managing officer, or responsible managing employee thereof, as referred to in Section 10285.1.

Note: The bidder must place a check mark after "has" or "has not" in one of the blank spaces provided. The above Statement is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Statement. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

Public Contract Code Section 10162 Questionnaire

In conformance with Public Contract Code Section 10162, the Bidder shall complete, under penalty of perjury, the following questionnaire:

Has the bidder, any officer of the bidder, or any employee of the bidder who has a proprietary interest in the bidder, ever been disqualified, removed, or otherwise prevented from bidding on, or completing a federal, state, or local government project because of a violation of law or a safety regulation?

Yes ____ No

If the answer is yes, explain the circumstances in the following space.

Public Contract Code 10232 Statement

In conformance with Public Contract Code Section 10232, the Contractor, hereby states under penalty of perjury, that no more than one final unappealable finding of contempt of court by a federal court has been issued against the Contractor within the immediately preceding two year period because of the Contractor's failure to comply with an order of a federal court which orders the Contractor to comply with an order of the National Labor Relations Board.

Note: The above Statement and Questionnaire are part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Statement and Questionnaire. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

Non-collusion Affidavit

(Title 23 United States Code Section 112 and
Public Contract Code Section 7106)

To the CITY OF ORANGE – DEPARTMENT OF COMMUNITY SERVICES

In conformance with Title 23 United States Code Section 112 and Public Contract Code 7106 the bidder declares that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

Note: The above Non-collusion Affidavit is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Non-collusion Affidavit.

Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

DEBARMENT AND SUSPENSION CERTIFICATION

TITLE 49, CODE OF FEDERAL REGULATIONS, PART 29

The bidder, under penalty of perjury, certifies that, except as noted below, he/she or any other person associated therewith in the capacity of owner, partner, director, officer, manager:

- is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal agency;
- has not been suspended, debarred, voluntarily excluded or determined ineligible by any Federal agency within the past 3 years;
- does not have a proposed debarment pending; and
- has not been indicted, convicted, or had a civil judgement rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

If there are any exceptions to this certification, insert the exceptions in the following space.

Exceptions will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any exception noted above, indicate below to whom it applies, initiating agency, and dates of action.

Notes: Providing false information may result in criminal prosecution or administrative sanctions. The above certification is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Certification.

The undersigned bidder hereby represents as follows:

That no Councilman, officer, agent, or employee of the City of Orange, is personally interested, directly or indirectly, in the Contract, or the compensation to be paid hereunder:

That this bid is made without connection with any person, firm or corporation making a bid for the same work, and is in all respects fair, and without collusion or fraud.

By my signature on this proposal I certify, under penalty of perjury under the laws of the State of California, that the foregoing questionnaire and statements of Public Contract Code Sections 10162, 10232 and 10285.1 are true and correct and that the bidder has complied with the requirements of Section 8103 of the Fair Employment and Housing Commission Regulations (Chapter 5, Title 2 of the California Administrative Code). By my signature on this proposal I further certify, under penalty of perjury under the laws of the State of California and the United States of America, that the Noncollusion Affidavit required by Title 23 United States Code, Section 112 and Public Contract Code Section 7106; and the Title 49 Code of Federal Regulations, Part 29 Debarment and Suspension Certification are true and correct.

Date: 8/11/2020

James B. Bostick

Sign

Julia Rae Stokes

Here

James B. Bostick *Julia Rae Stokes*
 Signature and Title of Bidder
 President Secretary

(If an individual, so state. If a firm or co-partnership, state the firm name and give the names of all individual co-partners composing the firm. If a corporation, state legal name of corporation, also names of President, Secretary, Treasurer and Manager thereof).

NAME OF BIDDER J B Bostick Company, Inc. (a California "C" Corporation)
 BUSINESS P.O. BOX N/A *President: James B. Bostick*
 CITY, STATE, ZIP See Below *Secretary: Julia Rae Stokes*
 BUSINESS STREET ADDRESS 2870 E. La Cresta Ave *Treasurer: Carlene S. Smith*
 CITY, STATE, ZIP Anaheim, CA 92806 (Please include even if P.O. Box is used)
 PLACE OF BUSINESS (Include City & State) 2870 E. La Cresta Avenue, Anaheim, CA 92806
 PLACE OF RESIDENCE (Include City & State) President: Vista, CA
 Telephone No. (714) 238-2121 ext: 7012 / Greg Fax No.(714) 238-2142

Licensed in accordance with an Act providing for the registration of Contractors.

LICENSE NUMBER 341573
 LICENSE CLASS C12 Earthwork & Paving / C-8 Concrete

Attachment 1
Location and Quantity Charts

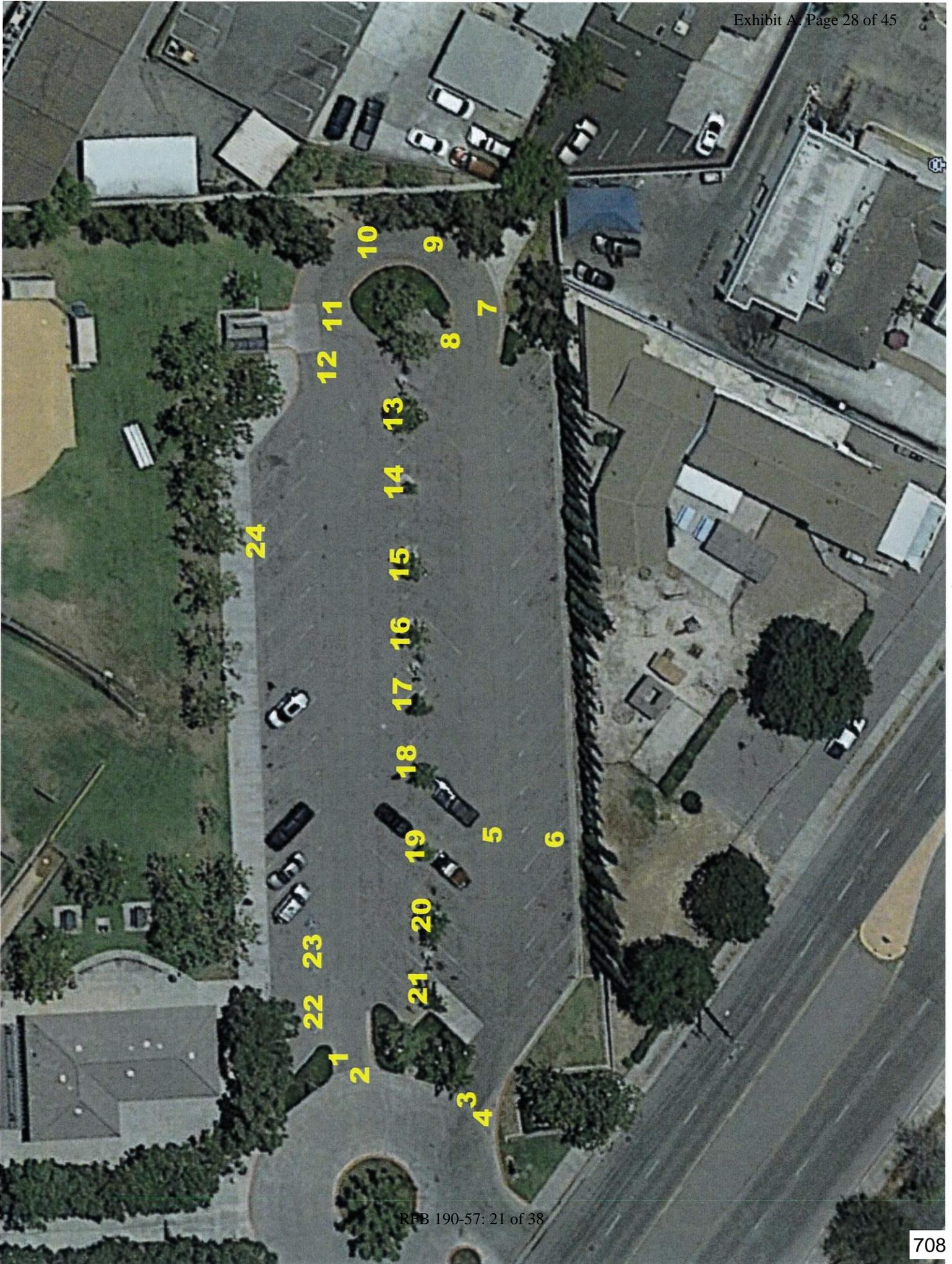
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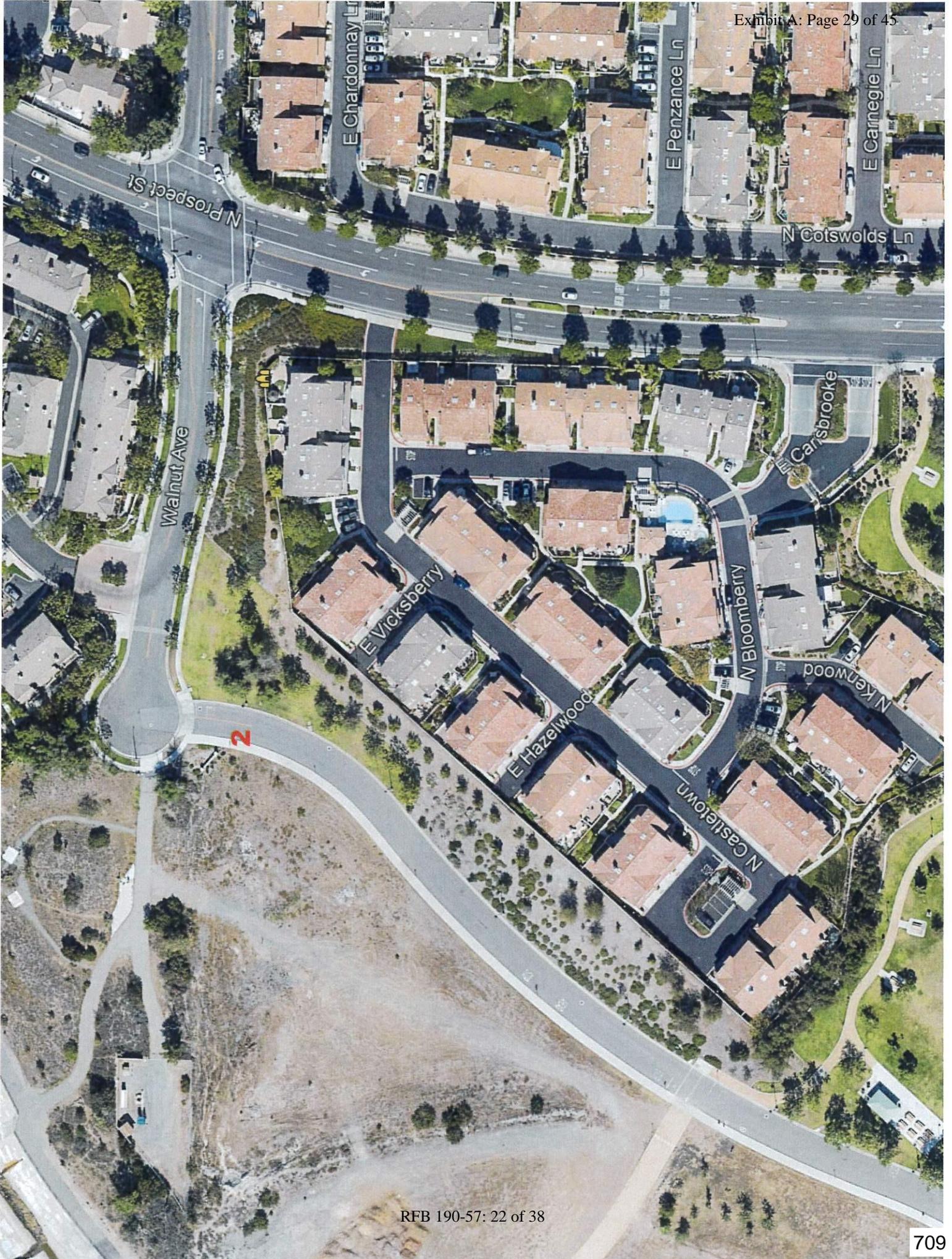
CITY OF ORANGE - OLIVE PARK

NO.	SIZE	SF/LF	REPAIR METHOD	NO.	SIZE	SF	REPAIR METHOD
1	14*5	70	Asphalt R/R	21	10*6	60	Tree Root - Asphalt R/R
2	17*3	51	Swale R/R	22	12*6	72	Asphalt R/R
3	17*3	51	Swale R/R	23	8*8	64	Asphalt R/R
4	16*3,9*3, 13*9/2	134	Spandrel R/R	24	50*2	100	Skin Patch
5	6*5	30	Asphalt R/R				
6	2*2	4	Skin Patch				
7	8*4	32	Asphalt R/R				
8	18*25,18*14	702	Asphalt R/R				
9	18*12	216	Asphalt R/R				
10	63*18	1,134	Asphalt R/R				
11	18*18	324	Remove Asphalt Replace w/PCC				
12	18*12	216	Remove Asphalt Replace w/PCC				
13	3*5	15	Skin Patch				
14	22*5	110	Skin Patch				
15	10*6	60	Skin Patch				
16	12*8	96	Skin Patch				
17	5*2,4*2	18	Skin Patch				
18	5*12	60	Skin Patch				
19	20*5	100	Skin Patch				
20	4*5	20	Skin Patch				

CITY OF ORANGE - GRIJALVA PARK

NO.	SIZE	SF/LF	REPAIR METHOD	NO.	SIZE	SF	REPAIR METHOD
1	20	20	C&G Remove/Replace	20	240*15	3,600	Forta Fi 3"
1	20*3	60	Asphalt Remove & Replace	21	8*32	256	Asphalt Remove & Replace
2	1	1	Erosion Starting	22	60	60	C&G Remove & Replace
3	1	1	Very Slight Cracking Starting - Watch	22	60*8	480	Asphalt Remove & Replace
4	15*14	210	Tree Root Damage R/R Asphalt	23	270*16	4,320	FortaFi - 3"
5	12*1,7*3	33	Concrete Remove & Replace	24	45*18	810	Remove AC - Replace w/PCC
6	120	120	Crack Fill				
7	8*5	260	CrackFill @ Previous Patches - 10 Locations				
8	9*4	36	Asphalt Remove & Replace				
9	40	40	Crack Fill				
10	16	16	Grind AC				
11	65*12	780	Asphalt Remove & Replace - 6"				
12	36*12	432	Asphalt Remove & Replace - 6"				
13	10*3	30	Asphalt Remove & Replace - 6"				
14	30*6	180	Asphalt Remove & Replace - 6"				
15	14*6	84	Asphalt Remove & Replace - 6"				
16	14*15	210	Tree Root Damage R/R Asphalt 4"				
17	135*15, 120*17	4,065	Tree Root Damage R/R Asphalt 4"				
18	95*15	1,425	Tree Root Damage R/R Asphalt 4"				
19	36*15	540	Tree Root Damage R/R Asphalt 4"				

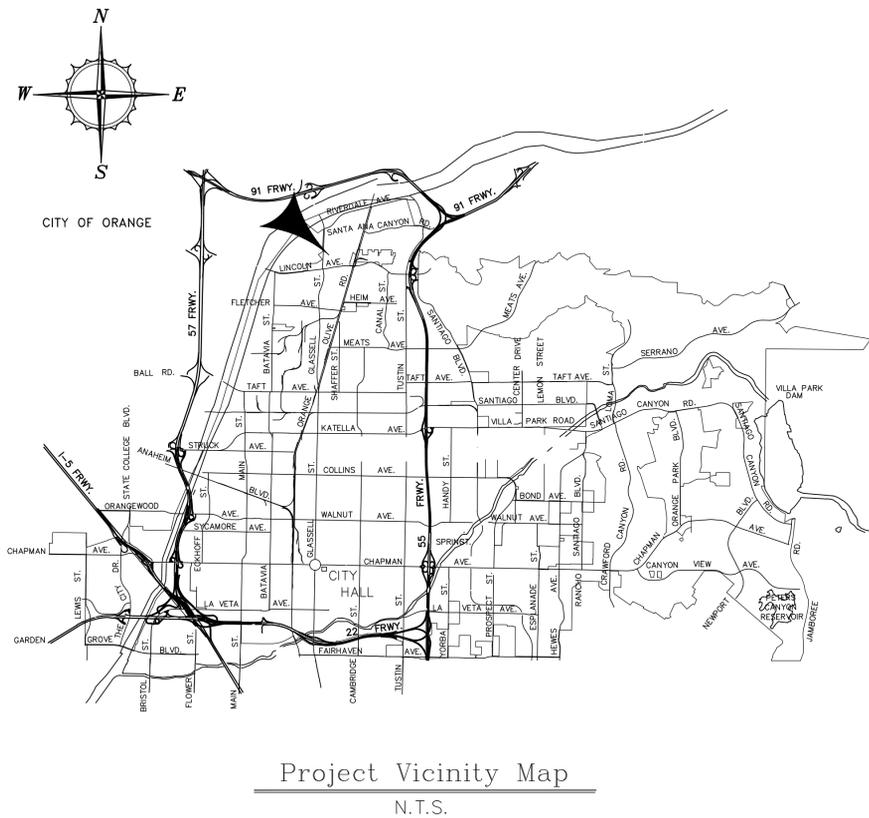






Attachment 2
Site Plan for Grijalva and Olive Parks

Olive Park Plans
[Behind this page.]



CITY OF ORANGE



OLIVE PARK PARKING LOT REPAIR/MAINTENANCE and RE-STRIPE

**OLIVE PARK
2841 N. GLASSELL ST.
ORANGE, CA. 92865**

SHEET INDEX

1. TITLE SHEET
2. SITE PLAN
3. DETAILS

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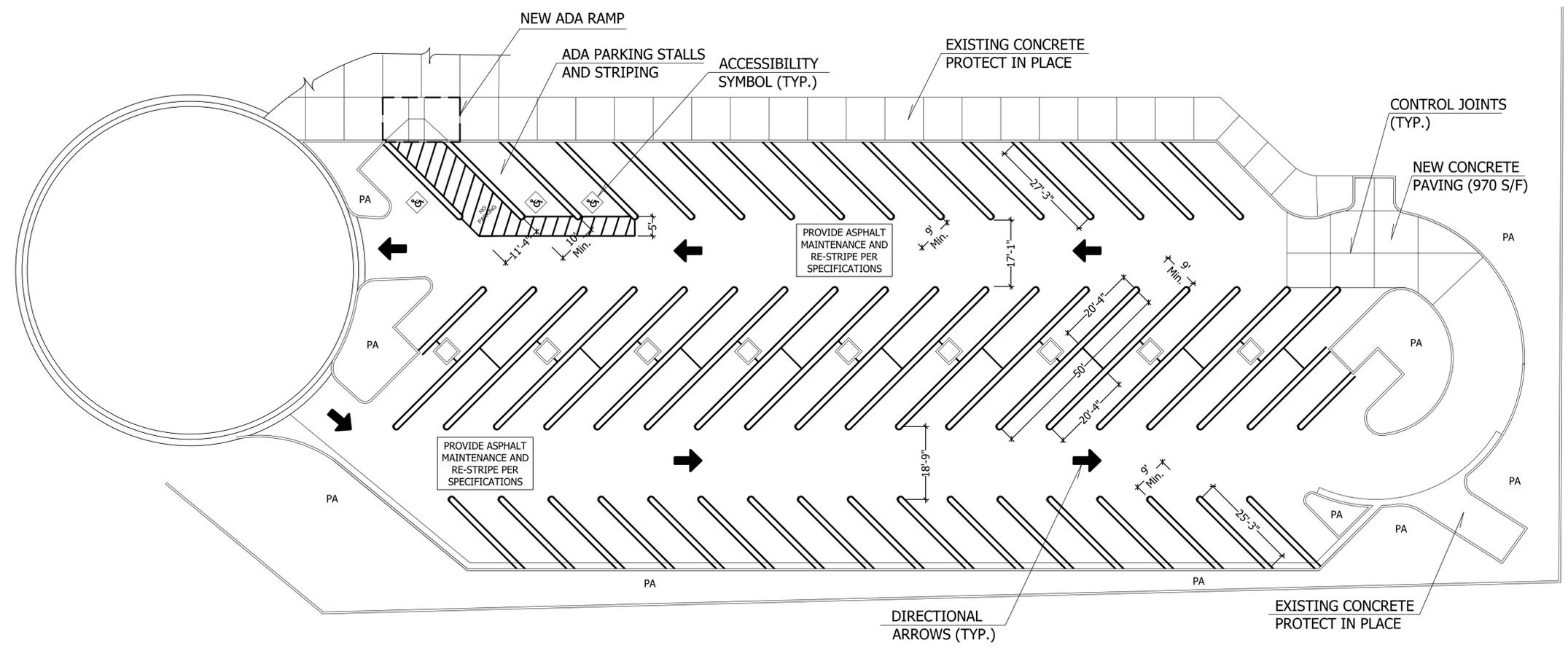
DON EQUITZ	CITY OF ORANGE SR. LANDSCAPE COORDINATOR	(714) 532-6464
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LARRY TAY	CITY OF ORANGE TRAFFIC DIVISION	(714) 532-6426
SON TRAN	CITY OF ORANGE WATER DIVISION	(714) 288-2497
STEVE HAN	AT & T (TELEPHONE SERVICES)	(714) 237-6199
KIERAN CALLANAN	METROPOLITAN WATER DISTRICT	(213) 217-7474
ROBERT HOERNING	MCI - WORLDCOM	(714) 923-5900
JASON KING	XO COMMUNICATIONS, INC.	(949) 417-7430
WALTER WERSTUIK	AT&T	(714) 963-7964
JEFF CESSNA	SOUTHERN CALIFORNIA EDISON	(714) 973-5454
DIANA CABALLERO	SOUTHERN CALIFORNIA GAS DISTRIBUTION	(714) 634-3115
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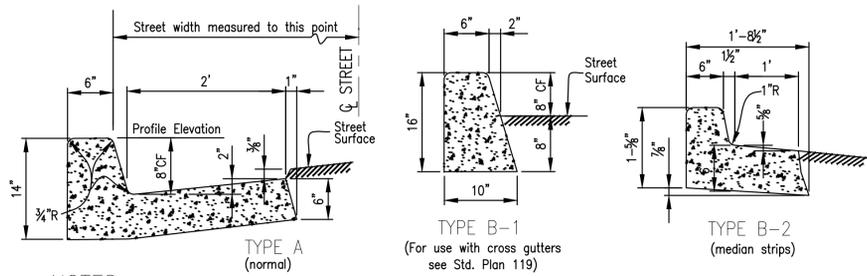
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ALL PARKING STALL STRIPING AND LETTERING TO BE PERFORMED AS SHOWN ON PLAN SET.

THESE PLANS WERE PREPARED IN THE OFFICE OF: D.E.		FOR ENGINEER'S USE		CITY OF ORANGE	
UNDER THE SUPERVISION OF:		DRAWN	NAME	DATE	OFFICE OF COMMUNITY SERVICES
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REVISIONS		FOR CITY USE ONLY		APPROVED:	
DATE	DESCRIPTION	STREETS	NAME	DATE	APPROVED:
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		DRAINAGE			DATE
		WATER			DATE
		ST. SUPT.			DATE
		TRAFFIC			DATE
		F.B. _____ PG. _____		SHEET <u>1</u> OF <u>3</u> SHEETS	



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		ST. SUPT.			
		TRAFFIC			
				F.B.	PG.
				SHEET 2 OF 3 SHEETS	

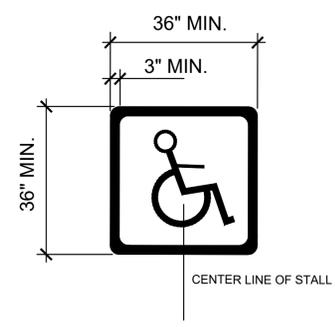


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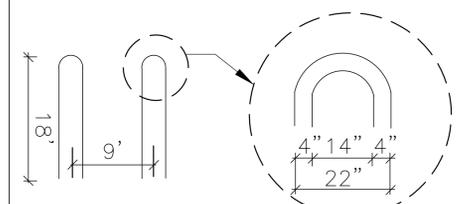
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2. Slope gutter in plane of pavement if cross slope of pavement is away from curb (when directed).
3. All gutter flowlines shall be water tested.
4. Weakened-plane joints shall be constructed at 12' intervals except through driveway and alley aprons.
5. Gutter thickness shall be 8" across commercial driveway apron depressions (see Std Plan 115).
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CITY STANDARD 117 CURB AND GUTTER

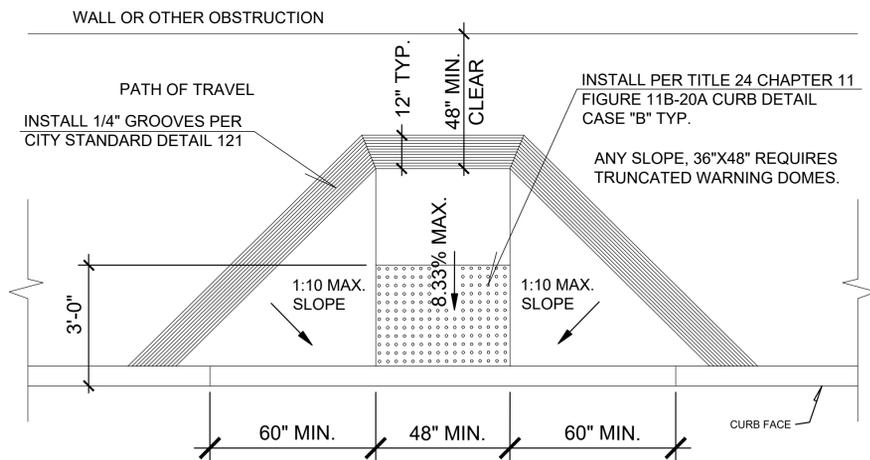
N.T.S.



ACCESSIBILITY SYMBOL- TYP. NO SCALE

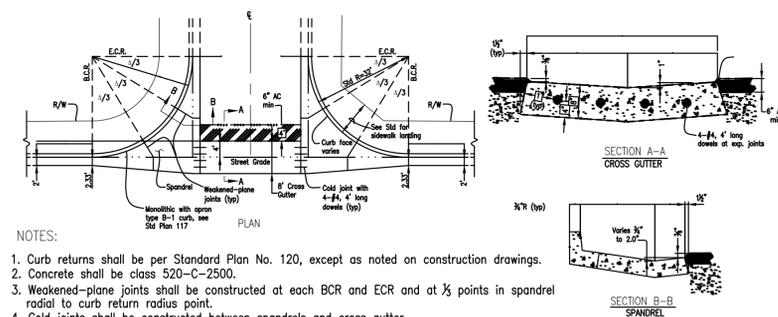


STALL STRIPING- TYP. NO SCALE



ADA RAMP DETAIL- TYP.

N.T.S.

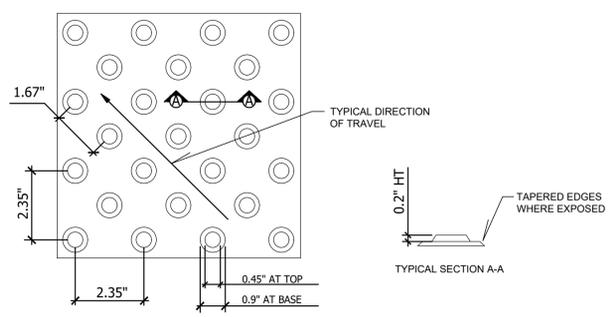


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CITY STANDARD 119 CROSS GUTTER AND SPANDREL

N.T.S.

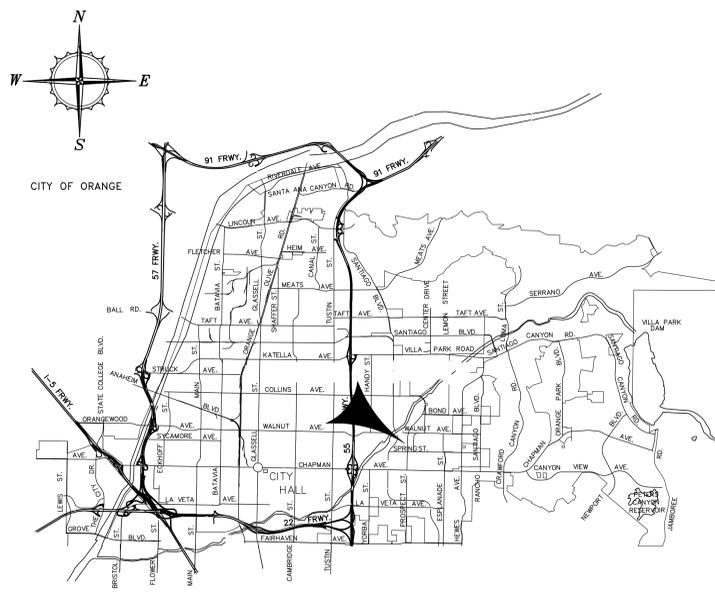


TRUNCATED DOMES- TYP.

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		FOR CITY USE ONLY		APPROVED:	
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		DRAINAGE		PUBLIC WORKS DIRECTOR/CITY ENGINEER	
		WATER		DATE	
		ST. SUPT.		DATE	
		TRAFFIC		DATE	
				F.B. PG. SHEET 3 OF 3 SHEETS	

Plans for Grijalva Park
[Behind this page.]



Project Vicinity Map
N.T.S.

CITY OF ORANGE



GRIJALVA PARK PARKING LOT REPAIR/MAINTENANCE and RE-STRIPE

**GRIJALVA PARK
368 N. PROSPECT AVE.
ORANGE, CA. 92869**

SHEET INDEX

1. TITLE SHEET
2. SPRING STREET OFF PROSPECT
3. SPRING STREET AT COURTS
4. PARKING AREA AT GYMNASIUM
5. NORTH DRIVE WAY/PARKING
6. DRIVE WAY OFF WALNUT STREET
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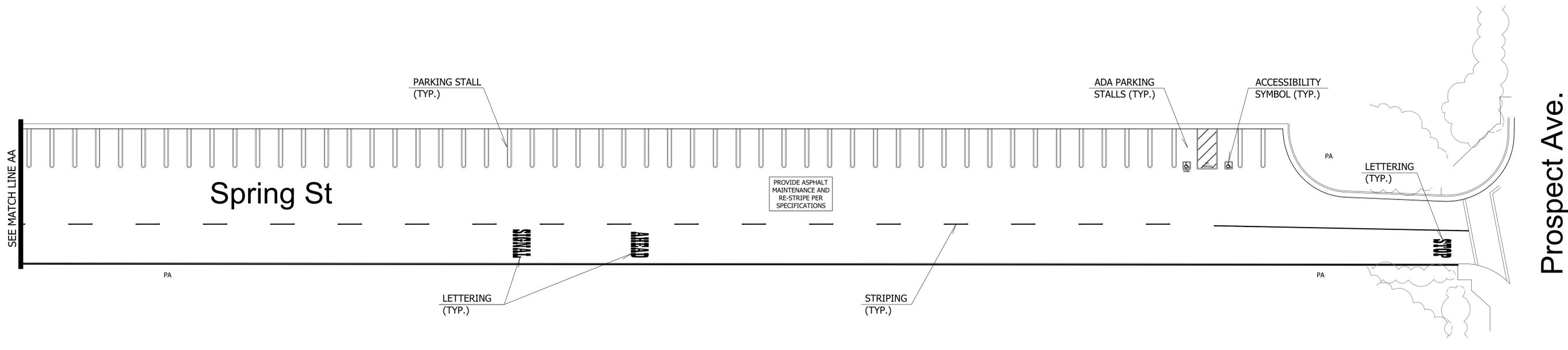
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NEW PARKING STALL STRIPING AND DRIVE ISLE LETTERING TO MATCH EXISTING SITE LAYOUT, AND AS SHOWN ON PLAN SET.

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		DRAINAGE			DATE
		WATER			ASSISTANT CITY ENGINEER
		ST. SLP.T.			DATE
		TRAFFIC			PUBLIC WORKS DIRECTOR/CITY ENGINEER
		F.B.		PG.	SHEET 1 OF 7 SHEETS



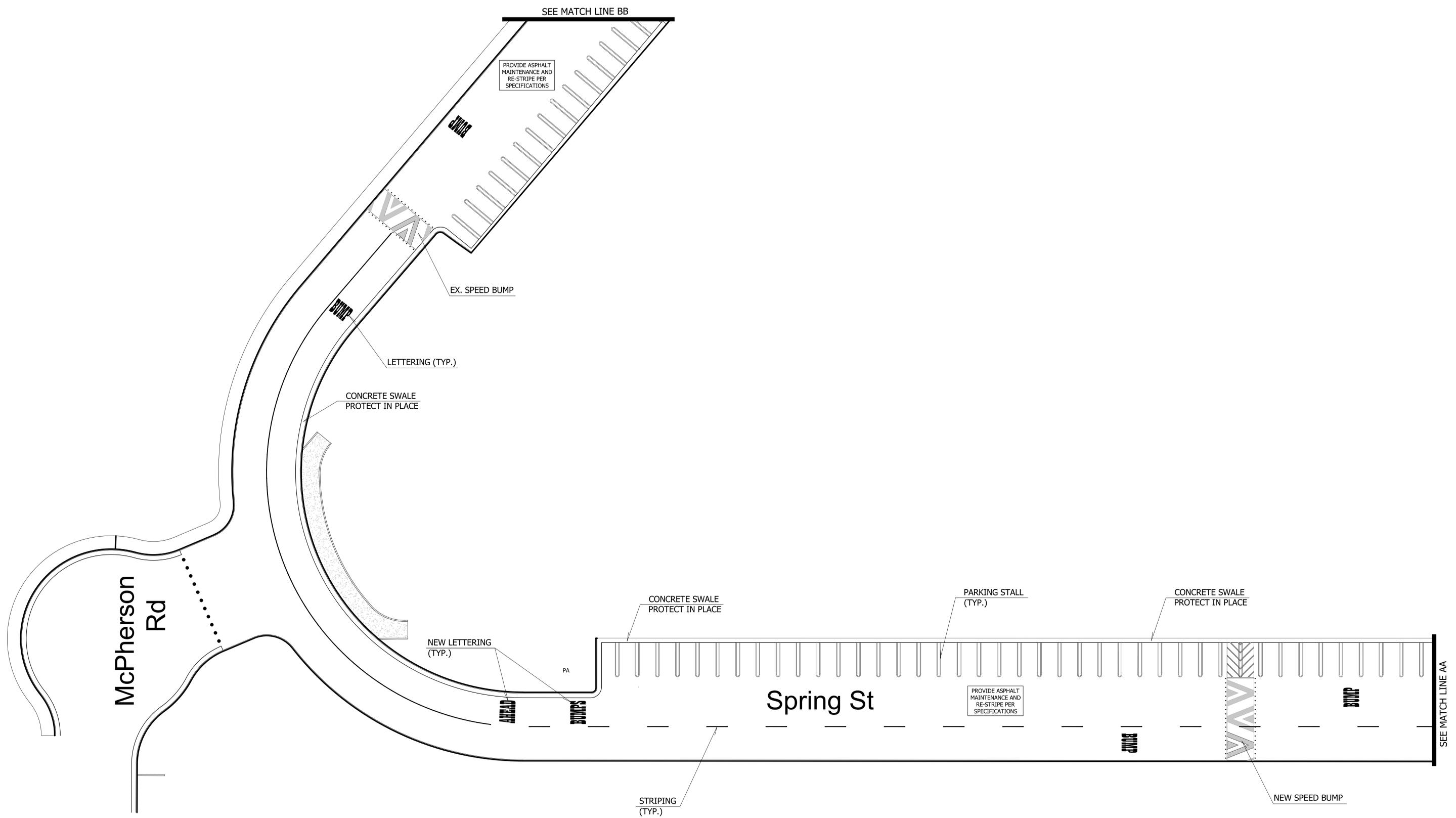
SEE MATCH LINE AA

Spring St

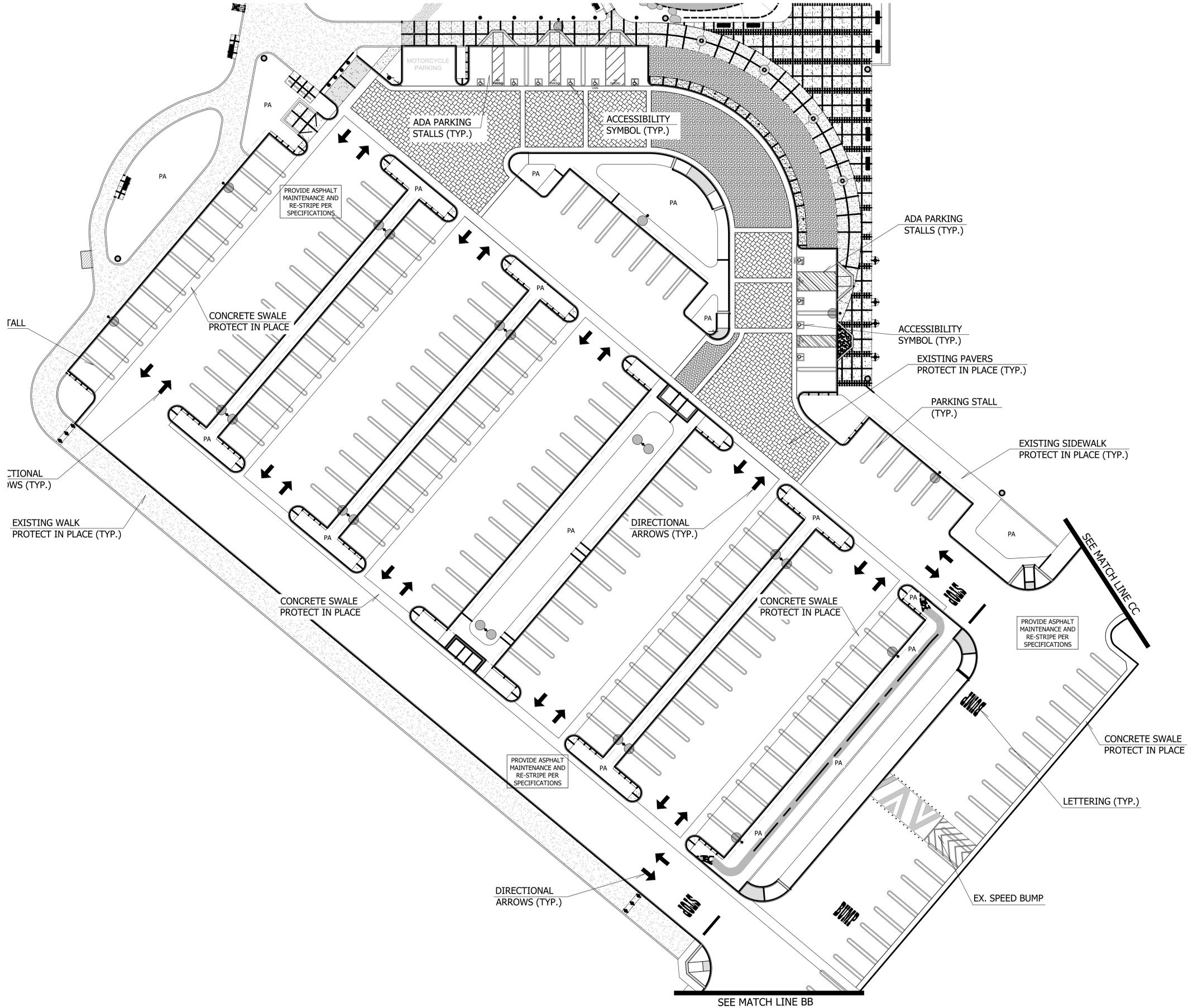
Prospect Ave.



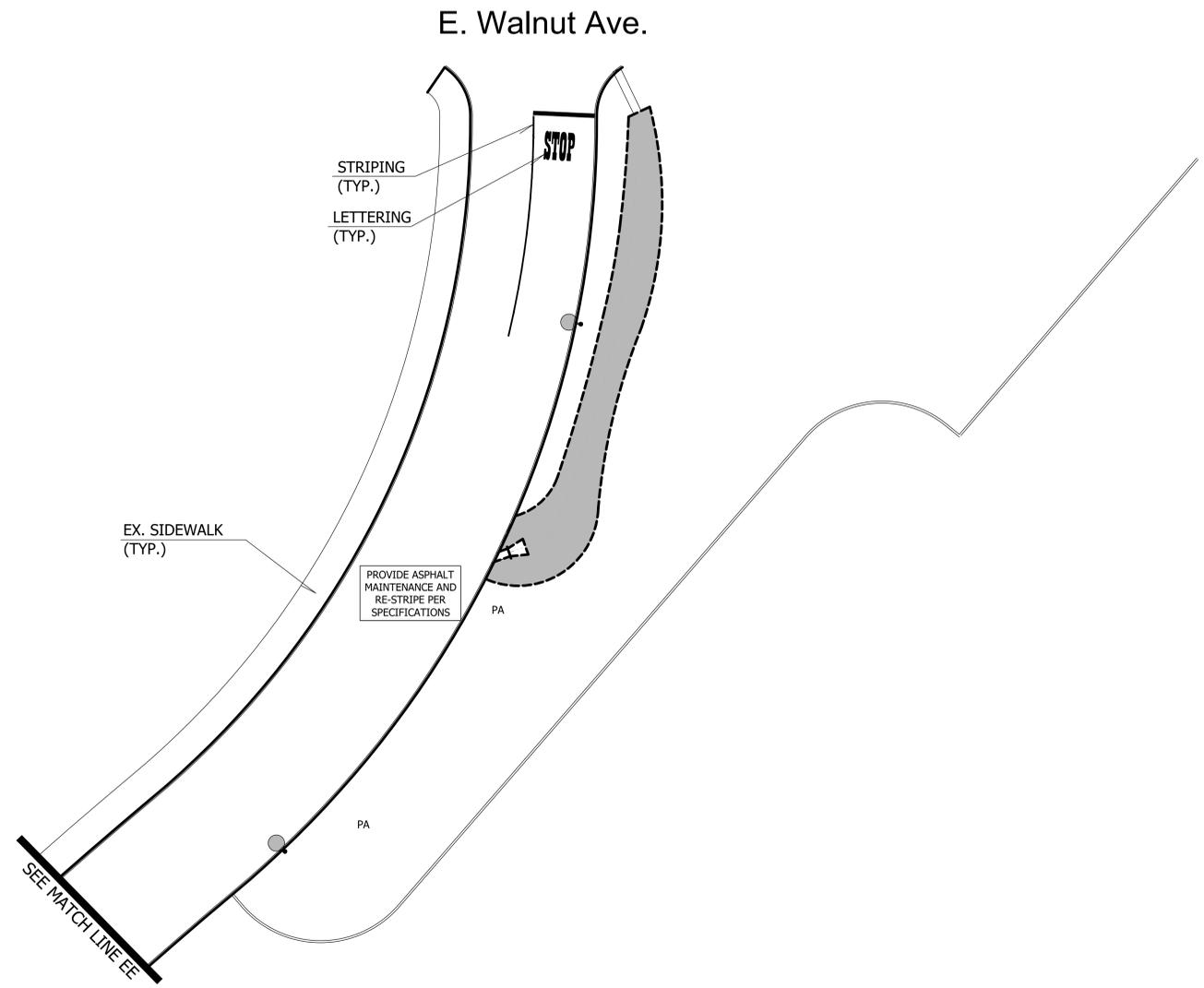
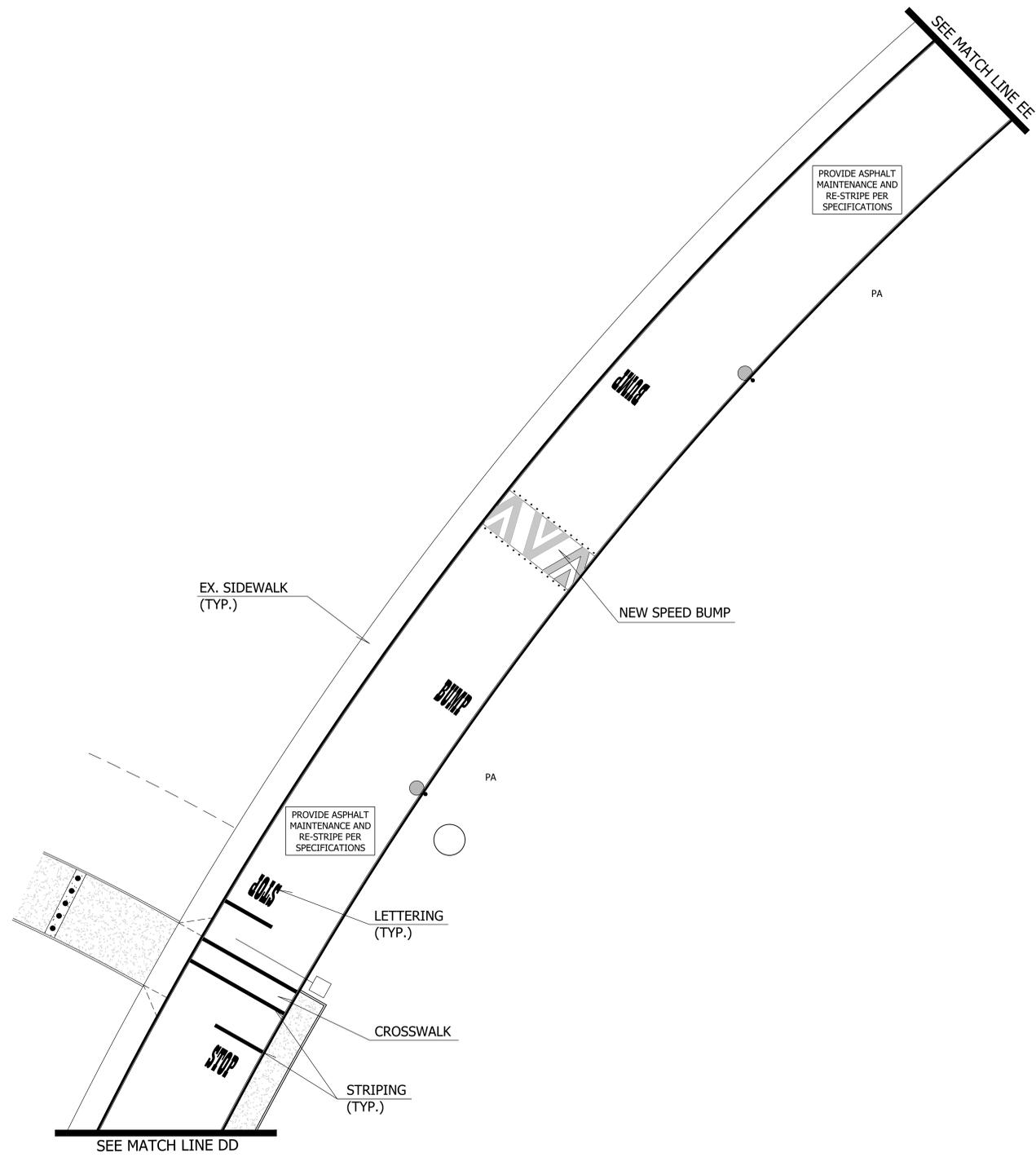
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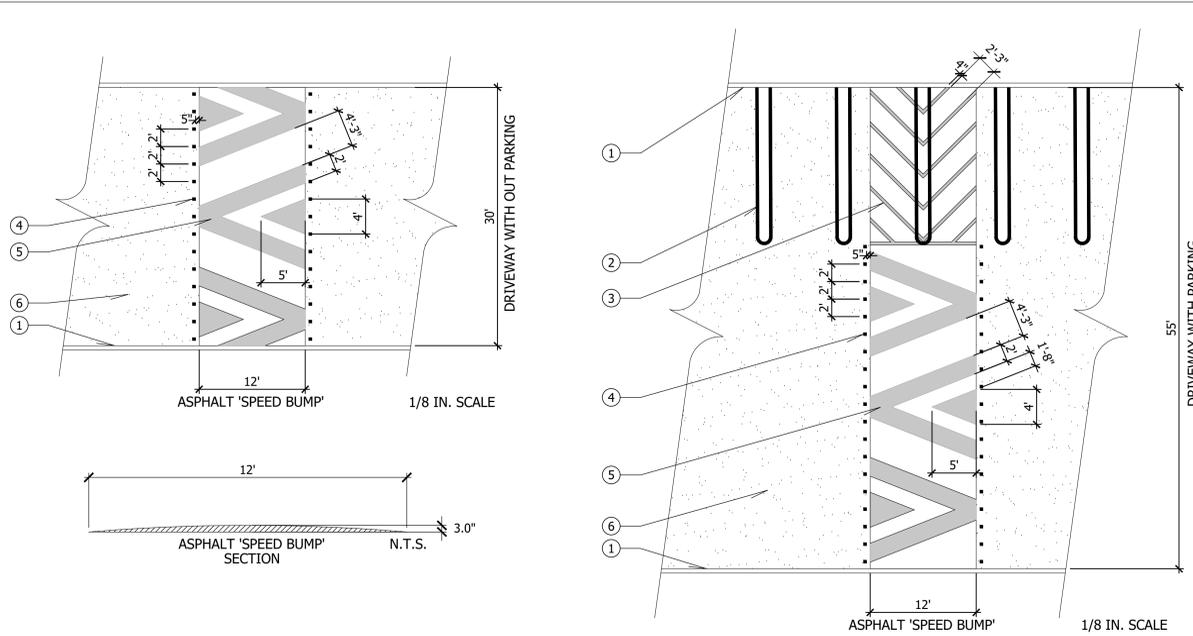
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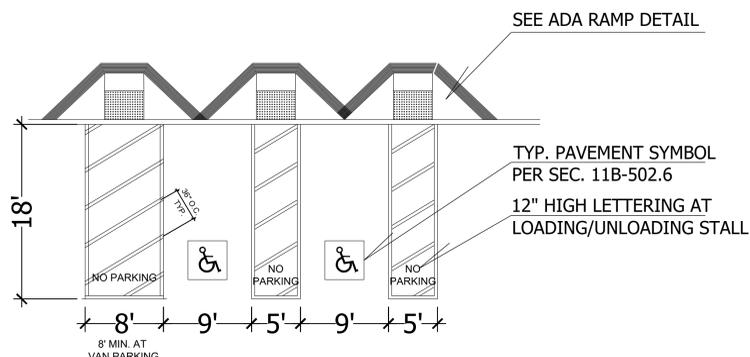
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LEGEND:

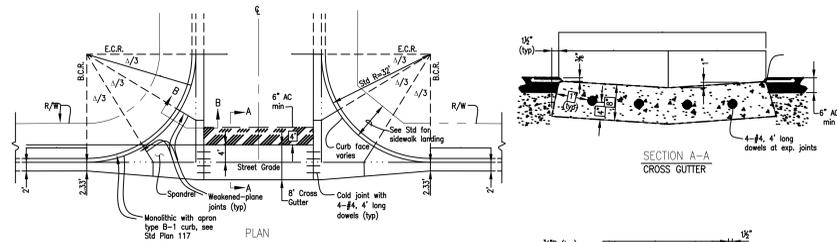
SYMBOL	DESCRIPTION
①	EXISTING CURB
②	TYPICAL STRIPED PARKING STALL.
③	WHITE 'HEAVY-DUTY' REFLECTIVE TRAFFIC PAINT AS SHOWN IN STRIPED PARKING STALL AREA.
④	WHITE MINI REFLECTIVE PAVEMENT MARKERS.
⑤	WHITE 'HEAVY-DUTY' REFLECTIVE TRAFFIC PAINT AS SHOWN IN DRIVE ISLE AREA.
⑥	ASPHALT DRIVE ISLE.

SPEED BUMP



ACCESSIBLE STALLS STRIPING DETAIL- TYP.

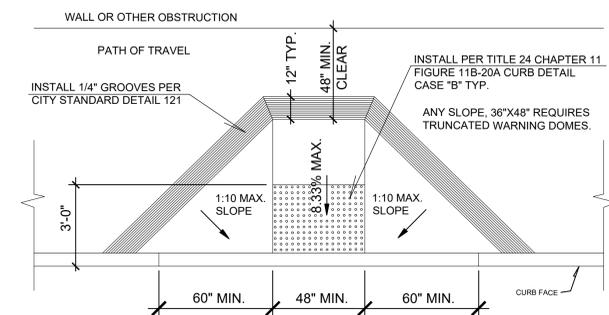
N.T.S.



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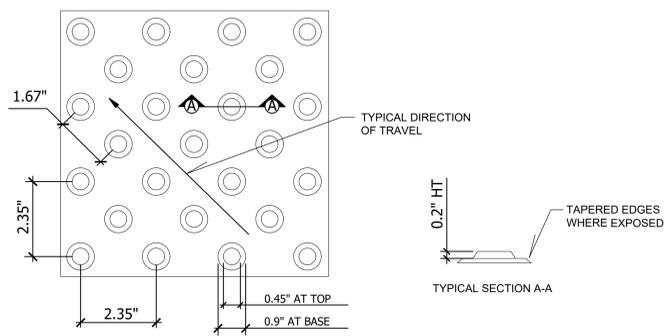
CITY STANDARD 119 CROSS GUTTER AND SPANDREL

N.T.S.



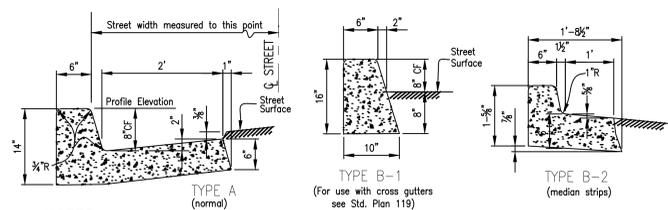
ADA RAMP DETAIL- TYP.

N.T.S.



TRUNCATED DOMES- TYP.

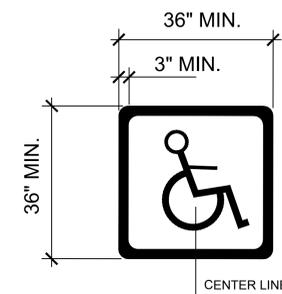
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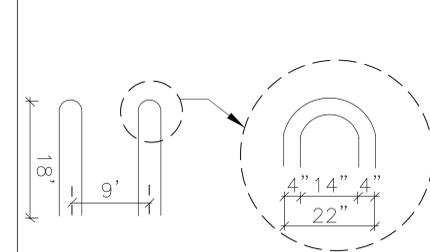
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CITY STANDARD 117 CURB AND GUTTER

N.T.S.



ACCESSIBILITY SYMBOL- TYP. NO SCALE



STALL STRIPING- TYP. NO SCALE

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UNDER THE SUPERVISION OF:		NAME	DATE	OFFICE OF COMMUNITY SERVICES	
DATE	DESIGNER	DESIGNED	CHECKED	GRIJALVA PARK PARKING LOT	
REVISIONS		FOR CITY USE ONLY		REPAIR/MAINTENANCE AND RE-STRIPE	
DATE	DESCRIPTION	NAME	DATE	APPROVED:	APPROVED:
		STREETS		DATE	DATE
		SEWER		ASSISTANT CITY ENGINEER	PUBLIC WORKS DIRECTOR/CITY ENGINEER
		DRAINAGE			
		WATER			
		ST. SLP.T.			
		TRAFFIC			
				F.B.	PG.
					SHEET 7 OF 7 SHEETS

Attachment 3
Insurance Requirements

[Behind this page.]

Parking Lot Pavement Rehabilitation at Olive and Grijalva Parks

Liability Insurance:

Contractor shall procure and maintain for the duration of this Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder and the results of that work by the Contractor, his agents, representatives, employees or subcontractors.

Coverage shall be at least as broad as:

1. Insurance Services Office Commercial General Liability coverage (occurrence Form CG 00 01).
2. Insurance Services Office Form Number CA 00 01 covering Automobile Liability, code 1 (any auto).
3. Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.

Contractor shall maintain limits no less than:

- | | | |
|---------------------------|-------------|--|
| 1. General Liability: | \$2,000,000 | per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit. |
| 2. Automobile Liability: | \$1,000,000 | per accident for bodily injury and property damage. |
| 3. Workers' Compensation: | | As required by the State of California. |
| 4. Employer's Liability: | \$1,000,000 | per accident for bodily injury or disease. |

Any deductibles or self-insured retentions must be declared to and approved by the City. At the option of the City, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City, its officers, officials and employees; or the Contractor shall provide a financial guarantee satisfactory to the City guaranteeing payment of losses and related investigations, claim administration, and defense expenses.

Each policy of general liability and automotive liability insurance shall contain, or be endorsed to contain, the following provisions:

1. The City, its officers, officials, agents and employees are to be covered as additional insureds with respect to liability arising out of automobiles owned, leased, hired or borrowed by or on behalf of the Contractor; and with respect to liability arising out of work or operations performed by or on behalf of the Contractor, including materials, parts or equipment furnished in connection with such work or operations. General Liability coverage shall be provided in the form of an Additional Insured Endorsement (Insurance Services Office, Inc. Form CG 20 10 11 85 or such other form as may be acceptable to the City) to the Contractor's insurance policy, or as a separate owner's policy.

2. For any claims related to this project, the Contractor's insurance coverage shall be primary insurance as respects the City, its officers, officials and employees. Any insurance or self-insurance maintained by the City, its officers, officials and employees shall be excess of the Contractor's insurance and shall not contribute with it.

3. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party, except after thirty (30) days' prior written notice has been provided to the City

The Contractor shall furnish the City with original certificates of insurance and endorsements effecting coverage required by this clause. The endorsements should be on forms acceptable to City. All certificates and endorsements are to be received and approved by the City before work commences. However, failure to do so shall not operate as a waiver of these insurance requirements. The City reserves the right to require complete, certified copies of all required insurance policies, including endorsements effecting the coverage required by these specifications at any time.

All insurance procured and maintained by the Contractor shall be issued by insurers admitted to conduct the pertinent line of insurance business in the State of California and having a rating of Grade A or better and Class VII or better by the latest edition of Best's Key Rating Guide.

Contractor shall immediately notify the City if any required insurance lapses or is otherwise modified and cease performance of this Agreement unless otherwise directed by the City. In such a case, the City may procure insurance or self-insure the risk and charge Contractor for such costs and any and all damages resulting therefrom, by way of set-off from any sums owed Contractor.

Contractor hereby agrees to waive subrogation, which any insurer of the Contractor may acquire from the Contractor by virtue of the payment of any loss. The Contractor agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation.

The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the City for all work performed by the Contractor, its employees, agents and subcontractors.

The Contractor shall require and verify that all subcontractors maintain insurance meeting all of the requirements stated herein.

ATTACHMENT NO. 1

[Behind this page.]

ATTACHMENT NO. 1

CALIFORNIA LABOR CODE SECTIONS 1725.5, 1771, 1771.1, 1771.4, 1775, 1776, 1777.5, 1813 and 1815

Section 1725.5. Registration of contractors; mandatory registration; qualifications and application; fees; exempt contractors

A contractor shall be registered pursuant to this section to be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any public work contract that is subject to the requirements of this chapter. For the purposes of this section, "contractor" includes a subcontractor as defined by Section 1722.1.

(a) To qualify for registration under this section, a contractor shall do all of the following:

(1)(A) Register with the Department of Industrial Relations in the manner prescribed by the department and pay an initial nonrefundable application fee of four hundred dollars (\$400) to qualify for registration under this section and an annual renewal fee on or before July 1 of each year thereafter. The annual renewal fee shall be in a uniform amount set by the Director of Industrial Relations, and the initial registration and renewal fees may be adjusted no more than annually by the director to support the costs specified in Section 1771.3.

(B) Beginning June 1, 2019, a contractor may register or renew according to this subdivision in annual increments up to three years from the date of registration. Contractors who wish to do so will be required to prepay the applicable nonrefundable application or renewal fees to qualify for the number of years for which they wish to preregister.

(2) Provide evidence, disclosures, or releases as are necessary to establish all of the following:

(A) Workers' compensation coverage that meets the requirements of Division 4 (commencing with Section 3200) and includes sufficient coverage for any worker whom the contractor employs to perform work that is subject to prevailing wage requirements other than a contractor who is separately registered under this section. Coverage may be evidenced by a current and valid certificate of workers' compensation insurance or certification of self-insurance required under Section 7125 of the Business and Professions Code.

(B) If applicable, the contractor is licensed in accordance with Chapter 9 (commencing with Section 7000) of the Business and Professions Code.

(C) The contractor does not have any delinquent liability to an employee or the state for any assessment of back wages or related damages, interest, fines, or penalties pursuant to any final judgment, order, or determination by a court or any federal, state, or local administrative agency, including a confirmed arbitration award. However, for purposes of this paragraph, the contractor shall not be disqualified for any judgment, order, or determination that is under appeal, provided that the contractor has secured the payment of any amount eventually found due through a bond or other appropriate means.

(D) The contractor is not currently debarred under Section 1777.1 or under any other federal or state law providing for the debarment of contractors from public works.

(E) The contractor has not bid on a public works contract, been listed in a bid proposal, or engaged in the performance of a contract for public works without being lawfully registered in accordance with this section, within the preceding 12 months or since the effective date of the requirements set forth in subdivision (e), whichever is earlier. If a contractor is found to be in violation of the requirements of this paragraph, the period of disqualification shall be waived if both of the following are true:

- (i) The contractor has not previously been found to be in violation of the requirements of this paragraph within the preceding 12 months.
- (ii) The contractor pays an additional nonrefundable penalty registration fee of two thousand dollars (\$2,000).
- (b) Fees received pursuant to this section shall be deposited in the State Public Works Enforcement Fund established by Section 1771.3 and shall be used only for the purposes specified in that section.
- (c) A contractor who fails to pay the renewal fee required under paragraph (1) of subdivision (a) on or before the expiration of any prior period of registration shall be prohibited from bidding on or engaging in the performance of any contract for public work until once again registered pursuant to this section. If the failure to pay the renewal fee was inadvertent, the contractor may renew its registration retroactively by paying an additional nonrefundable penalty renewal fee equal to the amount of the renewal fee within 90 days of the due date of the renewal fee.
- (d) If, after a body awarding a contract accepts the contractor's bid or awards the contract, the work covered by the bid or contract is determined to be a public work to which Section 1771 applies, either as the result of a determination by the director pursuant to Section 1773.5 or a court decision, the requirements of this section shall not apply, subject to the following requirements:
- (1) The body that awarded the contract failed, in the bid specification or in the contract documents, to identify as a public work that portion of the work that the determination or decision subsequently classifies as a public work.
- (2) Within 20 days following service of notice on the awarding body of a determination by the Director of Industrial Relations pursuant to Section 1773.5 or a decision by a court that the contract was for public work as defined in this chapter, the contractor and any subcontractors are registered under this section or are replaced by a contractor or subcontractors who are registered under this section.
- (3) The requirements of this section shall apply prospectively only to any subsequent bid, bid proposal, contract, or work performed after the awarding body is served with notice of the determination or decision referred to in paragraph (2).
- (e) The requirements of this section shall apply to any bid proposal submitted on or after March 1, 2015, to any contract for public work, as defined in this chapter, executed on or after April 1, 2015, and to any work performed under a contract for public work on or after January 1, 2018, regardless of when the contract for public work was executed.
- (f) This section does not apply to work performed on a public works project of twenty-five thousand dollars (\$25,000) or less when the project is for construction, alteration, demolition, installation, or repair work or to work performed on a public works project of fifteen thousand dollars (\$15,000) or less when the project is for maintenance work.

Section 1771. Payment of general prevailing rate

Except for public works projects of one thousand dollars (\$1,000) or less, not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the public work is performed, and not less than the general prevailing rate of per diem wages for holiday and overtime work fixed as provided in this chapter, shall be paid to all workers employed on public works.

This section is applicable only to work performed under contract, and is not applicable to work carried out by a public agency with its own forces. This section is applicable to contracts let for maintenance work.

Section 1771.1. Registration as a contractor or subcontractor required prior to bid submission; exceptions; violations; penalties

(a) A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

(b) Notice of the requirement described in subdivision (a) shall be included in all bid invitations and public works contracts, and a bid shall not be accepted nor any contract or subcontract entered into without proof of the contractor or subcontractor's current registration to perform public work pursuant to Section 1725.5.

(c) An inadvertent error in listing a subcontractor who is not registered pursuant to Section 1725.5 in a bid proposal shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive, provided that any of the following apply:

(1) The subcontractor is registered prior to the bid opening.

(2) Within 24 hours after the bid opening, the subcontractor is registered and has paid the penalty registration fee specified in subparagraph (E) of paragraph (2) of subdivision (a) of Section 1725.5.

(3) The subcontractor is replaced by another registered subcontractor pursuant to Section 4107 of the Public Contract Code.

(d) Failure by a subcontractor to be registered to perform public work as required by subdivision (a) shall be grounds under Section 4107 of the Public Contract Code for the contractor, with the consent of the awarding authority, to substitute a subcontractor who is registered to perform public work pursuant to Section 1725.5 in place of the unregistered subcontractor.

(e) The department shall maintain on its Internet Web site a list of contractors who are currently registered to perform public work pursuant to Section 1725.5.

(f) A contract entered into with any contractor or subcontractor in violation of subdivision (a) shall be subject to cancellation, provided that a contract for public work shall not be unlawful, void, or voidable solely due to the failure of the awarding body, contractor, or any subcontractor to comply with the requirements of Section 1725.5 or this section.

(g) If the Labor Commissioner or his or her designee determines that a contractor or subcontractor engaged in the performance of any public work contract without having been registered in accordance with this section, the contractor or subcontractor shall forfeit, as a civil penalty to the state, one hundred dollars (\$100) for each day of work performed in violation of the registration requirement, not to exceed an aggregate penalty of eight thousand dollars (\$8,000) in addition to any penalty registration fee assessed pursuant to clause (ii) of subparagraph (E) of paragraph (2) of subdivision (a) of Section 1725.5.

(h)(1) In addition to, or in lieu of, any other penalty or sanction authorized pursuant to this chapter, a higher tiered public works contractor or subcontractor who is found to have entered into a subcontract with an unregistered lower tier subcontractor to perform any public work in violation of the requirements of Section 1725.5 or this section shall be subject to forfeiture, as a civil penalty to the state, of one hundred dollars (\$100)

for each day the unregistered lower tier subcontractor performs work in violation of the registration requirement, not to exceed an aggregate penalty of ten thousand dollars (\$10,000).

(2) The Labor Commissioner shall use the same standards specified in subparagraph (A) of paragraph (2) of subdivision (a) of Section 1775 when determining the severity of the violation and what penalty to assess, and may waive the penalty for a first time violation that was unintentional and did not hinder the Labor Commissioner's ability to monitor and enforce compliance with the requirements of this chapter.

(3) A higher tiered public works contractor or subcontractor shall not be liable for penalties assessed pursuant to paragraph (1) if the lower tier subcontractor's performance is in violation of the requirements of Section 1725.5 due to the revocation of a previously approved registration.

(4) A subcontractor shall not be liable for any penalties assessed against a higher tiered public works contractor or subcontractor pursuant to paragraph (1). A higher tiered public works contractor or subcontractor may not require a lower tiered subcontractor to indemnify or otherwise be liable for any penalties pursuant to paragraph (1).

(i) The Labor Commissioner or his or her designee shall issue a civil wage and penalty assessment, in accordance with the provisions of Section 1741, upon determination of penalties pursuant to subdivision (g) and subparagraph (B) of paragraph (1) of subdivision (h). Review of a civil wage and penalty assessment issued under this subdivision may be requested in accordance with the provisions of Section 1742. The regulations of the Director of Industrial Relations, which govern proceedings for review of civil wage and penalty assessments and the withholding of contract payments under Article 1 (commencing with Section 1720) and Article 2 (commencing with Section 1770), shall apply.

(j)(1) Where a contractor or subcontractor engages in the performance of any public work contract without having been registered in violation of the requirements of Section 1725.5 or this section, the Labor Commissioner shall issue and serve a stop order prohibiting the use of the unregistered contractor or the unregistered subcontractor on all public works until the unregistered contractor or unregistered subcontractor is registered. The stop order shall not apply to work by registered contractors or subcontractors on the public work.

(2) A stop order may be personally served upon the contractor or subcontractor by either of the following methods:

(A) Manual delivery of the order to the contractor or subcontractor personally.

(B) Leaving signed copies of the order with the person who is apparently in charge at the site of the public work and by thereafter mailing copies of the order by first class mail, postage prepaid to the contractor or subcontractor at one of the following:

(i) The address of the contractor or subcontractor on file with either the Secretary of State or the Contractors' State License Board.

(ii) If the contractor or subcontractor has no address on file with the Secretary of State or the Contractors' State License Board, the address of the site of the public work.

(3) The stop order shall be effective immediately upon service and shall be subject to appeal by the party contracting with the unregistered contractor or subcontractor, by the unregistered contractor or subcontractor, or both. The appeal, hearing, and any further review of the hearing decision shall be governed by the procedures, time limits, and other requirements specified in subdivision (a) of Section 238.1.

(4) Any employee of an unregistered contractor or subcontractor who is affected by a work stoppage ordered by the commissioner pursuant to this subdivision shall be paid at his or her regular hourly prevailing wage rate by that employer for any hours the employee would have worked but for the work stoppage, not to exceed 10 days.

(k) Failure of a contractor or subcontractor, owner, director, officer, or managing agent of the contractor or subcontractor to observe a stop order issued and served upon him or her pursuant to subdivision (j) is guilty of a misdemeanor punishable by imprisonment in county jail not exceeding 60 days or by a fine not exceeding ten thousand dollars (\$10,000), or both.

(l) This section shall apply to any bid proposal submitted on or after March 1, 2015, and any contract for public work entered into on or after April 1, 2015. This section shall also apply to the performance of any public work, as defined in this chapter, on or after January 1, 2018, regardless of when the contract for public work was entered.

(m) Penalties received pursuant to this section shall be deposited in the State Public Works Enforcement Fund established by Section 1771.3 and shall be used only for the purposes specified in that section.

(n) This section shall not apply to work performed on a public works project of twenty-five thousand dollars (\$25,000) or less when the project is for construction, alteration, demolition, installation, or repair work or to work performed on a public works project of fifteen thousand dollars (\$15,000) or less when the project is for maintenance work.

Section 1771.4. Additional requirements when bidding and awarding public works contracts

(a) All of the following are applicable to all public works projects that are otherwise subject to the requirements of this chapter:

(1) The call for bids and contract documents shall specify that the project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

(2) The awarding body shall post or require the prime contractor to post job site notices, as prescribed by regulation.

(3) Each contractor and subcontractor shall furnish the records specified in Section 1776 directly to the Labor Commissioner, in the following manner:

(A) At least monthly or more frequently if specified in the contract with the awarding body.

(B) In a format prescribed by the Labor Commissioner.

(4) If the contractor or subcontractor is not registered pursuant to Section 1725.5 and is performing work on a project for which registration is not required because of subdivision (f) of Section 1725.5, the unregistered contractor or subcontractor is not required to furnish the records specified in Section 1776 directly to the Labor Commissioner but shall retain the records specified in Section 1776 for at least three years after completion of the work.

(5) The department shall undertake those activities it deems necessary to monitor and enforce compliance with prevailing wage requirements.

(b) The Labor Commissioner may exempt a public works project from compliance with all or part of the requirements of subdivision (a) if either of the following occurs:

(1) The awarding body has enforced an approved labor compliance program, as defined in Section 1771.5, on all public works projects under its authority, except those deemed exempt pursuant to subdivision (a) of Section 1771.5, continuously since December 31, 2011.

(2) The awarding body has entered into a collective bargaining agreement that binds all contractors performing work on the project and that includes a mechanism for resolving disputes about the payment of wages.

(c) The requirements of paragraph (1) of subdivision (a) shall only apply to contracts for public works projects awarded on or after January 1, 2015.

(d) The requirements of paragraph (3) of subdivision (a) shall apply to all contracts for public work, whether new or ongoing, on or after January 1, 2016.

Section 1775. Penalties for violations

(a)(1) The contractor and any subcontractor under the contractor shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit not more than two hundred dollars (\$200) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rates as determined by the director for the work or craft in which the worker is employed for any public work done under the contract by the contractor or, except as provided in subdivision (b), by any subcontractor under the contractor.

(2)(A) The amount of the penalty shall be determined by the Labor Commissioner based on consideration of both of the following:

(i) Whether the failure of the contractor or subcontractor to pay the correct rate of per diem wages was a good faith mistake and, if so, the error was promptly and voluntarily corrected when brought to the attention of the contractor or subcontractor.

(ii) Whether the contractor or subcontractor has a prior record of failing to meet its prevailing wage obligations.

(B)(i) The penalty may not be less than forty dollars (\$40) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, unless the failure of the contractor or subcontractor to pay the correct rate of per diem wages was a good faith mistake and, if so, the error was promptly and voluntarily corrected when brought to the attention of the contractor or subcontractor.

(ii) The penalty may not be less than eighty dollars (\$80) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, if the contractor or subcontractor has been assessed penalties within the previous three years for failing to meet its prevailing wage obligations on a separate contract, unless those penalties were subsequently withdrawn or overturned.

(iii) The penalty may not be less than one hundred twenty dollars (\$120) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, if the Labor Commissioner determines that the violation was willful, as defined in subdivision (c) of Section 1777.1.

(C) If the amount due under this section is collected from the contractor or subcontractor, any outstanding wage claim under Chapter 1 (commencing with Section 1720) of Part 7 of Division 2 against that contractor

or subcontractor shall be satisfied before applying that amount to the penalty imposed on that contractor or subcontractor pursuant to this section.

(D) The determination of the Labor Commissioner as to the amount of the penalty shall be reviewable only for abuse of discretion.

(E) The difference between the prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing wage rate shall be paid to each worker by the contractor or subcontractor, and the body awarding the contract shall cause to be inserted in the contract a stipulation that this section will be complied with.

(b) If a worker employed by a subcontractor on a public works project is not paid the general prevailing rate of per diem wages by the subcontractor, the prime contractor of the project is not liable for any penalties under subdivision (a) unless the prime contractor had knowledge of that failure of the subcontractor to pay the specified prevailing rate of wages to those workers or unless the prime contractor fails to comply with all of the following requirements:

(1) The contract executed between the contractor and the subcontractor for the performance of work on the public works project shall include a copy of the provisions of this section and Sections 1771, 1776, 1777.5, 1813, and 1815.

(2) The contractor shall monitor the payment of the specified general prevailing rate of per diem wages by the subcontractor to the employees, by periodic review of the certified payroll records of the subcontractor.

(3) Upon becoming aware of the failure of the subcontractor to pay his or her workers the specified prevailing rate of wages, the contractor shall diligently take corrective action to halt or rectify the failure, including, but not limited to, retaining sufficient funds due the subcontractor for work performed on the public works project.

(4) Prior to making final payment to the subcontractor for work performed on the public works project, the contractor shall obtain an affidavit signed under penalty of perjury from the subcontractor that the subcontractor has paid the specified general prevailing rate of per diem wages to his or her employees on the public works project and any amounts due pursuant to Section 1813.

(c) The Division of Labor Standards Enforcement shall notify the contractor on a public works project within 15 days of the receipt by the Division of Labor Standards Enforcement of a complaint of the failure of a subcontractor on that public works project to pay workers the general prevailing rate of per diem wages.

Section 1776. Payroll records; retention; inspection; redacted information; agencies entitled to receive nonredacted copies of certified records; noncompliance penalties; rules

(a) Each contractor and subcontractor shall keep accurate payroll records, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the public work. Each payroll record shall contain or be verified by a written declaration that it is made under penalty of perjury, stating both of the following:

(1) The information contained in the payroll record is true and correct.

(2) The employer has complied with the requirements of Sections 1771, 1811, and 1815 for any work performed by his or her employees on the public works project.

(b) The payroll records enumerated under subdivision (a) shall be certified and shall be available for inspection at all reasonable hours at the principal office of the contractor on the following basis:

(1) A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request.

(2) A certified copy of all payroll records enumerated in subdivision (a) shall be made available for inspection or furnished upon request to a representative of the body awarding the contract and the Division of Labor Standards Enforcement of the Department of Industrial Relations.

(3) A certified copy of all payroll records enumerated in subdivision (a) shall be made available upon request by the public for inspection or for copies thereof. However, a request by the public shall be made through either the body awarding the contract or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to paragraph (2), the requesting party shall, prior to being provided the records, reimburse the costs of preparation by the contractor, subcontractors, and the entity through which the request was made. The public may not be given access to the records at the principal office of the contractor.

(c) Unless required to be furnished directly to the Labor Commissioner in accordance with paragraph (3) of subdivision (a) of Section 1771.4, the certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the division. The payroll records may consist of printouts of payroll data that are maintained as computer records, if the printouts contain the same information as the forms provided by the division and the printouts are verified in the manner specified in subdivision (a).

(d) A contractor or subcontractor shall file a certified copy of the records enumerated in subdivision (a) with the entity that requested the records within 10 days after receipt of a written request.

(e) Except as provided in subdivision (f), any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the awarding body or the Division of Labor Standards Enforcement shall be marked or obliterated to prevent disclosure of an individual's name, address, and social security number. The name and address of the contractor awarded the contract or the subcontractor performing the contract shall not be marked or obliterated. Any copy of records made available for inspection by, or furnished to, a multiemployer Taft-Hartley trust fund (29 U.S.C. Sec. 186(c)(5)) that requests the records for the purposes of allocating contributions to participants shall be marked or obliterated only to prevent disclosure of an individual's full social security number, but shall provide the last four digits of the social security number. Any copy of records made available for inspection by, or furnished to, a joint labor-management committee established pursuant to the federal Labor Management Cooperation Act of 1978 (29 U.S.C. Sec. 175a) shall be marked or obliterated only to prevent disclosure of an individual's social security number.

(f)(1) Notwithstanding any other provision of law, agencies that are included in the Joint Enforcement Strike Force on the Underground Economy established pursuant to Section 329 of the Unemployment Insurance Code and other law enforcement agencies investigating violations of law shall, upon request, be provided nonredacted copies of certified payroll records. Any copies of records or certified payroll made available for inspection and furnished upon request to the public by an agency included in the Joint Enforcement Strike Force on the Underground Economy or to a law enforcement agency investigating a violation of law shall be marked or redacted to prevent disclosure of an individual's name, address, and social security number.

(2) An employer shall not be liable for damages in a civil action for any reasonable act or omission taken in good faith in compliance with this subdivision.

(g) The contractor shall inform the body awarding the contract of the location of the records enumerated under subdivision (a), including the street address, city, and county, and shall, within five working days, provide a notice of a change of location and address.

(h) The contractor or subcontractor has 10 days in which to comply subsequent to receipt of a written notice requesting the records enumerated in subdivision (a). In the event that the contractor or subcontractor fails to comply within the 10-day period, he or she shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit one hundred dollars (\$100) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due. A contractor is not subject to a penalty assessment pursuant to this section due to the failure of a subcontractor to comply with this section.

(i) The body awarding the contract shall cause to be inserted in the contract stipulations to effectuate this section.

(j) The director shall adopt rules consistent with the California Public Records Act (Chapter 3.5 (commencing with Section 6250) of Division 7 of Title 1 of the Government Code) and the Information Practices Act of 1977 (Title 1.8 (commencing with Section 1798) of Part 4 of Division 3 of the Civil Code) governing the release of these records, including the establishment of reasonable fees to be charged for reproducing copies of records required by this section.

Section 1777.5. Employment of registered apprentices; wages; standards; number; apprenticeable craft or trade; exemptions; contributions; compliance program

(a)(1) This chapter does not prevent the employment upon public works of properly registered apprentices who are active participants in an approved apprenticeship program.

(2) For purposes of this chapter, “apprenticeship program” means a program under the jurisdiction of the California Apprenticeship Council established pursuant to Section 3070.

(b)(1) Every apprentice employed upon public works shall be paid the prevailing rate of per diem wages for apprentices in the trade to which he or she is registered and shall be employed only at the work of the craft or trade to which he or she is registered.

(2) Unless otherwise provided by a collective bargaining agreement, when a contractor requests the dispatch of an apprentice pursuant to this section to perform work on a public works project and requires the apprentice to fill out an application or undergo testing, training, an examination, or other preemployment process as a condition of employment, the apprentice shall be paid for the time spent on the required preemployment activity, including travel time to and from the required activity, if any, at the prevailing rate of per diem wages for apprentices in the trade to which he or she is registered. Unless otherwise provided by a collective bargaining agreement, a contractor is not required to compensate an apprentice for the time spent on preemployment activities if the apprentice is required to take a preemployment drug or alcohol test and he or she fails to pass that test.

(c) Only apprentices, as defined in Section 3077, who are in training under apprenticeship standards that have been approved by the Chief of the Division of Apprenticeship Standards and who are parties to written

apprentice agreements under Chapter 4 (commencing with Section 3070) of Division 3 are eligible to be employed at the apprentice wage rate on public works. The employment and training of each apprentice shall be in accordance with either of the following:

- (1) The apprenticeship standards and apprentice agreements under which he or she is training.
- (2) The rules and regulations of the California Apprenticeship Council.

(d) If the contractor to whom the contract is awarded by the state or any political subdivision, in performing any of the work under the contract, employs workers in any apprenticeable craft or trade, the contractor shall employ apprentices in at least the ratio set forth in this section and may apply to any apprenticeship program in the craft or trade that can provide apprentices to the site of the public work for a certificate approving the contractor under the apprenticeship standards for the employment and training of apprentices in the area or industry affected. However, the decision of the apprenticeship program to approve or deny a certificate shall be subject to review by the Administrator of Apprenticeship. The apprenticeship program or programs, upon approving the contractor, shall arrange for the dispatch of apprentices to the contractor. A contractor covered by an apprenticeship program's standards shall not be required to submit any additional application in order to include additional public works contracts under that program. "Apprenticeable craft or trade," as used in this section, means a craft or trade determined as an apprenticeable occupation in accordance with rules and regulations prescribed by the California Apprenticeship Council. As used in this section, "contractor" includes any subcontractor under a contractor who performs any public works not excluded by subdivision (o).

(e) Before commencing work on a contract for public works, every contractor shall submit contract award information to an applicable apprenticeship program that can supply apprentices to the site of the public work. The information submitted shall include an estimate of journeyman hours to be performed under the contract, the number of apprentices proposed to be employed, and the approximate dates the apprentices would be employed. A copy of this information shall also be submitted to the awarding body, if requested by the awarding body. Within 60 days after concluding work on the contract, each contractor and subcontractor shall submit to the awarding body, if requested, and to the apprenticeship program a verified statement of the journeyman and apprentice hours performed on the contract. The information under this subdivision shall be public. The apprenticeship programs shall retain this information for 12 months.

(f) The apprenticeship program supplying apprentices to the area of the site of the public work shall ensure equal employment and affirmative action in apprenticeship for women and minorities.

(g) The ratio of work performed by apprentices to journeymen employed in a particular craft or trade on the public work may be no higher than the ratio stipulated in the apprenticeship standards under which the apprenticeship program operates if the contractor agrees to be bound by those standards. However, except as otherwise provided in this section, in no case shall the ratio be less than one hour of apprentice work for every five hours of journeyman work.

(h) This ratio of apprentice work to journeyman work shall apply during any day or portion of a day when any journeyman is employed at the jobsite and shall be computed on the basis of the hours worked during the day by journeymen so employed. Any work performed by a journeyman in excess of eight hours per day or 40 hours per week shall not be used to calculate the ratio. The contractor shall employ apprentices for the number of hours computed as above before the end of the contract or, in the case of a subcontractor, before the end of the subcontract. However, the contractor shall endeavor, to the greatest extent possible, to employ apprentices during the same time period that the journeymen in the same craft or trade are employed at the jobsite. When an hourly apprenticeship ratio is not feasible for a particular craft or trade, the Administrator

of Apprenticeship, upon application of an apprenticeship program, may order a minimum ratio of not less than one apprentice for each five journeymen in a craft or trade classification.

(i) A contractor covered by this section who has agreed to be covered by an apprenticeship program's standards upon the issuance of the approval certificate, or who has been previously approved for an apprenticeship program in the craft or trade, shall employ the number of apprentices or the ratio of apprentices to journeymen stipulated in the applicable apprenticeship standards, but in no event less than the 1-to-5 ratio required by subdivision (g).

(j) Upon proper showing by a contractor that he or she employs apprentices in a particular craft or trade in the state on all of his or her contracts on an annual average of not less than one hour of apprentice work for every five hours of labor performed by journeymen, the Administrator of Apprenticeship may grant a certificate exempting the contractor from the 1-to-5 hourly ratio, as set forth in this section for that craft or trade.

(k) An apprenticeship program has the discretion to grant to a participating contractor or contractor association a certificate, which shall be subject to the approval of the Administrator of Apprenticeship, exempting the contractor from the 1-to-5 ratio set forth in this section when it finds that any one of the following conditions is met:

(1) Unemployment for the previous three-month period in the area exceeds an average of 15 percent.

(2) The number of apprentices in training in the area exceeds a ratio of 1 to 5.

(3) There is a showing that the apprenticeable craft or trade is replacing at least one-thirtieth of its journeymen annually through apprenticeship training, either on a statewide basis or on a local basis.

(4) Assignment of an apprentice to any work performed under a public works contract would create a condition that would jeopardize his or her life or the life, safety, or property of fellow employees or the public at large, or the specific task to which the apprentice is to be assigned is of a nature that training cannot be provided by a journeyman.

(l) If an exemption is granted pursuant to subdivision (k) to an organization that represents contractors in a specific trade from the 1-to-5 ratio on a local or statewide basis, the member contractors shall not be required to submit individual applications for approval to local joint apprenticeship committees, if they are already covered by the local apprenticeship standards.

(m)(1) A contractor to whom a contract is awarded, who, in performing any of the work under the contract, employs journeymen or apprentices in any apprenticeable craft or trade shall contribute to the California Apprenticeship Council the same amount that the director determines is the prevailing amount of apprenticeship training contributions in the area of the public works site. A contractor may take as a credit for payments to the council any amounts paid by the contractor to an approved apprenticeship program that can supply apprentices to the site of the public works project. The contractor may add the amount of the contributions in computing his or her bid for the contract.

(2)(A) At the conclusion of the 2002-03 fiscal year and each fiscal year thereafter, the California Apprenticeship Council shall distribute training contributions received by the council under this subdivision, less the expenses of the Department of Industrial Relations for administering this subdivision, by making grants to approved apprenticeship programs for the purpose of training apprentices. The grant funds shall be distributed as follows:

(i) If there is an approved multiemployer apprenticeship program serving the same craft or trade and geographic area for which the training contributions were made to the council, a grant to that program shall be made.

(ii) If there are two or more approved multiemployer apprenticeship programs serving the same craft or trade and county for which the training contributions were made to the council, the grant shall be divided among those programs based on the number of apprentices from that county registered in each program.

(iii) All training contributions not distributed under clauses (i) and (ii) shall be used to defray the future expenses of the Department of Industrial Relations for the administration and enforcement of apprenticeship and preapprenticeship standards and requirements under this code.

(B) An apprenticeship program shall only be eligible to receive grant funds pursuant to this subdivision if the apprenticeship program agrees, prior to the receipt of any grant funds, to keep adequate records that document the expenditure of grant funds and to make all records available to the Department of Industrial Relations so that the Department of Industrial Relations is able to verify that grant funds were used solely for training apprentices. For purposes of this subparagraph, adequate records include, but are not limited to, invoices, receipts, and canceled checks that account for the expenditure of grant funds. This subparagraph shall not be deemed to require an apprenticeship program to provide the Department of Industrial Relations with more documentation than is necessary to verify the appropriate expenditure of grant funds made pursuant to this subdivision.

(C) The Department of Industrial Relations shall verify that grants made pursuant to this subdivision are used solely to fund training apprentices. If an apprenticeship program is unable to demonstrate how grant funds are expended or if an apprenticeship program is found to be using grant funds for purposes other than training apprentices, then the apprenticeship program shall not be eligible to receive any future grant pursuant to this subdivision and the Department of Industrial Relations may initiate the process to rescind the registration of the apprenticeship program.

(3) All training contributions received pursuant to this subdivision shall be deposited in the Apprenticeship Training Contribution Fund, which is hereby created in the State Treasury. Upon appropriation by the Legislature, all moneys in the Apprenticeship Training Contribution Fund shall be used for the purpose of carrying out this subdivision and to pay the expenses of the Department of Industrial Relations.

(n) The body awarding the contract shall cause to be inserted in the contract stipulations to effectuate this section. The stipulations shall fix the responsibility of compliance with this section for all apprenticeable occupations with the prime contractor.

(o) This section does not apply to contracts of general contractors or to contracts of specialty contractors not bidding for work through a general or prime contractor when the contracts of general contractors or those specialty contractors involve less than thirty thousand dollars (\$30,000).

(p) An awarding body that implements an approved labor compliance program in accordance with subdivision (b) of Section 1771.5 may, with the approval of the director, assist in the enforcement of this section under the terms and conditions prescribed by the director.

Section 1813. Forfeiture for violations; contract stipulation; report of violations

The contractor or subcontractor shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit twenty- five dollars (\$25) for each worker employed in the execution of

the contract by the respective contractor or subcontractor for each calendar day during which the worker is required or permitted to work more than 8 hours in any one calendar day and 40 hours in any one calendar week in violation of the provisions of this article. In awarding any contract for public work, the awarding body shall cause to be inserted in the contract a stipulation to this effect. The awarding body shall take cognizance of all violations of this article committed in the course of the execution of the contract, and shall report them to the Division of Labor Standards Enforcement.

Section 1815. Overtime

Notwithstanding the provisions of Sections 1810 to 1814, inclusive, of this code, and notwithstanding any stipulation inserted in any contract pursuant to the requirements of said sections, work performed by employees of contractors in excess of 8 hours per day, and 40 hours during any one week, shall be permitted upon public work upon compensation for all hours worked in excess of 8 hours per day at not less than 1 ½ times the basic rate of pay.

ATTACHMENT NO. 2

[Behind this page.]

ATTACHMENT NO. 2

CALIFORNIA PUBLIC CONTRACT CODE SECTION 9204

Section 9204. Legislative findings and declarations regarding timely and complete payment of contractors for public works projects; claims process (Eff: January 1, 2017)

(a) The Legislature finds and declares that it is in the best interests of the state and its citizens to ensure that all construction business performed on a public works project in the state that is complete and not in dispute is paid in full and in a timely manner.

(b) Notwithstanding any other law, including, but not limited to, Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2, Chapter 10 (commencing with Section 19100) of Part 2, and Article 1.5 (commencing with Section 20104) of Chapter 1 of Part 3, this section shall apply to any claim by a contractor in connection with a public works project.

(c) For purposes of this section:

(1) "Claim" means a separate demand by a contractor sent by registered mail or certified mail with return receipt requested, for one or more of the following:

(A) A time extension, including, without limitation, for relief from damages or penalties for delay assessed by a public entity under a contract for a public works project.

(B) Payment by the public entity of money or damages arising from work done by, or on behalf of, the contractor pursuant to the contract for a public works project and payment for which is not otherwise expressly provided or to which the claimant is not otherwise entitled.

(C) Payment of an amount that is disputed by the public entity.

(2) "Contractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who has entered into a direct contract with a public entity for a public works project.

(3)(A) "Public entity" means, without limitation, except as provided in subparagraph (B), a state agency, department, office, division, bureau, board, or commission, the California State University, the University of California, a city, including a charter city, county, including a charter county, city and county, including a charter city and county, district, special district, public authority, political subdivision, public corporation, or nonprofit transit corporation wholly owned by a public agency and formed to carry out the purposes of the public agency.

(B) "Public entity" shall not include the following:

(i) The Department of Water Resources as to any project under the jurisdiction of that department.

(ii) The Department of Transportation as to any project under the jurisdiction of that department.

(iii) The Department of Parks and Recreation as to any project under the jurisdiction of that department.

(iv) The Department of Corrections and Rehabilitation with respect to any project under its jurisdiction pursuant to Chapter 11 (commencing with Section 7000) of Title 7 of Part 3 of the Penal Code.

(v) The Military Department as to any project under the jurisdiction of that department.

(vi) The Department of General Services as to all other projects.

(vii) The High-Speed Rail Authority.

(4) "Public works project" means the erection, construction, alteration, repair, or improvement of any public structure, building, road, or other public improvement of any kind.

(5) "Subcontractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who either is in direct contract with a contractor or is a lower tier subcontractor.

(d)(1)(A) Upon receipt of a claim pursuant to this section, the public entity to which the claim applies shall conduct a reasonable review of the claim and, within a period not to exceed 45 days, shall provide the claimant a written statement identifying what portion of the claim is disputed and what portion is undisputed. Upon receipt of a claim, a public entity and a contractor may, by mutual agreement, extend the time period provided in this subdivision.

(B) The claimant shall furnish reasonable documentation to support the claim.

(C) If the public entity needs approval from its governing body to provide the claimant a written statement identifying the disputed portion and the undisputed portion of the claim, and the governing body does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified mail, return receipt requested, the public entity shall have up to three days following the next duly publicly noticed meeting of the governing body after the 45-day period, or extension, expires to provide the claimant a written statement identifying the disputed portion and the undisputed portion.

(D) Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. If the public entity fails to issue a written statement, paragraph (3) shall apply.

(2)(A) If the claimant disputes the public entity's written response, or if the public entity fails to respond to a claim issued pursuant to this section within the time prescribed, the claimant may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the public entity shall schedule a meet and confer conference within 30 days for settlement of the dispute.

(B) Within 10 business days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, the public entity shall provide the claimant a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. Any disputed portion of the claim, as identified by the contractor in writing, shall be submitted to nonbinding mediation, with the public entity and the claimant sharing the associated costs equally. The public entity and claimant shall mutually agree to a mediator within 10 business days after the disputed portion of the claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator. If mediation is unsuccessful, the parts of the claim remaining in dispute shall be subject to applicable procedures outside this section.

(C) For purposes of this section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.

(D) Unless otherwise agreed to by the public entity and the contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.

(E) This section does not preclude a public entity from requiring arbitration of disputes under private arbitration or the Public Works Contract Arbitration Program, if mediation under this section does not resolve the parties' dispute.

(3) Failure by the public entity to respond to a claim from a contractor within the time periods described in this subdivision or to otherwise meet the time requirements of this section shall result in the claim being deemed rejected in its entirety. A claim that is denied by reason of the public entity's failure to have responded to a claim, or its failure to otherwise meet the time requirements of this section, shall not constitute an adverse finding with regard to the merits of the claim or the responsibility or qualifications of the claimant.

(4) Amounts not paid in a timely manner as required by this section shall bear interest at 7 percent per annum.

(5) If a subcontractor or a lower tier subcontractor lacks legal standing to assert a claim against a public entity because privity of contract does not exist, the contractor may present to the public entity a claim on behalf of a subcontractor or lower tier subcontractor. A subcontractor may request in writing, either on their own behalf or on behalf of a lower tier subcontractor, that the contractor present a claim for work which was performed by the subcontractor or by a lower tier subcontractor on behalf of the subcontractor. The subcontractor requesting that the claim be presented to the public entity shall furnish reasonable documentation to support the claim. Within 45 days of receipt of this written request, the contractor shall notify the subcontractor in writing as to whether the contractor presented the claim to the public entity and, if the original contractor did not present the claim, provide the subcontractor with a statement of the reasons for not having done so.

(e) The text of this section or a summary of it shall be set forth in the plans or specifications for any public works project that may give rise to a claim under this section.

(f) A waiver of the rights granted by this section is void and contrary to public policy, provided, however, that (1) upon receipt of a claim, the parties may mutually agree to waive, in writing, mediation and proceed directly to the commencement of a civil action or binding arbitration, as applicable; and (2) a public entity may prescribe reasonable change order, claim, and dispute resolution procedures and requirements in addition to the provisions of this section, so long as the contractual provisions do not conflict with or otherwise impair the timeframes and procedures set forth in this section.

(g) This section applies to contracts entered into on or after January 1, 2017.

(h) Nothing in this section shall impose liability upon a public entity that makes loans or grants available through a competitive application process, for the failure of an awardee to meet its contractual obligations.

(i) This section shall remain in effect only until January 1, 2027, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2027, deletes or extends that date.



Agenda Item

City Council

Item #: 3.25.

9/8/2020

File #: 20-061

TO: Honorable Mayor and Members of the City Council
THRU: Rick Otto, City Manager
FROM: Bonnie Hagan, Assistant City Manager / Community Services Director

1. SUBJECT

Award of Contract to Academy Electric, Inc. for the Electrical Panel Replacement for McPherson Athletic Facility and Killefer Park; Bid No. 190-60.

2. SUMMARY

The electrical distribution equipment and protective enclosures at McPherson Athletic Facility and Killefer Park are deteriorating due to age and water intrusion, and need to be replaced. The proposed contract includes full replacement of both electrical panels.

3. RECOMMENDED ACTION

1. Authorize the appropriation of \$17,656 from the Park Acquisition (510) unreserved fund balance to expenditure account number 510.7021.56032.30054, Park Acquisition-Infill - Park Electrical Panel Replacement.
2. Approve the Contract with Academy Electric, Inc. in the amount of \$210,056 for electrical panel replacement; and authorize the Mayor and City Clerk to execute on behalf of the City.

4. FISCAL IMPACT

The total expenditure for this Contract is \$210,056 and will be funded in Park Electrical Panel Replacement (30054) through Park Acquisition-Infill (510).

5. STRATEGIC PLAN GOALS

- Goal 3: Enhance and promote quality of life in the community
a: Renovate, maintain, develop, and/or expand public use spaces and places.

6. DISCUSSION AND BACKGROUND

The electrical distribution equipment and protective enclosures at both McPherson Athletic Facility and Killefer Park are deteriorating due to age and corrosion caused by water intrusion. Many of the components within both main electrical panels have become obsolete over time, creating a potential for lengthy power disruptions in the event of a failure. The electrical panel located at Killefer Park services the community building, buildings occupied by The Friendly Center, as well as area lighting in the park. The electrical panel at McPherson Athletic Facility services the concession buildings, restrooms and storage facilities, and the park area lighting.

While these panels are still currently functioning, extensive maintenance and repairs continue to be

done but is no longer economically practical or reasonable. In an effort to ensure the safety and functionality of these park facilities, a full replacement of the panels was included in the annual capital improvement program as Park Electrical Panel Replacement (30054).

A request for bids (Bid No.190-60) was advertised and four bids were received:

Company	City	Bid Amount
Academy Electric, Inc.	Orange, CA	\$190,960
Best Electric	Gardena, CA	\$247,100
Alliance Facility Services, Inc.	Corona, CA	\$359,066
Mass. Electric Construction, Co.	Lake Forest, CA	\$371,400

The lowest responsible bid is from Academy Electric, Inc. (Academy Electric) for \$190,960. Staff verified the qualifications of Academy Electric with references provided for similar work. The company has also successfully performed similar work for the City, including the Yorba Park Renovation project and ongoing electrical maintenance and repair work.

The total not to exceed amount of the proposed contract is \$210,056. This amount includes a 10% contingency of \$19,096 for unforeseen conditions related to underground electrical work and having no adequate as-built plans available for either location to reference.

The project was budgeted for \$221,500. An amount of \$24,056 was spent on design work and salaries in Fiscal Year 2019-2020 (FY20). An additional appropriation of unreserved Park Acquisition (510) funds in the amount of \$17,656 is necessary to cover the bid amount, contingency, and City staff time (estimated at \$5,044) for continued project management. With the additional appropriation, the total cost of the project amounts to \$239,156. There are sufficient Park Acquisition-Infill (510) funds in the unreserved fund balance for this additional appropriation.

The project at each park will be done in a manner that minimizes disruption to programming. Staff will communicate and coordinate with The Friendly Center and all other permit holders potentially affected.

7. ATTACHMENTS

- Electrical Panel Replacement - Bid Abstract
- Contract with Academy Electric for Electrical Panel Replacement



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- Contract with Academy Electric for Electrical Panel Replacement

**Project: Electrical Panel Replacement for
McPherson Athletic Facility & Killefer Park**

**BID ABSTRACT SUMMARY
Bid No. 190-60**

Date Advertised: 7/30/2020
Bid Due Date: 8/4/2020
Engineer's Cost Estimate: \$180,000

Company/Contractor	Academy Electric, Inc.	Best Electric	Alliance Facility Services, Inc.	Mass. Electric Construction Co.
City (Location of Company)	Orange, Ca.	Gardena, Ca.	Corona, Ca.	Lake Forest, Ca.
McPherson Bid Amount	\$65,223	\$88,700	\$141,453	\$128,981
Killefer Bid Amount	\$125,737	\$158,400	\$217,613	\$242,419
Total Bid Amount	\$190,960	\$247,100	\$359,066	\$371,400
	Recommended Award			

CONTRACT
[Electrical Panel Replacement for McPherson Athletic Facility
& Killefer Park (Bid No. 190-60)]

THIS CONTRACT (the "Contract") is made and entered into as of _____, 2020 ("Effective Date") by and between the CITY OF ORANGE, a municipal corporation ("City"), and ACADEMY ELECTRIC, INC., a California corporation ("Contractor"), who agree as follows.

ARTICLE 1
Work Performed

a. For and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by City, and under the conditions expressed in the two (2) bonds presented to City with this Contract and incorporated herein by this reference, Contractor hereby agrees to and shall do all the work and furnish all the labor, materials, tools and equipment, except such as are mentioned in the specifications to be furnished by City to Contractor, necessary to complete in good workmanship and substantial manner the work (the "Work") described in:

(1) The Request for Bid which includes Construction Plans and Contractor's bid (Exhibit A);

(2) The latest edition of the "City of Orange Standard Plans and Specifications" (the "Orange Book") with the term "Engineer," as used in the Orange Book and in this Contract, to specifically include the City Engineer (or his/her designee);

(3) City of Orange Park Development Standards and Specifications;

(4) The "Standard Specifications for Public Works Construction" (the "Green Book"), and all amendments thereto.

b. Contractor acknowledges that it has received the Plans from City and that a complete copy of the Plans are in its possession and are hereby specifically referred to and by such reference made a part hereof. The Orange Book, Green Book and City of Orange Standard Special Provisions and Standard Plans are on file with City's Community Services Director and are hereby specifically referred to and by such reference made a part hereof. Contractor hereby acknowledges that it has read, reviewed and understands the Plans, the Orange Book, the Green Book, the Special Provisions, the Standard Plans, as they relate to the Work, all of which documents shall be referred to herein collectively as the "Plans and Specifications."

c. Contractor acknowledges the provisions of Chapter 8.28 of the Orange Municipal Code which requires, among other things, that Contractor utilize City's exclusive solid waste hauler for the rental of bins for trash and debris removal and imposes mandatory recycling requirements for self-hauled construction and demolition waste. The terms and conditions set forth

in this Contract shall control over any terms and conditions in the Plans and Specifications to the contrary.

d. The Work shall be performed in conformity with the Plans and Specifications and the Bid Proposal and all applicable laws, including any and all applicable federal and state labor laws and standards and applicable prevailing wage requirements and any and all state, federal and local statutes, regulations and ordinances relating to the protection of human health or the environment.

e. Unless and until otherwise notified in writing by City's Community Services Director, City's Sr. Landscape Project Coordinator, Don Equitz ("Authorized City Representative"), shall be the person to whom Contractor will report for the performance of the Work hereunder. It is understood that Contractor's performance hereunder shall be under the direction and supervision of the Authorized City Representative or such other person as City's Community Services Director may designate from time to time, that Contractor shall coordinate the Work hereunder with the Authorized City Representative to the extent required by the Authorized City Representative, and that all performances required hereunder by Contractor shall be performed to the satisfaction of the Authorized City Representative or City's Community Services Director.

f. It is expressly agreed by and between the parties hereto that should there be any conflict between the terms of this instrument and Contractor's Bid Proposal, then this instrument shall control and nothing herein shall be considered as an acceptance of the said terms of said Bid Proposal conflicting herewith.

ARTICLE 2 Commencement of Work

Contractor shall commence the Work provided for in this Contract within fifteen (15) days of the date of the issuance by City of a Notice to Proceed and diligently prosecute completion of the Work within the timeframe as set forth in Exhibit A, unless legal extension is granted in accordance with the terms set forth in the Green Book. Time is of the essence in this Contract. Contractor shall do all things necessary and incidental to the prosecution of Contractor's Work.

ARTICLE 3 Compensation

a. Contractor agrees to receive and accept an amount not to exceed ONE HUNDRED NINETY THOUSAND NINE HUNDRED SIXTY DOLLARS and 00/100 (\$190,960.00) as compensation for furnishing all materials and doing all the Work contemplated and embraced in this Contract. Said compensation covers (1) all loss or damage arising out of the nature of the Work, from the acts of the elements; (2) any unforeseen difficulties or obstructions which may arise or be encountered in the prosecution of the Work until its acceptance by City, other than as provided below; (3) all risks of every description connected with the Work; (4) all expenses incurred by or in consequence of the suspension or discontinuance of the Work; and (5) well and faithfully completing the Work, and for the whole thereof, in the manner and according to the

Plans and Specifications, and requirements of the Authorized City Representative under them. Retention amounts shall be withheld from progress payments as required by law unless Contractor provides securities in lieu of retention.

b. In addition to the scheduled Work to be performed by the Contractor, the parties recognize that additional, unforeseen work and services may be required by the Authorized City Representative. In anticipation of such contingencies, the sum of NINETEEN THOUSAND NINETY-SIX DOLLARS and 00/100 (\$19,096.00) has been added to the total compensation of this Contract. The Authorized City Representative may approve the additional work and the actual costs incurred by the Contractor in performance of additional work or services in accordance with such amount as the Authorized City Representative and the Contractor may agree upon in advance. Said additional work or services and the amount of compensation therefor, up to the amount of the authorized contingency, shall be memorialized in the form of a Contract Amendment approved by the City Manager on a form acceptable to the City Attorney. The Contractor agrees to perform only that work or those services that are specifically requested by the Authorized City Representative. Any and all additional work and services performed under this Contract shall be completed in such sequence as to assure their completion as expeditiously as is consistent with professional skill and care in accordance with a cost estimate or proposal submitted to and approved by the Authorized City Representative prior to the commencement of such Work or services.

c. The total amount of compensation under this Contract, including contingencies, shall not exceed TWO HUNDRED TEN THOUSAND FIFTY-SIX DOLLARS and 00/100 (\$210,056.00).

ARTICLE 4 Licenses

Contractor represents that it and any subcontractors it may engage, possess any and all licenses which are required under state or federal law to perform the Work contemplated by this Contract and that Contractor and subcontractors shall maintain all appropriate licenses, including a City of Orange business license, at its cost, during the performance of this Contract.

ARTICLE 5 Guarantees

a. Contractor guarantees the construction and installation of all Work included in the Plans and Specifications for which Contractor has been awarded this Contract.

b. Should any of the materials or equipment installed pursuant to this Contract prove defective or should the Work as a whole prove defective, due to faulty equipment, workmanship, materials furnished or methods of installations, or should said Work or any part thereof fail to function properly, as designed, due to any of the above causes within twelve (12) months after the date on which said Work is accepted by City, Contractor shall make repairs and furnish such materials and equipment as are necessary to be furnished and installed within fifteen (15) calendar days after the receipt of a demand from City.

c. Said Work will be deemed defective within the meaning of this guarantee in the event that it fails to function as originally intended either by the Plans and Specifications of this Contract or by the manufacturer(s) of the equipment incorporated into the Work.

d. In the event repairs are not made within fifteen (15) calendar days after Contractor's receipt of a demand from City, City shall have the unqualified option to make any needed repairs or replacements itself or by any other contractor. Contractor shall reimburse City, upon demand, for all expenses incurred in restoring said Work to the condition contemplated in this Contract, including the cost of any equipment or materials replaced.

e. It is understood that emergency repairs may, by necessity, be made by City. Therefore, when defective equipment, materials or workmanship result in emergency repairs by City, Contractor shall reimburse City, upon demand, for all expenses incurred. Emergency repairs will be deemed as those repairs determined by City's Director of Public Works to be necessary due to an immediate detriment to the health, safety, welfare or convenience of the residents of City.

ARTICLE 6 Water Quality

a. The Santa Ana Regional Water Quality Control Board ("RWQCB") has issued National Pollutant Discharge Elimination System ("NPDES") Permit No. R8-2009-0030 (the "Permit"), which governs storm water and non-storm water discharges resulting from municipal activities performed by City or its contractors. In order to comply with the Permit requirements, the County of Orange has prepared a Drainage Area Management Plan ("DAMP"), containing Model Maintenance Procedures with Best Management Practices ("BMPs") that City and its contractors must adhere to. The Model Maintenance Procedures contain pollution prevention and source control techniques to minimize the impact of those activities upon dry-weather urban runoff, storm water runoff, and receiving water quality. Examples include: wash water from cleaning of sidewalks or parking lots must be collected and disposed of in the sewer or landscaped areas.

b. The Permit, the DAMP and the Model Maintenance Procedures are on file in the office of City's Director of Public Works. Contractor hereby acknowledges that it has read, reviewed and understands the Permit, the DAMP and the Model Maintenance Procedures, as they relate to the Work and hereby shall perform the Work in conformance therewith.

ARTICLE 7 Independent Contractor; Contractor not Agent

a. At all times during the term of this Contract, Contractor shall be an independent contractor and not an employee of City. City shall have the right to control Contractor only insofar as the result of Contractor's services rendered pursuant to this Contract. City shall not have the right to control the means by which Contractor accomplishes services rendered pursuant to this Contract. Contractor shall, at its sole cost and expense, furnish all facilities, materials and

equipment which may be required for furnishing services pursuant to this Contract. Contractor shall be solely responsible for, and shall indemnify, defend and save City harmless from all matters relating to the payment of its subcontractors, agents and employees, including compliance with social security, withholding and all other wages, salaries, benefits, taxes, exactions, and regulations of any nature whatsoever. Contractor acknowledges that Contractor and any subcontractors, agents or employees employed by Contractor shall not, under any circumstances, be considered employees of City, and that they shall not be entitled to any of the benefits or rights afforded employees of City, including, but not limited to, sick leave, vacation leave, holiday pay, Public Employees Retirement System benefits, or health, life, dental, long-term disability or workers' compensation insurance benefits.

b. Except as City may specify in writing, Contractor shall have no authority, express or implied, to act on behalf of City in any capacity whatsoever as an agent. Contractor shall have no authority, express or implied, to bind City to any obligation whatsoever.

ARTICLE 8

Public Work; Prevailing Wage

a. The Work which is the subject of this Contract is a “public work,” as that term is defined in Section 1720 of the California Labor Code, for which prevailing wages must be paid. To the extent Contractor’s employees will perform any work that falls within any of the classifications for which the Department of Labor Relations of the State of California promulgates prevailing wage determinations, Contractor hereby agrees that Contractor, and any subcontractor under it, shall pay not less than the specified prevailing rates of wages to all such workers. The general prevailing wage determinations for crafts can be located on the website of the Department of Industrial Relations (www.dir.ca.gov/DLSR). Additionally, to perform work under this Contract, Contractor must meet all State registration requirements and criteria, including project compliance monitoring.

b. Attached hereto as Attachment No. 1 and incorporated herein by this reference is a copy of the provisions of Sections 1725.5, 1771, 1771.1, 1771.4, 1775, 1776, 1777.5, 1813 and 1815 of the California Labor Code. Contractor hereby acknowledges that it has read, reviewed and understands those provisions of the Labor Code and shall prosecute and complete the Work under this Contract in strict compliance with all of those terms and provisions.

c. Contractor shall secure the payment of compensation to its employees in accordance with the provisions of Section 3700 of the California Labor Code. Accordingly, and as required by Section 1861 of the California Labor Code, Contractor hereby certifies as follows:

“I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract.”

d. Contractor shall indemnify, protect, defend and hold harmless City and its officers, employees, contractors and agents, with counsel reasonably acceptable to City, from and against any and all loss, liability, damage, claim, cost, expense, and/or “increased costs” (including reasonable attorney’s fees, court and litigation costs, and fees of expert witnesses) which result or arise in any way from the noncompliance by Contractor of any applicable local, state and/or federal law, including, without limitation, any applicable federal and/or state labor laws (including, without limitation, the requirement to pay state prevailing wages). It is agreed by the parties that, in connection with the construction of the Work which is the subject of this Contract, Contractor shall bear all risks of payment or non-payment of state prevailing wages. “Increased costs” as used in this paragraph shall have the meaning ascribed to it in Labor Code Section 1781, as the same may be enacted, adopted or amended from time to time. The foregoing indemnity shall survive termination of this Contract.

ARTICLE 9 Equal Employment Opportunity

During the performance of this Contract, Contractor agrees as follows:

a. Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law. Contractor shall ensure that applicants are employed and that employees are treated during employment, without regard to their race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law. Such actions shall include, but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation and selection for training, including apprenticeship. Contractor shall post in conspicuous places, available to employees and applicants for employment, a notice setting forth provisions of this non-discrimination clause.

b. Contractor shall, in all solicitations and advertisements for employees placed by, or on behalf of Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law.

c. Contractor shall cause the foregoing paragraphs (a) and (b) to be inserted in all subcontracts for any Work covered by this Contract, provided that the foregoing provisions shall not apply to subcontracts for standard commercial supplies or raw materials.

ARTICLE 10 Conflicts of Interest

Contractor agrees that it shall not make, participate in the making, or in any way attempt to use its position as a contractor to influence any decision of City in which Contractor knows or has reason to know that Contractor, its officers, partners, or employees have a financial interest as defined in Section 87103 of the Government Code. Contractor further agrees that it shall not be eligible to work as the builder for any project for which the design work is part of this Contract.

ARTICLE 11
Indemnity

Contractor shall defend, indemnify and hold harmless City and its officers, officials, agents, and employees from and against:

a. Any and all claims, liabilities, losses, damages, penalties, costs or expenses (including reasonable attorneys' fees and court costs) which City may directly or indirectly sustain or suffer arising from or as a result of the death of any person or any accident, injury, loss or damage whatsoever caused to any person or the property of any person which shall occur on or adjacent to the real property which is the subject of this Contract, or in connection with performance of this Contract which may be directly or indirectly caused by the acts or omissions of Contractor or its officers, employees, contractors or agents, or as a consequence of any use, generation, manufacture, storage, disposal, release or threatened release of a hazardous waste or substance. Contractor shall not be responsible for (and such indemnity shall not apply to) any willful misconduct, negligence or breach of this Contract by City or its officers, officials, agents, and employees. The foregoing indemnity shall survive termination of this Contract.

b. Any and all claims under workers' compensation acts and other employee benefit acts with respect to Contractor's employees or Contractor's subcontractor's employees arising out of Contractor's Work under this Contract, including any and all claims under any law pertaining to Contractor's status as an independent contractor.

ARTICLE 12
Insurance

a. Contractor shall procure and maintain for the duration of this Contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Work hereunder and the results of that Work by Contractor, its agents, representatives, employees or subcontractors.

b. Contractor shall maintain the following minimum amount of insurance: the greater of either the limits set forth in (1) through (4), below; or all of the insurance coverage and/or limits carried by or available to Contractor.

- | | | |
|-----------------------|-------------|--|
| (1) General Liability | \$2,000,000 | per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit. |
|-----------------------|-------------|--|

g. All insurance procured and maintained by Contractor shall be issued by insurers admitted to conduct the pertinent line of insurance business in California and having a rating of Grade A or better and Class VII or better by the latest edition of Best Key Rating Guide.

h. Contractor shall immediately notify City if any required insurance lapses or is otherwise modified and cease performance of this Contract unless otherwise directed by City. In such a case, City may procure insurance or self-insure the risk and charge Contractor for such costs and any and all damages resulting therefrom by way of set-off from any sums owed Contractor.

i. Contractor agrees that in the event of loss due to any of the perils for which it has agreed to provide insurance, Contractor shall look solely to its insurance for recovery. Contractor hereby grants to City, on behalf of any insurer providing insurance to either Contractor or City with respect to the services of Contractor herein, a waiver of any right to subrogation which any such insurer may acquire against City by virtue of the payment of any loss under such insurance. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of City for all Work performed by Contractor, its employees, agents and subcontractors. Contractor shall obtain any other endorsement that may be necessary to effect this waiver of subrogation.

j. Contractor shall require and verify that all subcontractors maintain insurance meeting all of the requirements stated herein.

ARTICLE 13 Termination

City, acting through its City Manager or his/her designee, reserves the right to terminate this Contract for any reason by giving five (5) days' written notice of intent to terminate to Contractor. Upon receipt of notice, Contractor shall immediately cease work, unless the notice provides otherwise. Should City terminate this Contract, City shall pay Contractor for services satisfactorily provided and all allowable reimbursements incurred to the date of termination in compliance with this Contract, unless such termination shall be for cause, in which event City may withhold any disputed compensation. City shall not be liable for any claim of lost profits.

ARTICLE 14 Maintenance and Inspection of Records

In accordance with generally accepted accounting principles, Contractor and its subcontractors shall maintain reasonably full and complete books, documents, papers, accounting records and other information (collectively, the "records") pertaining to the costs of and completion of services performed under this Contract. During the term of this Contract and for a period of three (3) years after termination or completion of this Contract, City shall have the right to inspect and/or audit Contractor's records pertaining to the performance of this Contract at Contractor's office. Contractor shall make available all such records for inspection or audit at its offices during normal business hours and upon three (3) days' notice from City, and copies thereof shall be furnished if requested.

ARTICLE 15
Compliance with Laws

a. Contractor shall be knowledgeable of and comply with all local, state and federal laws pertaining to the subject matter hereof or in any way regulating the activities undertaken by Contractor or any subcontractor hereunder.

b. Contractor represents and warrants that it:

(1) Has complied and shall at all times during the term of this Contract comply, in all respects, with all immigration laws, regulations, statutes, rules, codes, and orders, including, without limitation, the Immigration Reform and Control Act of 1986 (IRCA); and

(2) Has not and will not knowingly employ any individual to perform services under this Contract who is ineligible to work in the United States or under the terms of this Contract; and

(3) Has properly maintained, and shall at all times during the term of this Contract properly maintain, all related employment documentation records including, without limitation, the completion and maintenance of the Form I-9 for each of Contractor's employees; and

(4) Has responded, and shall at all times during the term of this Contract respond, in a timely fashion to any government inspection requests relating to immigration law compliance and/or Form I-9 compliance and/or worksite enforcement by the Department of Homeland Security, the Department of Labor, or the Social Security Administration.

c. Contractor shall require all subcontractors and/or subconsultants to make the same representations and warranties required by this Article 15 when hired to perform services under this Contract.

d. Contractor shall, upon request of City, provide a list of all employees working under this Contract and shall provide, to the reasonable satisfaction of City, verification that all such employees are eligible to work in the United States. All costs associated with such verification shall be borne by Contractor. Once such request has been made, Contractor may not change employees working under this Contract without written notice to City, accompanied by the verification required herein for such employees. Contractor shall require all subcontractors and/or sub-consultants to make the same verification when hired to perform services under this Contract.

e. If Contractor, or a subcontractor or subconsultant, knowingly employs an employee providing Work under this Contract who is not authorized to work in the United States, and/or fails to follow federal laws to determine the status of such employee, such shall constitute a material breach of this Contract and may be cause for immediate termination of this Contract by City.

f. Contractor shall indemnify and hold City, its officials and employees harmless for, of and from any loss, including but not limited to fines, penalties and corrective measures, City

may sustain by reason of Contractor's failure to comply with said laws, rules and regulations in connection with the performance of this Contract.

ARTICLE 16
Governing Law and Venue

This Contract shall be construed in accordance with and governed by the laws of the State of California and Contractor shall submit to the jurisdiction of California courts. Venue for any dispute arising under this Contract shall be in Orange County, California.

ARTICLE 17
Integration and Amendment

a. This Contract constitutes the entire agreement of the parties. No other agreement, oral or written, pertaining to the Work to be performed under this Contract shall be of any force or effect unless it is in writing and signed by both parties. Any Work performed which is inconsistent with or in violation of the provisions of this Contract shall not be compensated.

b. Amendments to this Contract must be in writing and signed by both parties. The City Manager is authorized to execute amendments to this Contract up to the amounts specified in Chapter 3.08 of the Orange Municipal Code.

ARTICLE 18
Notice

Except as otherwise provided herein, all notices required under this Contract shall be in writing and delivered personally, by e-mail, or by first class mail, postage prepaid, to each party at the address listed below. Either party may change the notice address by notifying the other party in writing. Notices shall be deemed received upon receipt of same or within three (3) days of deposit in the U.S. Mail, whichever is earlier. Notices sent by e-mail shall be deemed received on the date of the e-mail transmission.

“CONTRACTOR”

Academy Electric, Inc.
864 South Winthrop Street
Orange, CA 92869
Attn: Donald B. Gentry

Telephone: 714-289-9143
E-Mail: don@academyelectric.net

“CITY”

City of Orange
300 E. Chapman Avenue
Orange, CA 92866-1591
Attn: Don Equitz

Telephone: 714-744-6464
E-Mail: dequitz@cityoforange.org

**ARTICLE 19
Claim Resolution**

City and Contractor agree that the claim resolution process applicable to any claim by Contractor in connection with the Work provided herein shall be subject to the procedures set forth in California Public Contract Code Section 9204, attached hereto as Attachment No. 2, and incorporated herein by this reference.

**ARTICLE 20
Counterparts**

This Contract may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Signatures transmitted via facsimile and electronic mail shall have the same effect as original signatures.

“CITY”

CITY OF ORANGE, a municipal corporation

By: _____
Mark A. Murphy
Mayor of the City of Orange

CONTRACT, BONDS AND INSURANCE
APPROVED BY:

ATTEST:

Mary E. Binning
Senior Assistant City Attorney

Pamela Coleman, City Clerk

“CONTRACTOR”

ACADEMY ELECTRIC, INC.,
a California corporation

[Note: Signature of Chairman of the Board, President or Vice President is required]

By: _____
Printed Name: _____
Title: _____

[Note: Signature of Secretary, Assistant Secretary, Chief Financial Officer or Assistant Treasurer is also required]

By: _____
Printed Name: _____
Title: _____

EXHIBIT “A”

**REQUEST FOR BIDS, CONTRACTOR’S BID AND
CONSTRUCTION PLANS**

[Behind this sheet.]



CITY OF ORANGE

COMMUNITY SERVICES DEPARTMENT www.cityoforange.org PHONE: (714) 744-7274 • FAX: (714) 744-7251

REQUEST FOR BID (RFB)
ELECTRICAL PANEL REPLACEMENT FOR MCPHERSON AND KILLEFER PARK
Bid No. 190-60

COMMUNITY SERVICES DEPARTMENT

230 E. Chapman Ave.
 Orange, CA 92866
 (714) 744-7274

Date: July 2, 2020

Project Name: Electrical Panel Replacement for McPherson Athletic Facility & Killefer Park

Location Address: **McPherson Athletic Facility- 333 S. Prospect Ave.,
 Orange CA, 92869**
Killefer- 615 N. Lemon Street, Orange CA, 92867

Contact Name: Don Equitz Sr. Landscape Project Coordinator
 Phone: 714-532-6464
 E-Mail Address: dequitz@cityoforange.org

PROJECT DESCRIPTION: The City of Orange, CA, a Municipal Corporation, is requesting qualified Electrical Contractors to provide bids in accordance with specifications detailed within the approved plans prepared by **P2S Engineering** and within this RFB. All work shall also conform to City of Orange codes, ordinances and standards. The work will generally include:

Demolition/removal of the existing electrical panels/service equipment/vaults, provide temporary power during 'power outage' phase of project, installation of new concrete base and new electrical panels/service equipment/vaults and re connecting of electrical power at McPherson Athletic Facility and Killefer Park (see Attachment 2).

LEGAL NOTICE:

Formal sealed bids are being invited under our **Bid No. 190-60, Electrical Panel Replacement for McPherson Athletic Facility & Killefer Park** in accordance with bid forms and specifications available at the office of the City Purchasing Officer, 300 East Chapman Avenue, Orange, California, 92866, at no cost. The publication, "City of Orange Standard Plans and Specifications", latest edition and addendum(a) shall govern the work under this contract and a copy of the City publication is available at the office of the City Engineer at no cost.

The bidder selected by the City for the award of a contract for this Project must be properly licensed in accordance with the laws of the State of California as a General Engineering Contractor (Class A), General Building Contractor (Class B), or C-10 Electrical Contractor, at the time of submitting its bid. The City will reject the bid of a bidder as being non-responsive if the bidder does not hold the requisite contractor's license at the time of submitting its bid; such a bidder shall be subject to all legal penalties imposed by law, including, but not limited to, any appropriate disciplinary action by the Contractors' State License Board. In addition, each subcontractor listed by the bidder shall possess, both at the time of the award of a contract to the bidder and at all times when work is performed, a valid contractor's license for the appropriate classification necessary to perform the work for which that subcontractor is listed. Failure of the bidder to deliver evidence to the City prior to the award of a contract for this project that each and every subcontractor listed by the bidder is properly licensed for the classification necessary to perform the work for which that subcontractor is listed, shall constitute a failure to execute the contract and may subject the bidder to all legal penalties imposed by law, including, but not limited to, forfeiture of the security of the bidder.

GENERAL PROVISIONS:

1. **A job walk has been scheduled for Monday, July 20, 2020 at 9:00 a.m. Job Walk locations to be McPherson Athletic Facility (first stop) and then Killefer Park (second stop).**
2. NOTE: All electrical construction/installation work shall be performed accordance to all applicable codes listed within the approved plans and in adherence to the current edition of the CalTrans "Green Book" and the City of Orange Park Development Standards and Specifications.
3. The Contractor shall, at all times, carry valid insurance which meets all City of Orange insurance requirements as outlined in **Attachment No. 1**.
4. The Contractor shall be registered with Department of Industrial Relations (DIR), the State of California per Labor Code Section 177.1(a) at the time of bid. The Contractor shall pay prevailing wages per the current Department of Industrial Relations wage rate (including all scheduled increases) and furnish Certified Payroll Reports for all work days.
5. No new access points will be allowed within the boundaries/scope of this project. The Contractor is to prepare estimates for work based upon the existing ingress/egress into the park facility.
6. Working hours will be per City of Orange ordinance. Weekend work will only take place with permission from the City of Orange.
7. The contractor is responsible for carrying all pertinent licenses/permits for accomplishing this work.
8. Minimum California Contractors licenses required to bid on and perform work as described within this RFB:

1. (A) General Engineering Contractor.
 2. (B) General Building Contractor.
 3. C-10 Electrical Contractor.
9. If applies, the contractor shall be required to provide a \$1,500.00 deposit for use of a City water meter on a City fire hydrant, if required. Contractor shall be charged \$2.75/day for water meter rental and shall be responsible for all water charges associated with project. Consumption charge of \$2.59 per hundred cubic feet of water.
 10. All vehicles used by the contractor are to be identified with door signs (approx. 20" x 16", magnetic sign okay) or equivalent with the company name and phone number. These need to be visible from both sides of said vehicle.
 11. Uniforms: All of contractor's employees shall wear appropriate uniforms at all times while on duty. Uniforms must have the contractor's name.
 12. Background/Security: All personnel engaged in performance of this work shall be employees of the contractor and as such shall be warranted to possess sufficient experience and security records to perform this work.

SCOPE OF WORK AND PROJECT SPECIFICATIONS PER APPROVED PLANS:

SITE PREPARATION:

1. Coordinate, orchestrate and provide the de-energizing of the existing electrical panels/service equipment.
2. Supply/provide temporary power supply for the Athletic Facility and/or Park during construction.
3. Supply all equipment and labor necessary for the demolition/removal of the existing electrical panels/service equipment and existing concrete base. All demolition materials are to be disposed off site at the expense of the Contractor.
4. Re-establish and provide new and/or amended/compacted sub grade (to 95% compaction) for the installation the new concrete base.
5. Supply/install new electrical panels/service equipment.
6. Re-energize new electrical panels/service equipment.
7. The contractor is responsible for making him/herself familiar with all existing site conditions at the work site within the boundaries detailed in the approved plans including, but not limited to, ingress/egress, soil, terrain, water supply and parking.
8. The contractor is to at all times during construction maintain/keep the job site in a safe condition. This will include, but not be limited to, the filling or covering of all exposed/open trenches or holes and securing all electrical equipment.
9. At the conclusion of each day's work, the Contractor shall remove all tools and equipment from the job site. The Contractor may arrange, with City staff, for a locked storage bin to be kept on site for tools and/or equipment storage.
10. Supply temporary barrier fencing during construction. Barrier fencing to be six feet tall chain link free standing type. Fencing to surround entire area of construction.

SPECIAL INSTRUCTIONS:

1. Contractor to submit a 10% Bid Bond with bid package.
2. This project requires a payment bond.
3. This project is subject to a 5% retention.

4. **The Contractor shall provide with this RFB a minimum of three (3) references** of commensurate/equal electrical work with cities and/or municipalities. References shall represent/include:
 - Work completed within the last five (5) years.
 - A description and location of said electrical work.
 - An approximate cost of said electrical work.
 - A contact person, email address and phone number to verify electrical work.
5. A detailed work schedule must be submitted with the RFB response and approved by the City of Orange prior to the beginning of work on this project. Work hours are between 7:00 a.m. to 4:00 p.m.
6. The City reserves the right to reject any contractor who they feel does not meet a qualifying work experience or satisfying references.
7. The City reserves the right to reject at any time any or all bids, or parts thereof, and to waive any variances, technicalities and informalities which do not impair the quality, or performance of the project.
8. Existing site amenities (e.g., building, fencing, sidewalks, curbs, landscape, etc.) are to be protected from all construction work. Any damage to any existing site amenities will be repaired or replaced at the contractor's expense to the satisfaction of the City of Orange.
9. All construction work per the approved plans is to be completed within **35 working days** from a Notice to Proceed (NTP) from the City of Orange. A 'working day' is considered to be Monday through Friday, excluding weekends, holidays and rain (weather related) delay days. Failure to complete all work as described within this bid request and the 35 working days will result in 'Liquidated Damages' being applied to the Contractor at a rate of \$400.00 per day.
10. **All technical questions regarding RFB 190-60 are to be submitted by email to Don Equitz at dequitz@cityoforange.org, by July 23, 2020 by 2:00 p.m.**

TIME LINE (APPROXIMATE):

- | | |
|--|----------------------------------|
| 1. Job walk: | July 20, 2020, 2020 at 9:00 a.m. |
| 2. Deadline for questions regarding RFB: | July 23, 2020 by 2:00 p.m. |
| 3. Bids due: | August 6, 2020 by 2:00 p.m. |
| 4. Presentation to City Council: | October 13, 2020 |
| 5. Notice to Proceed (NTP): | TBD |
| 6. Work to be completed by: | 35 working days from NTP |

BID SUBMISSION INSTRUCTIONS:

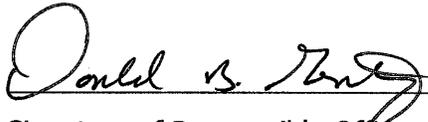
Bids must be submitted to the City Clerk at 300 E. Chapman Ave., Orange, CA 92866 by 2:00 p.m. on Thursday, August 6, 2020. Responses may be sent via U.S. Mail or delivered in person to the above address. Provide response to the above REQUEST FOR BIDS on attached bid sheets and return all pages of the Request for Bids, addenda (if applicable), bonds, schedule, and references. **Please provide three copies of bid packets.** Label submission packet: **RFB 190-60 Electrical Panel Replacement for McPherson Athletic Facility & Killefer Park.** Contact Natalie Favela for any questions related to bid submission at nfavela@cityoforange.org.

The City reserves the right to reject any and all **Bids** and any item on items therein, and to waive any non-conformity of **Bids** with this Request for Bids, whether of a technical or substantive nature, as the interest of the City may require.

**ELECTRICAL PANEL REPLACEMENT FOR MCPHERSON ATHLETIC FACILITY
& KILLEFER PARK**

BID SHEET

Date: August 6, 2020
 Bid Submitted by: Donald B. Gentry
 Company Name: Academy Electric, Inc.
 Address: 864 South Winthrop Street
Orange, California 92869
 Phone #: 714-289-9143
 E-mail Address: don@academyelectric.net
 Contact Name: Donald B. Gentry


 Signature of Responsible Officer or Employee

Donald B. Gentry
 Print Name

PROJECT

PROJECT NAME: Electrical Panel Replacement for McPherson Athletic Facility & Killefer Park
 Location Address: McPherson Athletic Facility- 333 S. Prospect Ave., Orange CA, 92869
 Killefer- 615 N. Lemon Street, Orange CA, 92867
 Contact Names: Don Equitz, Sr. Landscape Project Coordinator
 Phone Number: 714-532-6464
 E-Mail Address: dequitz@cityoforange.org

The stated bid amount below constitutes the total dollar amount to perform the work described in the above scope of services and to include all that is required to provide the work product and/or install all materials required to complete the work to a professional workmanship standard, and to install and apply all materials per the approved plans and all manufacturer's specifications and recommendations.

Contractor represents and warrants that it has thoroughly investigated and considered the scope of services and fully understands the difficulties and restrictions in performing the work. Contractor represents that it is experienced in performing the work and will follow professional standards in performance of the work. All services provided shall conform to all federal, state and local laws, rules and regulations and to the best professional standards and practices.

A. McPherson Athletic Facility Bid Amount: \$ 65,223⁰⁰

B. Killefer Park Bid Amount: \$ 125,737⁰⁰

Total Project Bid Amount: \$ 190,960⁰⁰

**Electrical Panel Replacement
For
McPherson Athletic Facility & Killefer Park**

LABOR PRICING

All bidders are required to provide the following itemized labor cost figures. These figures shall be used by the City for additions/deletions to the contract, extra work, or for payment adjustments. All itemized labor pricing shall include all comprehensive fees including, but not limited to, labor, overhead, profit and any additional fees.

Labor Pricing

1. General laborer	per hour	\$ <u>90.00</u>
2. Foreman	per hour	\$ <u>115.00</u>
3. Superintendent	per hour	\$ <u>123.00</u>
4. Concrete finisher	per hour	\$ <u>95.00</u>
5. Equipment operator	per hour	\$ <u>105.00</u>
6. Electrician	per hour	\$ <u>106.00</u>

Note: Contractor's extra material costs will be charged to the City of Orange at cost plus 15%.

CITY OF ORANGE

COMMUNITY SERVICES DEPARTMENT
 230 E. CHAPMAN AVENUE
 ORANGE, CALIFORNIA 92866-1591
 (714) 744-7274

Academy Electric, Inc.
 Company Name (Bidder)

TO THE CITY COUNCIL OF THE CITY OF ORANGE:

In compliance with the notice inviting bids, plans, specifications and other contract documents for the construction of **Bid No. 190-60; Electrical Panel Replacement for McPherson and Killefer Park**, the undersigned has carefully examined: the location of the proposed work, character, quality and quantity of work to be performed, conditions to be encountered, materials to be furnished and as to the requirements of the plans, specifications and other contract documents; agrees that submission of a proposal shall be considered prima facie evidence that the bidder has made such examination; and proposes to furnish all labor, materials, tools, and equipment necessary to complete the work in accordance with said plans, specifications and other contract documents at the following unit or lump sum prices set forth in the schedule.

If awarded the contract, the undersigned agrees to commence the work under the contract within fifteen (15) days after the date of contract, and complete said work within **thirty-five (35) calendar days** from the first day of commencement of such work unless legal extension is granted in accordance with the terms set forth in the specifications. If undersigned is awarded more than one zone, the work must be completed consecutively.

The undersigned agrees that the foregoing estimate of quantities of work to be done and materials to be furnished are approximate only, being given as basis for the comparison of bids.

The undersigned agrees that the City will not be held responsible if any of the approximate quantities shown in the foregoing proposal shall be found incorrect, and shall not make any claim for damages or for loss of profits because of a difference between the quantities of the various classes of work as estimated and the work actually done. If any error, omission or mis-statement shall be discovered in the estimated quantities, it shall not invalidate this contract or release the undersigned from the execution and completion of the whole or part of the work herein specified, in accordance with the specifications and the plans herein mentioned and the prices herein agreed upon and fixed therefore, or excuse him from any of the obligations or liabilities hereunder, or entitle him to any damages or compensation otherwise than as provided for in this contract.

The undersigned agrees that the City shall have the right to increase or decrease the quantity of any bid item or portion of the work or to omit portions of the work as may be deemed necessary or expedient, and that the payment for incidental items of work not separately provided in the proposal shall be considered included in the price bid for other various items of work.

Accompanying this proposal is "Bidder's Bond" (\$ 19,096.00)

NOTICE: Insert the words "Cash", "Certified Check", or "Bidder's Bond", as the case may be, in an amount equal to at least 10 percent of the total bid price, payable to the City of Orange to guarantee that the bidder will, if awarded the contract, promptly execute such contract in accordance with the

proposal and in the manner and form required by the contract documents, and will furnish good and sufficient bonds for the faithful performance of the same.

The undersigned deposits the above named security as a proposal guaranty and agrees that it shall be forfeited to the City of Orange as liquidated damages in case this proposal is withdrawn by the undersigned and the undersigned shall fail to execute a contract for doing said work and to furnish good and sufficient bonds in the form set forth in the specifications and contract documents of the City, with surety satisfactory to the City within 15 days after the bidder has received written notice of the award of the contract; otherwise, said security shall be returned to the undersigned.

Bidder hereby declares in writing, under penalty of perjury that all employees who will be performing labor, maintenance, delivery, installation or repair, will be those who are legally entitled to live and work in the United States. Further, the bidder as employer agrees to provide documentary proof of such eligibility (when requested by the City of any other authorized entity or agency).

Bids are to be submitted for the entire work. The bidder shall set forth for each unit basis item of work a unit price and a total for the item, and for each lump sum item a total for the item, all in clearly legible figures in the respective spaces provided for that purpose. In the case of unit basis items, the amount set forth under the "Item Total" column shall be the product of the unit price bid and the estimated quantity for the item. In case of discrepancy between the unit price and the total set forth for a unit basis item, the unit price shall prevail, except as provided in (a) or (b), as follows:

(a) If the amount set forth as a unit price is unreadable or otherwise unclear, or is omitted, or is the same as the amount as the entry in the item total column, then the amount set forth in the item total column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price;

(b) (Decimal Errors) If the product of the entered unit price and the estimated quantity is exactly off by a factor of ten, one hundred, etc., or one-tenth, or one-hundredth, etc. from the entered total, the discrepancy will be resolved by using the entered unit price or item total, whichever most closely approximates percentage wise the unit price or item total in the City of Orange Final Estimate of cost.

If both the unit price and the item total are unreadable or otherwise unclear, or are omitted, the bid may be deemed irregular. Likewise if the item total for a lump sum item is unreadable or otherwise unclear, or is omitted, the bid may be deemed irregular unless the project being bid has only a single item and a clear, readable total bid is provided.

Symbols such as commas and dollar signs will be ignored and have no mathematical significance in establishing any unit price or item total or lump sums. Written unit prices, item totals and lump sums will be interpreted according to the number of digits and, if applicable, decimal placement. Cents symbols also have no significance in establishing any unit price or item total since all figures are assumed to be expressed in dollars and/or decimal fractions of a dollar. Bids on lump sum items shall be item totals only; if any unit price for a lump sum item is included in a bid and it differs from the item total, the items total shall prevail.

The foregoing provisions for the resolution of specific irregularities cannot be so comprehensive as to cover every omission, inconsistency, error or other irregularity which may occur in a bid. Any situation not specifically provided for will be determined in the discretion of the City of Orange, and that discretion will be exercised in the manner deemed by the City of Orange, to best protect the public interest in the prompt and economical completion of the work. The decision of the City of Orange respecting the amount of a bid, or the existence or treatment of an irregularity in a bid, shall be final.

Bond No. N/A

**CALIFORNIA PUBLIC WORKS
BID BOND**

TO WHOM IT MAY CONCERN:

WE, Academy Electric, Inc. (CONTRACTOR) as Principal, and United Surety Insurance Company (SURETY), a Corporation organized and existing under the laws of the State of Nebraska and authorized to transact business in the State of California, as Surety, are held and firmly bound unto the **CITY OF ORANGE**, hereinafter called the Oblige, for the penal sum of **Ten Percent (10%) of the Amount of the Bid** as described herein and we each of us bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, by this Bid Bond.

WHEREAS, the Principal is herewith submitting a bid for Bid No. 190-60; Electrical Panel Replacement for McPherson and Killefer Park

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH that if the Principal shall be awarded the contract, and the Principal does within the period specified therefor, or, if no period be specified, within ten (10) days after the notice of such award, enter into a contract and give bond or bonds as specified in the bidding or contract documents with good and sufficient surety of adequate financial size category rating acceptable to the Oblige for the faithful performance of the contract and for the prompt payment of labor and material furnished in the prosecution thereof, then this obligation shall be null and void. Otherwise the Principal and the Surety will pay to the Oblige the difference in money between the amount of the bid of the Principal and the amount for which the Oblige may legally contract with another party to perform the work if the latter amount be in excess of the former. In no event shall the liability hereunder exceed the penal sum hereof.

SIGNED AND SEALED this 30th day of July, 2020.

Academy Electric, Inc.
CONTRACTOR

BY: 
SECRETARY/TREASURER

BY: 
PRESIDENT/VICE PRESIDENT

United Surety Insurance Company
NAME OF SURETY

BY: 
ATTORNEY-IN-FACT
Kelly A. Specht

NOTARY ACKNOWLEDGEMENTS ATTACHED

California All-Purpose Certificate of Acknowledgment

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California }
County of Orange } s.s.

On July 30, 2020 before me, Bethany Mercer, Notary Public
Name of Notary Public, Title

personally appeared Kelly A. Specht
Name of Signer (1)

N/A
Name of Signer (2)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Bethany Mercer
Signature of Notary Public



Seal

OPTIONAL INFORMATION

Although the information in this section is not required by law, it could prevent fraudulent removal and reattachment of this acknowledgment to an unauthorized document and may prove useful to persons relying on the attached document.

Description of Attached Document

The preceding Certificate of Acknowledgment is attached to a document titled/for the purpose of Bid Bond

containing 1 pages, and dated July 30, 2020

The signer(s) capacity or authority is/are as:

- Individual(s)
- Attorney-in-fact
- Corporate Officer(s) _____
Title(s)

- Guardian/Conservator
- Partner - Limited/General
- Trustee(s)
- Other: _____

representing: United Surety Insurance Company
Name(s) of Person(s) Entity(ies) Signer is Representing

Additional Information

Method of Signer Identification

Proved to me on the basis of satisfactory evidence:
 form(s) of identification credible witness(es)

Notarial event is detailed in notary journal on:

Page # _____ Entry # _____

Notary contact: _____

Other

- Additional Signer Signer(s) Thumbprints(s)
- _____



UNITED CASUALTY AND SURETY INSURANCE COMPANY
US Casualty and Surety Insurance Company
United Surety Insurance Company

POWER OF ATTORNEY

Agency No. 171372

KNOW ALL MEN BY THESE PRESENTS: That United Casualty and Surety Insurance Company, a corporation of the State of Nebraska, and US Casualty and Surety Insurance Company and United Surety Insurance Company, assumed names of United Casualty and Surety Insurance Company (collectively, the Companies), do by these presents make, constitute and appoint:

Kelly A. Specht, Kandis Gregory, Richard P. Ford, Thomas C. Buckner, Michael Herranen, Bethany Mercer

its true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, with full power and authority hereby conferred in its name, place and stead, to execute, acknowledge and deliver any and all bonds, recognizances, undertakings or other instruments or contracts of suretyship to include riders, amendments, and consents of surety. This Power of Attorney shall expire without further action on December 31st, 2023.

This Power of Attorney is granted under and by authority of the following resolutions adopted by the Board of Directors of the Companies at a meeting duly called and held on the 1st day of July, 1993:

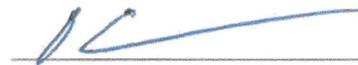
Resolved that the President, Treasurer, or Secretary be and they are hereby authorized and empowered to appoint Attorneys-in-Fact of the Company, in its name and as its acts to execute and acknowledge for and on its behalf as Surety any and all bonds, recognizances, contracts of indemnity, waivers of citation and all other writings obligatory in the nature thereof, with power to attach thereto the seal of the Company. Any such writings so executed by such Attorneys-in-Fact shall be binding upon the Company as if they had been duly executed and acknowledged by the regularly elected Officers of the Company in their own proper persons.

That the signature of any officer authorized by Resolutions of this Board and the Company seal may be affixed by facsimile to any power of attorney or special power of attorney or certification of either given for the execution of any bond, undertaking, recognizance or other written obligation in the nature thereof; such signature and seal, when so used being hereby adopted by the Company as the original signature of such officer and the original seal of the Company, to be valid and binding upon the Company with the same force and effect as though manually affixed.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed and their corporate seals to be hereunto affixed, this 1st day of August, 2019.



UNITED CASUALTY AND SURETY INSURANCE COMPANY
US Casualty and Surety Insurance Company
United Surety Insurance Company


Joel R. Chachkes, Treasurer

Corporate Seals

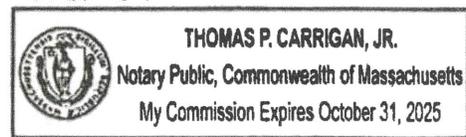
Commonwealth of Massachusetts
County of Suffolk ss:

On this 1st day of August, 2019, before me, Thomas P. Carrigan, Jr., a notary public, personally appeared Joel R. Chachkes, Treasurer of United Casualty and Surety Insurance Company, US Casualty and Surety Insurance Company and United Surety Insurance Company, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person(s), or the entity on behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the Commonwealth of Massachusetts that the foregoing paragraph is true and correct.
WITNESS my hand and seal.



Thomas P. Carrigan, Jr., Notary Public Commission Expires: 10/31/2025



I, Robert F. Thomas, Chief Operating Officer of United Casualty and Surety Insurance Company, US Casualty and Surety Insurance Company and United Surety Insurance Company do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney, executed by said Companies, which is still in full force and effect; furthermore, the resolutions of the Board of Directors, set out in the Power of Attorney are in full force and effect.

In Witness Whereof, I have hereunto set my hand and affixed the seals of said Companies at Boston, Massachusetts this 30th day of

July, 2020.

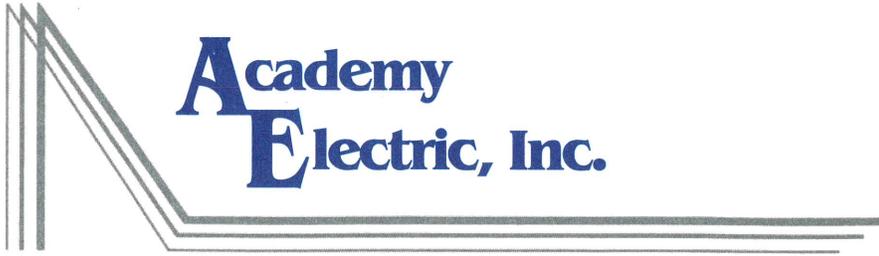
Corporate Seals





Robert F. Thomas, Chief Operating Officer

TO CONFIRM AUTHENTICITY OF THIS BOND OR DOCUMENT EMAIL: CONFIRMBOND@UNITEDCASUALTY.COM



License No. C-10 662841

Bid Clarifications

RFB 190-60

1. Addendum #1 included.
2. Delivery of new Square D switchboards is 16 to 20 weeks from receipt of approved submittals.
3. Project “actual” construction start will be three weeks before scheduled delivery date of new switchboards.



CITY OF ORANGE

COMMUNITY SERVICES DEPARTMENT www.cityoforange.org

PHONE: (714) 744-7274 • FAX: (714) 744-7251

ADDENDUM #1

For Request for Bid (RFB) Bid No. 190-60

Electrical Panel Replacement for McPherson and Killefer Park

July 27, 2020

This addendum serves as written notice of the following corrections, clarifications, additions and/or deletions to any and all copies of the Request for Bid (Bid No. 190-60).

Job Walk Comments:

- The engineer's estimate for this project is \$160,000.
- City permits are required for this job, but the associated fees will be waived for this project.
- The allotted number of working days for this project may be adjusted, upon approval of the City Representative, based on delays in ordering special parts, scheduling inspections, and equipment rentals.

Regarding Submitted Questions:

- 1. Are there as built drawings for underground conduits associated with McPherson Park and Killefer Park?**
 - The City has the original electrical plan sets for both Parks. Said plans are not 'red lined' as built plan sets. The assumptions are that conduits are installed per existing plan set.
- 2. During construction/demo phase, there will be time when power is completely shut down while cutting over from permanent power to temporary power. What is the maximum allowable time for an outage?**
 - 24 hours.

- 3. Page 4 note 9 of "special instructions" of bid documents states work completed to be "35 working days", while page 7, paragraph 2 states "35 calendar days". Please clarify if contract time is defined as working days or calendar days.**
 - Working days.

- 4. What type of backfill/encasement is required over new underground conduits? If concrete encasement is required, please provide a concrete design specification.**
 - No encasement is required.

- 5. Will there be any costs (Utility Fees) related to SCE and if so will the City will cover these fees?**
 - Any subsequent fees imposed by SCE are the responsibility of the Contractor. The City will not cover said fees.

- 6. Can we quote other switchboard manufacturers besides Square D shown on the drawings?**
 - No.

- 7. Normal delivery dates for new switchboards (after submittals have been approved) is 5 to 8 weeks. Will the 35 working day schedule be extended to allow for switchboard delivery without liquidated damages?**
 - Yes.

Respectfully Submitted,

Don Equitz
Sr. Landscape Project Coordinator
dequitz@cityoforange.org
714-532-6464

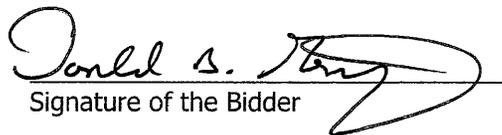
LIST OF SUBCONTRACTS

- A. The undersigned intends to subcontract a portion of this project to the following subcontracts (Note: Refer to Section 2.3 of the Standard Specifications and Section 4100 through 4113 of the California Contract Code for SUBCONTRACT DISCLOSURE REQUIREMENTS).

NAME OF SUBCONTRACTOR AND ADDRESS	LICENSE NO.	BID ITEM NUMBER(s)	PERCENT OF BID ITEM SUBBED	CHECK IF SPECIALITY	DESCRIBE WORK WHEN LESS THAN 100% OF WORK IS SUBBED	\$ AMOUNT BASED ON BID AMOUNT
Asplundh Const. 1428 N. Lemon Street Anaheim, CA. 92801	1028802	#3 ↓	100% ↓	✓ ✓ ✓	Concrete Pad Removal/Replace Excavation/Bacfill	\$ 35,834 ⁰⁰ ↓
DIR#1000052788						

- B. The undersigned DOES NOT INTEND to subcontract any portion of this project.

NOTE: The bidder shall check Box A or B as applicable. If the bidder does not check either box, it will be deemed that he has checked Box B.


Signature of the Bidder

PUBLIC CONTRACT CODE

Public Contract Code Section 10285.1 Statement

In conformance with Public Contract Code Section 10285.1 (Chapter 376, Stats. 1985), the bidder hereby declares under penalty of perjury under the laws of the State of California that the bidder has ____, has not been convicted

within the preceding three years of any offenses referred to in that section, including any charge of fraud, bribery, collusion, conspiracy, or any other act in violation of any state or Federal antitrust law in connection with the bidding upon, award of, or performance of, any public works contract, as defined in Public Contract Code Section 1101, with any public entity, as defined in Public Contract Code Section 1100, including the Regents of the University of California or the Trustees of the California State University. The term "bidder" is understood to include any partner, member, officer, director, responsible managing officer, or responsible managing employee thereof, as referred to in Section 10285.1.

Note: The bidder must place a check mark after "has" or "has not" in one of the blank spaces provided. The above Statement is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Statement. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

Public Contract Code Section 10162 Questionnaire

In conformance with Public Contract Code Section 10162, the Bidder shall complete, under penalty of perjury, the following questionnaire:

Has the bidder, any officer of the bidder, or any employee of the bidder who has a proprietary interest in the bidder, ever been disqualified, removed, or otherwise prevented from bidding on, or completing a federal, state, or local government project because of a violation of law or a safety regulation?

Yes ____ No

If the answer is yes, explain the circumstances in the following space.

Public Contract Code 10232 Statement

In conformance with Public Contract Code Section 10232, the Contractor, hereby states under penalty of perjury, that no more than one final unappealable finding of contempt of court by a federal court has been issued against the Contractor within the immediately preceding two year period because of the Contractor's failure to comply with an order of a federal court which orders the Contractor to comply with an order of the National Labor Relations Board.

Note: The above Statement and Questionnaire are part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Statement and Questionnaire. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

Non-collusion Affidavit

(Title 23 United States Code Section 112 and
Public Contract Code Section 7106)

To the CITY OF ORANGE – DEPARTMENT OF COMMUNITY SERVICES

In conformance with Title 23 United States Code Section 112 and Public Contract Code 7106 the bidder declares that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

Note: The above Non-collusion Affidavit is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Non-collusion Affidavit.

Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

DEBARMENT AND SUSPENSION CERTIFICATION

TITLE 49, CODE OF FEDERAL REGULATIONS, PART 29

The bidder, under penalty of perjury, certifies that, except as noted below, he/she or any other person associated therewith in the capacity of owner, partner, director, officer, manager:

- is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal agency;
- has not been suspended, debarred, voluntarily excluded or determined ineligible by any Federal agency within the past 3 years;
- does not have a proposed debarment pending; and
- has not been indicted, convicted, or had a civil judgement rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

If there are any exceptions to this certification, insert the exceptions in the following space.

Exceptions will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any exception noted above, indicate below to whom it applies, initiating agency, and dates of action.

Notes: Providing false information may result in criminal prosecution or administrative sanctions. The above certification is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Certification.

The undersigned bidder hereby represents as follows:

That no Councilman, officer, agent, or employee of the City of Orange, is personally interested, directly or indirectly, in the Contract, or the compensation to be paid hereunder:

That this bid is made without connection with any person, firm or corporation making a bid for the same work, and is in all respects fair, and without collusion or fraud.

By my signature on this proposal I certify, under penalty of perjury under the laws of the State of California, that the foregoing questionnaire and statements of Public Contract Code Sections 10162, 10232 and 10285.1 are true and correct and that the bidder has complied with the requirements of Section 8103 of the Fair Employment and Housing Commission Regulations (Chapter 5, Title 2 of the California Administrative Code). By my signature on this proposal I further certify, under penalty of perjury under the laws of the State of California and the United States of America, that the Noncollusion Affidavit required by Title 23 United States Code, Section 112 and Public Contract Code Section 7106; and the Title 49 Code of Federal Regulations, Part 29 Debarment and Suspension Certification are true and correct.

Date: August 6, 2020



Donald B. Gentry

Donald B. Gentry

Vice-President

Signature and Title of Bidder

(If an individual, so state. If a firm or co-partnership, state the firm name and give the names of all individual co-partners composing the firm. If a corporation, state legal name of corporation, also names of President, Secretary, Treasurer and Manager thereof).

NAME OF BIDDER Academy Electric, Inc.

BUSINESS P.O. BOX P.O. Box 2364

CITY, STATE, ZIP Orange, California 92859

BUSINESS STREET ADDRESS 864 South Winthrop Street

CITY, STATE, ZIP Orange, California 92869 (Please include even if P.O. Box is used)

PLACE OF BUSINESS (Include City & State) 864 S. Winthrop St. - Orange, CA. 92869

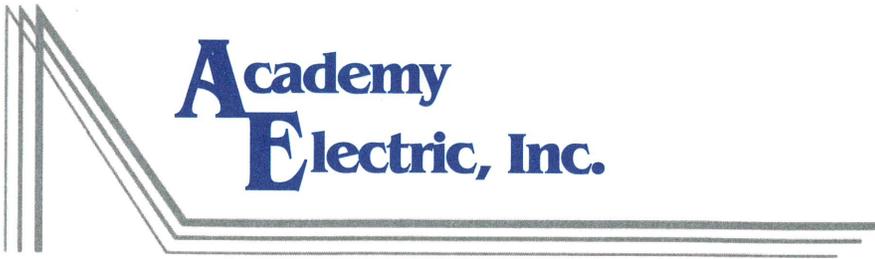
PLACE OF RESIDENCE (Include City & State) 864 S. Winthrop St. - Orange, CA. 92869

Telephone No. (714) 289-9143 Fax No. (714) 289-9743

Licensed in accordance with an Act providing for the registration of Contractors.

LICENSE NUMBER 662841

LICENSE CLASS C-10



License No. C-10 662841

References

RFB 190-60

2018

City of Orange

"Yorba Park Electrical Improvements"

Contract Amount: \$117,563.00

Project Manager: Don Equitz

Phone: 714-532-6464

Cell: 714-438-9617

Email: dequitz@cityoforange.org

2020

City of Anaheim

"Modjeska Park 12KV Service and Switchboard Replacement"

Contract Amount: \$234,636.00

Project Manager: Sean Saxton

Phone: 714-936-6809

Cell: 714-936-4272

Email: ssaxton@anaheim.net

2020-2021

City of Anaheim

"ARMD Electrical Maintenance and Repairs"

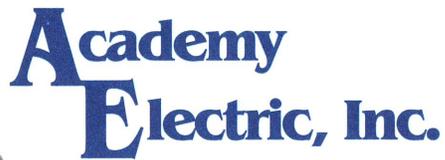
Annual Contract Amount: \$120,833.36

Project Manager: Mike Leggett

Phone: 714-765-6934

Cell: 714-620-6073

Email: mleggett@anaheim.net



License No. C-10 662841

Construction Schedule

RFB 190-60

Week #1	1. Finalize and receive contract and/or purchase order.
	2. Obtain electrical permit.
	3. Obtain SCE work order.
Week #2	4. Submit switchboard drawings to city engineer and SCE for approval.
	5. Approve switchboard construction after receipt of "approved" drawings.
	6. Confirm "Lead Time" of 16 to 20 weeks for switchboards.
Week #3	Note: This week will start three weeks before the delivery of the switchboards.
	7. Install temporary construction fencing.
	8. Circuit and conduit identifications at project site.
	9. Excavate and expose underground conduits.
	10. Deliver concrete pull boxes to job site.
	11. Job site coordination meeting with SCE inspector.
	12. Schedule outage with SCE and City of Orange.
Week #4	13. Receive temporary generator and set in place.
	14. Power outage.
	15. Remove existing switchboard to temporary location.
	16. Connect generator to temporary switchboard and connect circuits temporarily through new pull boxes.
	17. Demolish existing concrete pad and remove existing underground conduits.
	18. Install new underground conduits.
	19. Install new grounding grid system.
	20. Form and pour new pad.
Week #5	21. Set new switchboard, install new wires, make all connections.
	22. City and SCE inspections.
	23. Re-energize system / Test & Check!

RFB 190-60: ATTACHMENT 1
ELECTRICAL PANEL REPLACEMENT FOR MCPHERSON ATHLETIC FACILITY &
KILLEFER PARK
Sample Liability Insurance

Contractor shall procure and maintain for the duration of this Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder and the results of that work by the Contractor, his agents, representatives, employees or subcontractors.

Coverage shall be at least as broad as:

1. Insurance Services Office Commercial General Liability coverage (occurrence Form CG 00 01).
2. Insurance Services Office Form Number CA 00 01 covering Automobile Liability, code 1 (any auto).
3. Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.

Contractor shall maintain limits no less than:

- | | | |
|---------------------------|-------------|--|
| 1. General Liability: | \$2,000,000 | per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit. |
| 2. Automobile Liability: | \$1,000,000 | per accident for bodily injury and property damage. |
| 3. Workers' Compensation: | | As required by the State of California. |
| 4. Employer's Liability: | \$1,000,000 | per accident for bodily injury or disease. |

Any deductibles or self-insured retentions must be declared to and approved by the City. At the option of the City, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City, its officers, officials and employees; or the Contractor shall provide a financial guarantee satisfactory to the City guaranteeing payment of losses and related investigations, claim administration, and defense expenses.

Each policy of general liability and automotive liability insurance shall contain, or be endorsed to contain, the following provisions:

1. The City, its officers, officials, agents and employees are to be covered as additional insureds with respect to liability arising out of automobiles owned, leased, hired or borrowed by or on behalf of the Contractor; and with respect to liability arising out of work or operations performed by or on behalf of the Contractor, including materials, parts or equipment furnished in connection with such work or operations. General Liability coverage shall be provided in the form of an Additional Insured Endorsement, or such other form as may be acceptable to the City, to the Contractor's insurance policy, or as a separate owner's policy.

2. For any claims related to this project, the Contractor's insurance coverage shall be primary insurance as respects the City, its officers, officials and employees. Any insurance or self-insurance maintained by the City, its officers, officials and employees shall be excess of the Contractor's insurance and shall not contribute with it.

3. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party, except after thirty (30) days' prior written notice has been provided to the City

The Contractor shall furnish the City with original certificates of insurance and endorsements effecting coverage required by this clause. The endorsements should be on forms acceptable to City. All certificates and endorsements are to be received and approved by the City before work commences. However, failure to do so shall not operate as a waiver of these insurance requirements. The City reserves the right to require complete, certified copies of all required insurance policies, including endorsements effecting the coverage required by these specifications at any time.

All insurance procured and maintained by the Contractor shall be issued by insurers admitted to conduct the pertinent line of insurance business in the State of California and having a rating of Grade A or better and Class VII or better by the latest edition of Best's Key Rating Guide.

Contractor shall immediately notify the City if any required insurance lapses or is otherwise modified and cease performance of this Agreement unless otherwise directed by the City. In such a case, the City may procure insurance or self-insure the risk and charge Contractor for such costs and any and all damages resulting therefrom, by way of set-off from any sums owed Contractor.

Contractor hereby agrees to waive subrogation, which any insurer of the Contractor may acquire from the Contractor by virtue of the payment of any loss. The Contractor agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation.

The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the City for all work performed by the Contractor, its employees, agents and subcontractors.

The Contractor shall require and verify that all subcontractors maintain insurance meeting all of the requirements stated herein.

RFB 190-60: Attachment 2
Plan Sets and Calculations for Killefer and McPherson Parks

[Behind this page.]

LEGEND

SYMBOL	DESCRIPTION
	NOTE CALLOUT
	DETAIL CALLOUT - NUMBER ON TOP DENOTES DETAIL NUMBER - NUMBER ON BOTTOM DENOTES SHEET DETAIL IS SHOWN
	NEW LINENWORK
	EXISTING LINENWORK
	DEMOLISHED LINENWORK
	CONDUIT CONCEALED IN WALL OR ABOVE CEILING
	CONDUIT TURNED UP
	CONDUIT CONCEALED UNDERGROUND OR BELOW FLOOR
	BRANCH CIRCUIT HOMERUN TO PANELBOARD AND CIRCUITS AS INDICATED
	CIRCUIT BREAKER
	SWITCH
	GROUND CONNECTION
	METER
	JUNCTION BOX
	SINGLE POLE SWITCH
	SWITCH 3-WAY
	THERMOSTAT

ABBREVIATIONS

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
1/C	SINGLE CONDUCTOR	KVA	KILOVOLT-AMPERES
&	AND	KW	KILOWATT
@	AT	LF	LINEAR FEET
A OR AMP	AMPERES	LS	LOAD INTERRUPTER SWITCH
ABV	ABOVE	LOC	LOCATION
A.C.	ASPHALT CONCRETE	LGT	LIGHTING
AFF	ABOVE FINISHED FLOOR	LV	LOW VOLTAGE
AFG	ABOVE FINISH GRADE	MAX	MAXIMUM
AIC	AMPERE INTERRUPTING CAPACITY	MCC	MOTOR CONTROL CENTER
AL	ALUMINUM	MCP	MOTOR CIRCUIT PROTECTOR
APPROX.	APPROXIMATE	MFR	MANUFACTURER
ARCH.	ARCHITECT./ARCHITECTURAL	MH	MANHOLE
ATC	AIR TERMINAL CHAMBER	MI	MECHANICAL INTERLOCK
ATS	AUTOMATIC TRANSFER SWITCH	MRCT	MULTI-RATIO CURRENT TRANSFORMER
AUTO	AUTOMATIC	MTD	MOUNTED
AUX	AUXILIARY	MTG	MOUNTING
AWG	AMERICAN WIRE GAUGE	MV	MEDIUM VOLTAGE
BAT	BATTERY	N	NORTH
BEL	BELOW	NAC	NOTIFICATION APPLIANCE CIRCUIT
BKBD	BACKBOARD	NC	NORMALLY CLOSED
BKR	BREAKER	NEC	NATIONAL ELECTRICAL CODE
BLDG	BUILDING	NF	NON-FUSED
B.S.	BARE STRANDED	NIC	NOT IN CONTRACT
C	CONDUIT	NL	NIGHT LIGHT-24HRS ON
CB	CIRCUIT BREAKER	NO	NUMBER
CC	CONSTANT CURRENT	OC	ON CENTER
CK	CIRCUIT	OD	OUTSIDE DIAMETER
CL	CENTER LINE	OE	OVERHEAD ELECTRICAL
CLG	CEILING	OFC	OIL FUSED CUTOFF
CMU	CONCRETE MASONRY UNIT	OH	OVERHEAD
C.O.	CONDUIT ONLY WITH PULL WIRE	OL	OIL LEVER SWITCH
COL	COLUMN	P	POLE
CP	COMMUNICATION PROCESSOR	PB	PULL BOX
CPT	CONTROL POWER TRANSFORMER	PC	PHOTOCELL
CR	CONTROL RELAY	PCB	POLYCHLORINATED BIPHENYL
CSU	CALIFORNIA STATE UNIVERSITY	PDS	PRESSURE DIFFERENTIAL SWITCH
CSFD	COMBINATION SMOKE FIRE DAMPER	PF	POWER FACTOR
CT	CURRENT TRANSFORMER	PH OR Ø	PHASE
CW	COLD WATER	PILC	PAPER INSULATED, LEAD COVER
CJ	COPPER	PIV	POST INDICATING VALVE
DIAG	DIAGRAM	PL	PLATE
DL	DAMP LOCATION LISTING	PNL	PANEL
DM	DIGITAL METER	POC	POINT OF CONNECTION
DP	DISTRIBUTION PANEL	PRI	PRIMARY
DIST.	DISTANCE	PVC	POLY-VINYL CHLORIDE
DWG	DRAWING	PWR	POWER
DWP	DEPARTMENT OF WATER & POWER	REC'D	RECEPTACLE
EA	EACH	REQD	REQUIRED
ELEC.	ELECTRICAL	RGS	RIGID GALVANIZED STEEL
EMH	ELECTRICAL MANHOLE	RPBP	REDUCED PRESSURE BACK FLOW PREVENTER
EMT	ELECTRICAL METALLIC TUBING	RM	ROOM
EPO	EMERGENCY POWER OFF	SCE	SOUTHERN CALIFORNIA EDISON
EPR	ETHYLENE PROPYLENE RUBBER	SF	SQUARE FEET
EQUIP	EQUIPMENT	SHT	SHEET
EXIST(E)	EXISTING	SIG	SIGNAL
EXP	EXPLOSION PROOF	SP	SPARE
FA	FIRE ALARM	SPECS	SPECIFICATIONS
FFE	FINISHED FLOOR ELEVATION	ST	STREET
FIN.	FINISH	STD	STANDARD
FIP	FIELD INTERFACE PANEL	SW	SWITCH
FIXT	FIXTURE	SWBD	SWITCHBOARD
FLA	FULL LOAD AMPS	SWGR	SWITCHGEAR
FLR	FLOOR	SWST	SWITCHING STATION
FLUOR	FLUORESCENT	TB	TERMINAL BLOCK
FT	FEET	TEL/TELE	TELEPHONE
FACP	FIRE ALARM CONTROL PANEL	TMH	TELEPHONE MANHOLE
FATC	FIRE ALARM TERMINAL CABINET	T.O.D.	TOP OF DUCTBANK
FO	FIBER OPTIC	T.O.M.	TOP OF MANHOLE
FTG	FOOTING	TIPS	TWISTED SHIELDED PAIR
GFI	GROUND FAULT INTERRUPTER	TRANSF/XFMR	TRANSFORMER
GFR	GROUND FAULT RELAY	TS	TAMPER SWITCH
GG	GREEN GROUND	TYP	TYPICAL
GND	GROUND	UG	UNDERGROUND
HOA	HAND-OFF-AUTOMATIC	UON	UNLESS OTHERWISE NOTED
HP	HORSEPOWER	V	VOLTS
HT	HEIGHT	VA	VOLT-AMPERES
ISC	SHORT CIRCUIT CURRENT	W	WITH
JB	JUNCTION BOX	WP	WEATHERPROOF
		WR	WEATHER RESISTANT
KMIL	THOUSAND CIRCULAR MILS	Z	IMPEDANCE
KV	KILOVOLT		

IN THE EVENT ABBREVIATIONS NOT MENTIONED HEREIN ARE USED, REFERENCE WILL BE MADE TO ANSI Y1.1, MILITARY STANDARD ABBREVIATIONS, AND OTHER STANDARD INDUSTRY CONVENTIONS.

SUGGESTED ORDER OF CONSTRUCTION

- TRACE, IDENTIFY, LABEL, AND DOCUMENT EXISTING FEEDER AND BRANCH CIRCUIT LOADS, ROUTING, AND TERMINATION LOCATIONS. PROVIDE DOCUMENTATION TO CITY REPRESENTATIVE. CONFIRM LOADS NO LONGER IN SERVICE WITH CITY REPRESENTATIVE.
- COORDINATE CONSTRUCTION WITH SOUTHERN CALIFORNIA EDISON. CALL SANTA ANA SERVICE PLANNING OFFICE AT (714) 973-5653.
- PREPARE FOR TEMPORARY GENERATOR INSTALLATION:
 - LOCATE EXISTING UNDERGROUND FEEDER AND BRANCH CIRCUIT CONDUITS TEN FEET FROM EXISTING SERVICE LOCATION.
 - LOCATE EXISTING UNDERGROUND IRRIGATION CONDUCTOR CONDUITS TEN FEET FROM EXISTING SERVICE EQUIPMENT LOCATION. NOTIFY CITY REPRESENTATIVE OF SPRINKLER CONFLICTS AND RELOCATION REQUIREMENTS.
 - EXCAVATE AND PREPARE FOR IN-GRADE PULLBOX INSTALLATIONS AT LOCATED CONDUIT LOCATIONS.
 - PROVIDE 400A, 480/277V, 3P, 4W, NEMA 3R, TEMPORARY SWITCHBOARD; 25KVA, 480-240/120V, 1P, 3W, NEMA 3R TRANSFORMER; 100A, 480/277V, 3P, 4W, NEMA 3R, AND 125A, 240/120V, PANELS; LIGHTING TIME CLOCKS; LIGHTING RELAYS; IRRIGATION TIME CLOCKS; IRRIGATION TRANSFORMER; AND ADDITIONAL EQUIPMENT AND MATERIALS AS NECESSARY TO MAINTAIN OPERATION OF THE FACILITY DURING CONSTRUCTION.
 - PROVIDE TEMPORARY FENCING AND SECURITY SCREENING AROUND CONSTRUCTION AREA.
 - PROVIDE PROTECTION OF TEMPORARY CABLES AT CONSTRUCTION PATHWAYS.
 - PROVIDE TEMPORARY 20A, 120V, POWER FOR CONSTRUCTION.
 - PROVIDE MOTION ACTIVATED SECURITY LIGHTING OF CONSTRUCTION AREA.
- PROVIDE 350KW, 480/277V, 3P, 4W, SCAQMD TIER 4 RATED, TEMPORARY GENERATOR WITH SOUND ATTENUATED ENCLOSURE AND 24-HOUR FUEL SUPPLY.
- SCHEDULE REFUELING TIMES AND COORDINATE WITH CITY REPRESENTATIVE.
- INTERCEPT AND REROUTE EXISTING FEEDER, BRANCH CIRCUIT, AND IRRIGATION CONDUITS AND CONDUCTORS TO IN-GRADE PULL BOX LOCATIONS. INSTALL TRAFFIC RATED IN-GRADE PULL BOXES. PROTECT EXISTING CONDUCTORS FOR REUSE AND EXTENSION TO NEW EQUIPMENT.
- ROUTE TEMPORARY CABLE CONNECTIONS FROM IN-GRADE PULL-BOXES TO TEMPORARY SWITCHBOARDS, PANELBOARDS, AND TIME CLOCKS.
- DEMOLISH EXISTING SWITCHBOARD AND CONCRETE PAD. PROTECT EXISTING UTILITY FEEDER CONDUIT AND CONDUCTORS FOR REUSE.
- INSTALL GROUNDING ELECTRODE SYSTEM AND ROUTE TO SERVICE EQUIPMENT LOCATION.
- EXTEND EXISTING UTILITY FEEDER CONDUIT TO 3 INCHES ABOVE THE NEW CONCRETE SERVICE EQUIPMENT PAD HEIGHT.
- EXTEND CONDUITS FROM IN-GRADE PULL-BOXES TO NEW SERVICE PAD. PROVIDE SPARE CONDUITS.
- PROVIDE NEW CONCRETE SERVICE EQUIPMENT PAD.
- INSTALL NEW SERVICE EQUIPMENT.
- PROVIDE TESTING OF SERVICE EQUIPMENT PER NETA ATS STANDARDS. TEST EXISTING FEEDER AND BRANCH CIRCUIT CONDUCTORS PER NETA ATS STANDARDS. PROVIDE COPY OF STANDARDS TO CITY REPRESENTATIVE FOR REVIEW. DISCONNECT AND ISOLATE LINE AND LOAD CONDUCTOR TERMINATIONS PRIOR TO TESTING. NOTIFY CITY REPRESENTATIVE OF TESTING RESULTS AND RECOMMENDATIONS.
- EXTEND EXISTING FEEDER, BRANCH CIRCUIT, AND IRRIGATION CONDUCTORS FROM IN-GRADE PULL-BOXES TO NEW SERVICE AND DISTRIBUTION EQUIPMENT AND TERMINATE. PROVIDE WATER PROOF SPLICES TO EXISTING CONDUCTORS WITHIN IN-GRADE PULL-BOXES. PROVIDE HIGH-PRESSURE SPLICES FOR CONDUCTORS 6 AWG AND LARGER.
- PROVIDE SEALANT AROUND SERVICE EQUIPMENT BASE AT CONCRETE.
- OBTAIN CITY INSPECTION AND SERVICE RELEASE TO ENERGIZE. NOTIFY SCE REPRESENTATIVE.
- ENERGIZE NEW SERVICE.
- TURN OVER PROJECT DOCUMENTATION AND PROVIDE OPERATIONAL TRAINING TO CITY REPRESENTATIVES.
- CLOSEOUT.

SCOPE OF WORK:

- PROVIDE TEMPORARY POWER DURING CONSTRUCTION.
- REPLACE EXISTING CONCRETE SERVICE PAD.
- REPLACE EXISTING SERVICE EQUIPMENT.

GENERAL NOTES

- WORK SHALL COMPLY WITH THE 2016 EDITION OF THE CALIFORNIA ELECTRICAL CODE AND OTHER APPLICABLE FEDERAL, STATE, AND LOCAL AGENCY CODES. WHERE CONSTRUCTION DOCUMENTS INDICATE MORE RESTRICTIVE REQUIREMENTS, THE CONSTRUCTION DOCUMENTS SHALL GOVERN BUT THE CONSTRUCTION DOCUMENTS SHALL NOT BE INTERPRETED AS AUTHORITY TO VIOLATE ANY CODE OR REGULATION.
 - APPLICABLE CODES:
 - 2015 IBC AND 2016 CALIFORNIA AMENDMENTS (2016 CALIFORNIA BUILDING CODE - PART 2, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR))
 - 2014 NEC AND 2016 CALIFORNIA AMENDMENTS (2016 CALIFORNIA ELECTRICAL CODE (CEC) - PART 3, TITLE 24, CCR)
 - 2015 UMC AND 2016 CALIFORNIA AMENDMENTS (2016 CALIFORNIA MECHANICAL CODE - PART 4, TITLE 24, CCR)
 - 2015 UPC AND 2016 CALIFORNIA AMENDMENTS (2016 CALIFORNIA PLUMBING CODE - PART 5, TITLE 24, CCR)-(PUBLISHER:INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS (IAPMO))
 - 2015 IFC AND 2016 CALIFORNIA AMENDMENTS (2016 CALIFORNIA FIRE CODE - PART 9, TITLE 24, CCR)
 - OBTAIN BUILDING AND LICENSING PERMITS, AND PAY ASSOCIATED COSTS AND EXPENSES REQUIRED BY FEDERAL, STATE, AND LOCAL AGENCIES.
 - IDENTIFY, CONTACT, AND COORDINATE WORK WITH THE SERVING UTILITY (POWER). PAY FEES ASSOCIATED WITH UTILITY COORDINATION AND INSTALLATION. PROVIDE INSTALLATIONS COMPLIANT WITH THE CONTRACT DOCUMENTS AND THE SERVING UTILITY'S REQUIREMENTS.
 - VISIT THE SITE, INCLUDING AREAS INDICATED ON THE DRAWINGS. OBTAIN AND INSPECT CONTRACT DOCUMENTS IMMEDIATELY UPON RECEIPT INCLUDING CONTRACT DOCUMENTS OF OTHER DISCIPLINES. NOTIFY OWNER OF DISCREPANCIES WITHIN 24 HOURS.
 - SUBMIT A CHANGE ORDER TO THE OWNER DETAILING AND SPECIFYING REQUIRED WORK, AND OBTAIN APPROVAL BEFORE PROCEEDING WITH WORK. WHERE CONDITIONS DEVELOP NOT COVERED BY THE CONTRACT DOCUMENTS OR WHERE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).
 - PROVIDE NEW EQUIPMENT AND MATERIALS LISTED BY UNDERWRITERS LABORATORIES (UL) OR OTHER TESTING AGENCY APPROVED BY THE AUTHORITY HAVING JURISDICTION (AHJ). PROVIDE INSTALLATIONS COMPLIANT WITH THE LISTING REQUIREMENTS AND THE MANUFACTURER'S INSTALLATION REQUIREMENTS AND RECOMMENDATIONS. PROVIDE MATERIALS, EQUIPMENT, AND INSTALLATIONS COMPLIANT WITH THE REQUIREMENTS OF THE FOLLOWING:
 - AMERICAN SOCIETY OF TESTING MATERIALS (ASTM)
 - INSULATED POWER CABLE ENGINEERS ASSOCIATION (IPCEA)
 - NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)
 - AMERICAN STANDARD ASSOCIATION (ASA)
 - NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
 - AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
 - CALIFORNIA CODE OF REGULATIONS TITLE 24 (CCR)
 - INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE)
 - ILLUMINATION ENGINEERING SOCIETY OF NORTH AMERICA (IESNA)
 - COMPLY WITH THE MOST STRINGENT REQUIREMENT WHERE DIFFERENT REQUIREMENTS ARE SPECIFIED IN THE PLANS AND SPECIFICATIONS.
 - COORDINATE AND SCHEDULE WORK WITH OTHER TRADES AND THE OWNER. BEFORE PROCEEDING WITH THE INSTALLATION.
 - MAINTAIN AS-BUILT DRAWINGS DAILY TO REFLECTING CHANGES MADE TO THE CONTRACT DOCUMENTS DURING CONSTRUCTION. IDENTIFY AND DIMENSION UNDERGROUND CONDUIT LOCATIONS AND DEPTHS.
 - PROVIDE REQUIRED DURABLE IDENTIFICATION AND LABELING OF CONDUCTORS AND EQUIPMENT COMPLIANT WITH CEC 110.21(B) INCLUDING:
 - ORANGE COLOR FOR HIGH-LEG OF DELTA-CONNECTED SYSTEM WHERE THE MIDPOINT OF ONE PHASE WINDING IS GROUNDED PER CEC 110.15
 - ARC-FLASH HAZARD WARNING PER CEC 110.16
 - IDENTIFICATION OF DISCONNECTING MEANS PER CEC 110.22
 - AVAILABLE FAULT CURRENT PER CEC 110.24
 - PANELBOARD CIRCUIT DIRECTORY PER CEC 408.4(A)
 - SOURCE OF SUPPLY FOR SWITCHBOARDS, SWITCHGEAR, AND PANELBOARDS PER CEC 408.4(B)
 - IDENTIFICATION OF BRANCH CIRCUITS PER CEC 210.5
 - POSTING OF IDENTIFICATION MEANS LISTING THE FEEDER POWER SOURCE PER CEC 210.5(C)(1)(b).
 - NOTIFY OWNER 48 HOURS PRIOR TO PROJECT COMPLETION TO ALLOW FOR OWNER'S INSPECTION OF WORK. PROVIDE COMPETENT PERSONNEL TO ASSIST AND DEMONSTRATE EQUIPMENT OR SYSTEM OPERATION. FINAL ACCEPTANCE OF WORK BY THE OWNER WILL BE AFTER APPROVAL AND ACCEPTANCE BY AHJ.
 - FURNISH A ONE-YEAR WRITTEN GUARANTEE FOR MATERIALS AND WORKMANSHIP FROM THE DATE OF SUBSTANTIAL COMPLETION, UNLESS OTHERWISE NOTED FOR A LONGER TERM IN THE EQUIPMENT SPECIFICATION.
 - PROVIDE AND MAINTAIN REQUIRED WORKING SPACE, DEDICATED EQUIPMENT SPACE, AND EGRESS REQUIREMENTS PER CEC 110.26.
- INSTALL CONDUIT 24 INCHES MINIMUM BELOW FINISHED GRADE.
- INSTALL CONDUITS AND EQUIPMENT PLUMB AND LEVEL.
- PROVIDE SAWCUTTING, TRENCHING, BACKFILLING, COMPACTION, AND PATCHING OF CONCRETE AND ASPHALT FOR UNDERGROUND INSTALLATIONS. OBTAIN THE SERVICES OF DIG ALERT PRIOR TO EXCAVATION. REPAIR UNDERGROUND INSTALLATIONS AND EQUIPMENT DAMAGED DURING EXCAVATION TO MATCH THE QUALITY OF THE ORIGINAL INSTALLATION.
- PROVIDE FIELD BENDS FOR EMT AND RIGID CONDUIT 1 INCH AND SMALLER. DO NOT KINK CONDUIT OR REDUCE CROSS SECTIONAL AREA. USE BENDING EQUIPMENT APPROVED BY CONDUIT MANUFACTURER. REPAIR SCRATCHES AND MARS WITH CONDUIT MANUFACTURER APPROVED PRODUCT.
- PROVIDE EQUIPMENT GROUNDING CONDUCTOR, WITH FEEDERS AND BRANCH CIRCUITS, SIZED PER CEC 250.122.
- PROVIDE COPPER CONDUCTORS. USE TYPE XHHW-2 CONDUCTOR INSULATION.

SHEET INDEX

SHEET	DESCRIPTION
E001	GENERAL NOTES, LEGEND, ABBREVIATIONS AND SHEET INDEX
E101	SITE PLAN
E201	TEMPORARY/NEW POWER PLAN
E501	SINGLE LINE DIAGRAMS AND PANEL SCHEDULES
E601	DETAILS AND ELEVATIONS
E602	DETAILS
E701	SPECIFICATIONS
S001	GENERAL NOTES & TYPICAL DETAILS
S002	DETAILS



UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA
CALL: TOLL FREE
1-800-227-2600
TWO WORKING DAYS BEFORE YOU DIG

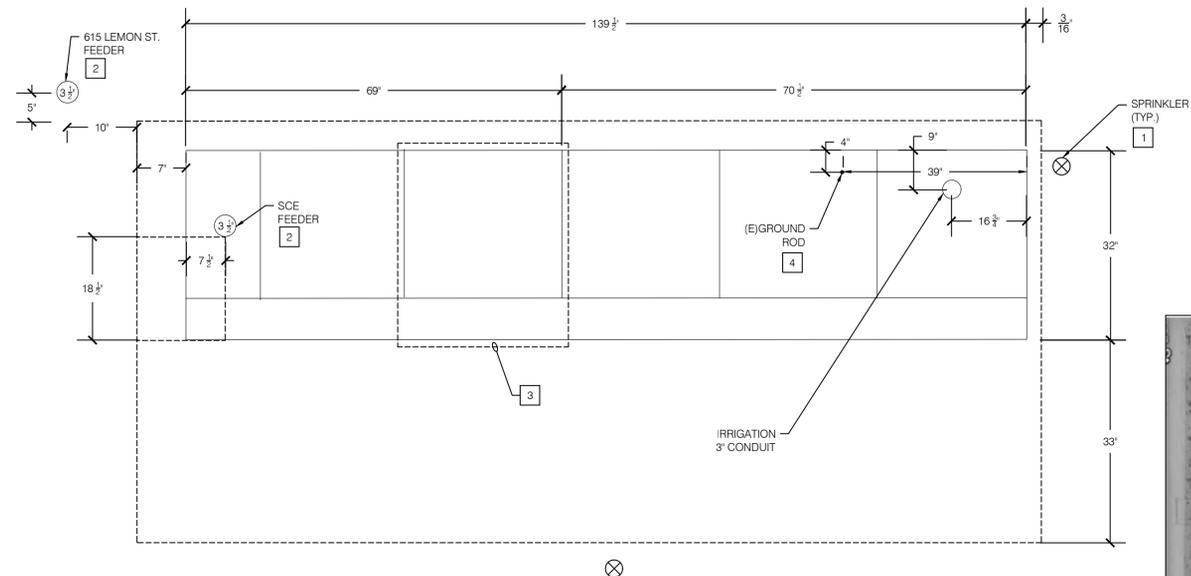


Long Beach | Los Angeles
San Diego | San Jose

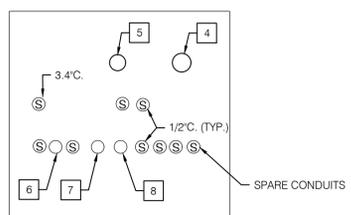
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UNDER THE SUPERVISION OF: DATE _____		FOR ENGINEER'S USE		CITY OF ORANGE KILLEFER PARK (615 N LEMON ST, ORANGE, CA 92867) GENERAL NOTES, LEGEND, ABBREVIATIONS & SHEET INDEX	
		NAME	DATE		
DRAWN MN 10/11/19 DESIGNED MN 10/11/19 CHECKED WS 10/11/19		FOR CITY USE ONLY		APPROVED: _____ DATE _____ CITY ENGINEER	
REVISIONS DATE DESCRIPTION		NAME	DATE	APPROVED: _____ DATE _____ PUBLIC WORKS DIRECTOR	
STREETS SEWER DRAINAGE WATER ST. SUPT. TRAFFIC				SCALE: HORIZ. AS NOTED VERT. AS NOTED F.B. _____ PG. _____	
100% CD SUBMITTAL				SHEET 1 OF 7 E001	

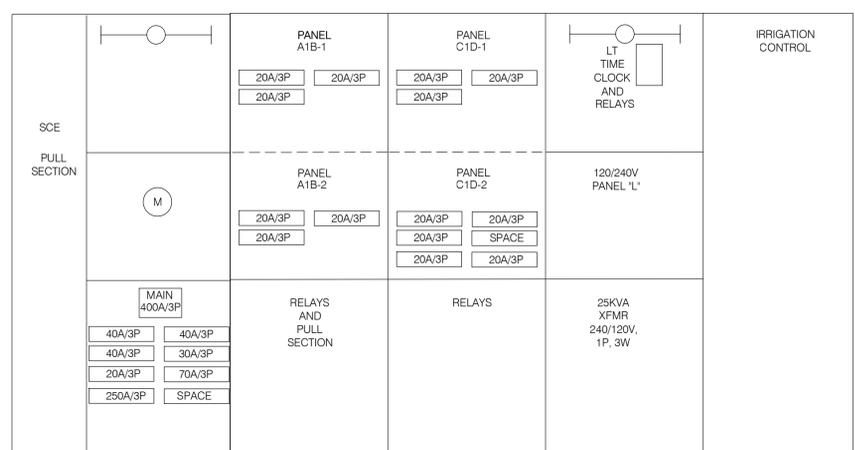


- NOTES**
- COORDINATE SPRINKLER AND SPRINKLER PIPING RELOCATION TO FACILITATE SERVICE REPLACEMENT WITH CITY REPRESENTATIVE.
 - COORDINATE POWER OUTAGE WITH UTILITY SERVICE PLANNER
 - TRACE, LOCATE, AND INTERCEPT EXISTING FEEDERS, BRANCH CIRCUITS, AND IRRIGATION CONDUCTORS. PROVIDE NEW IN-GRADE TRAFFIC RATED PULL BOXES LOCATED TEN FEET MINIMUM FROM EXISTING SERVICE EQUIPMENT PAD. PROVIDE SEPARATE IN-GRADE PULL-BOXES FOR IRRIGATION CONDUCTORS AND POWER CONDUCTORS. DO NOT COMBINE WITHIN A COMMON PULL-BOX. REFERENCE DETAIL 4/E601.
 - SAVE EXISTING GROUND ROD AND BOND TO NEW REBAR WITH EXOTHERMIC BOND USING 2 AWG AND EXTEND TO GROUND BUS.



- NOTES**
- 1 1/4\"/>

3 EXISTING CONDUIT STUB LOCATIONS
NO SCALE



2 EXISTING SWITCHBOARD "MS" ELEVATION
NO SCALE



1 SITE PLAN
1/8" = 1'-0"



UNDERGROUND SERVICE ALERT
OF SOUTHERN CALIFORNIA
CALL: TOLL FREE
1-800-227-2600
TWO WORKING DAYS BEFORE YOU DIG

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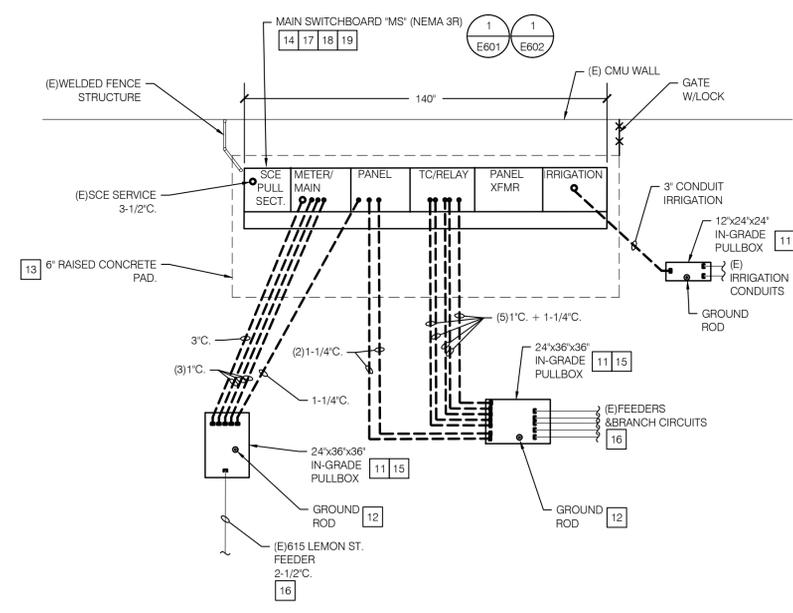
UNDER THE SUPERVISION OF:		FOR ENGINEER'S USE		CITY OF ORANGE	
		NAME	DATE		
DATE		DRAWN	MN	10/11/19	KILLEFER PARK (615 N LEMON ST, ORANGE, CA 92867) SITE PLAN
DATE		DESIGNED	MN	10/11/19	
DATE		CHECKED	WS	10/11/19	
DATE		FOR CITY USE ONLY		APPROVED:	
DATE		NAME	DATE	DATE	CITY ENGINEER
DATE		DESCRIPTION	DATE	DATE	PUBLIC WORKS DIRECTOR
DATE		STREETS		SCALE:	HORIZ. AS NOTED
DATE		SEWER		VERT. AS NOTED	F.B. PG.
DATE		DRAINAGE		SHEET 2 OF 7	
DATE		WATER		E101	
DATE		ST. SUPT.		100% CD SUBMITTAL	
DATE		TRAFFIC			

GENERAL NOTES

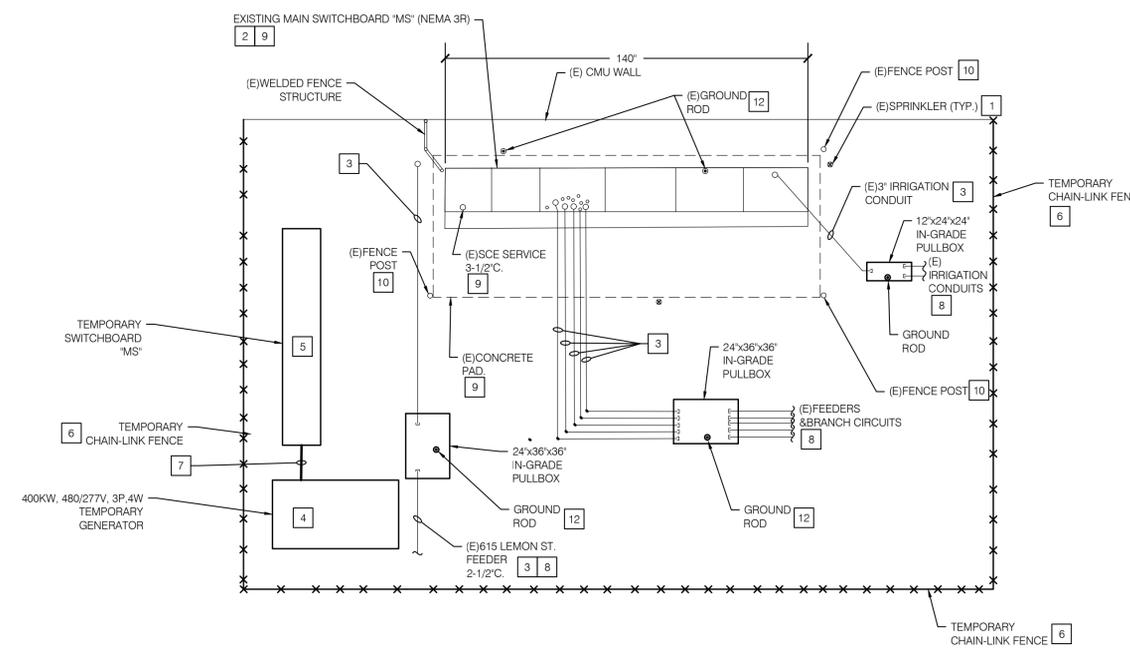
1. COORDINATE CONSTRUCTION WITH SOUTHERN CALIFORNIA EDISON. CALL SANTA ANA SERVICE PLANNING OFFICE AT (714) 973-5653.
2. CHECK AND REFILL GENERATOR FUEL DAILY.
3. PROVIDE TEMPORARY POWER FOR CONSTRUCTION.
4. PROVIDE WATERPROOF SPLICES OF CONDUCTORS FOR TEMPORARY AND PERMANENT CONNECTIONS.
5. PROVIDE PROTECTIVE CHAIN-LINK FENCING WITH VISUAL BLOCKING MATERIAL AROUND CONSTRUCTION SITE AND GENERATOR. REFERENCE DETAIL 4/E601.
6. PROVIDE CABLE PROTECTION AT PATHWAYS PER CEC 590.4(H).
7. REFERENCE SINGLE LINE DIAGRAM AND DETAIL 2/E201 FOR CONDUIT AND FEEDER SIZES AND SPARE CONDUITS.
8. RETURN ALL RELAYS TO OWNER.
9. REUSE IRRIGATION CONTROLLER.

NOTES

1. COORDINATE SPRINKLER AND SPRINKLER PIPING RELOCATION TO FACILITATE SERVICE REPLACEMENT WITH CITY REPRESENTATIVE.
2. COORDINATE POWER OUTAGE WITH UTILITY SERVICE PLANNER AND CITY REPRESENTATIVE.
3. TRACE, LOCATE, AND INTERCEPT EXISTING FEEDERS, BRANCH CIRCUITS, AND IRRIGATION CONDUCTORS. PROVIDE NEW IN-GRADE TRAFFIC RATED PULL BOXES LOCATED TEN FEET MINIMUM FROM EXISTING SERVICE EQUIPMENT. PROVIDE SEPARATE IN-GRADE PULL-BOXES FOR IRRIGATION CONDUCTORS AND POWER CONDUCTORS. REFERENCE DETAIL 5/E601.
4. PROVIDE 350KW, 480/277V, 3P, 4W, TEMPORARY GENERATOR WITH SOUND ATTENUATED ENCLOSURE AND 24-HOUR FUEL SUPPLY.
5. PROVIDE 400A, 480/277V, 3P, 4W, NEMA 3R, TEMPORARY SWITCHBOARD, 25KVA, 480-240/120V, 1P, 3W, NEMA 3R TRANSFORMER, 100A, 480/277V, 3P, 4W, NEMA 3R, AND 125A, 240/120V, PANELS, LIGHTING TIME CLOCKS, LIGHTING RELAYS, IRRIGATION TIME CLOCKS, IRRIGATION TRANSFORMER, AND ADDITIONAL EQUIPMENT AND MATERIALS AS NECESSARY TO MAINTAIN OPERATION OF THE FACILITY DURING CONSTRUCTION. EXISTING EQUIPMENT MAY BE REUSED FOR THE TEMPORARY INSTALLATION.
6. PROVIDE TEMPORARY FENCING AND SECURITY SCREENING AROUND CONSTRUCTION AREA.
7. ROUTE 8#2/0 + 1#2/0 GND TYPE W CABLES FROM THE GENERATOR TO THE TEMPORARY SWITCHBOARD.
8. EXTEND EXISTING FEEDER, BRANCH CIRCUIT, AND IRRIGATION CONDUCTORS FROM IN-GRADE PULL BOXES TO TEMPORARY SWITCHBOARD TO MAINTAIN POWER TO EXISTING FACILITIES.
9. DEMOLISH EXISTING SERVICE EQUIPMENT AND PAD. PROTECT EXISTING UTILITY CONDUIT AND FEEDER CONDUCTORS FOR REUSE. EXTEND EXISTING UTILITY FEEDER CONDUIT TO THREE (3) INCHES ABOVE NEW PAD. CONCEAL UTILITY CONDUCTORS FROM VIEW TO PREVENT THEFT.
10. REMOVE POST AND ASSOCIATED FOOTING.
11. EXTEND NEW FEEDER, BRANCH CIRCUIT, AND IRRIGATION CONDUITS FROM IN-GRADE PULL BOXES TO NEW SERVICE DISTRIBUTION SECTION LOCATION.
12. PROVIDE NEW GROUNDING ELECTRODE SYSTEM. REFERENCE DETAILS 2 AND 3/E601.
13. PROVIDE NEW CONCRETE SERVICE EQUIPMENT PAD, 6' A.F.G. REFERENCE SHEET 3001. LOCATE THE NORTH-EAST CORNER OF THE NEW SERVICE 'MS' AT THE SAME LOCATION AS THE EXISTING SERVICE IN ORDER TO MAINTAIN USEFULNESS OF THE EXISTING WELDED FENCE STRUCTURE.
14. PROVIDE NEW NEMA 3R, 400A, 480/277V, 3P, 4W, METERED MAIN WITH DISTRIBUTION, UTILITY PULL-SECTION, AND LOW VOLTAGE SECTIONS. REFERENCE SHEET E602.
15. EXTEND EXISTING CONDUCTORS FROM NEW IN-GRADE PULL BOXES TO NEW SERVICE.
16. LOCATE EACH FEEDER LOAD TERMINATION LOCATION AND DISCONNECT FEEDER FROM LOAD PRIOR TO TESTING OF FEEDER CONDUCTORS. TEST EXISTING FEEDER CONDUCTORS PER ANSINETA ACCEPTANCE TESTING SPECIFICATIONS (ATS) 7.3.2. TERMINATE AND TEST PER SERVICE EQUIPMENT PER ATS 7.1.
17. PROVIDE BLACK LABELS WITH WHITE ENGRAVED LETTERS FOR IDENTIFICATION OF EACH FEEDER. VERIFY CIRCUIT NAMES WITH CITY REPRESENTATIVE.
18. PROVIDE RED LABEL WITH WHITE LETTERS BELOW METER LISTING THE AVAILABLE SHORT CIRCUIT CURRENT AND DATE. OBTAIN WRITTEN DOCUMENTATION OF UTILITY'S CONTRIBUTION TO THE AVAILABLE SHORT CIRCUIT CURRENT FROM THE SERVICE PLANNER. REFERENCE CEC 110.24. PROVIDE ORIGINAL DOCUMENTATION TO CITY REPRESENTATIVE.
19. COORDINATE AND REESTABLISH UTILITY POWER TO NEW SERVICE.



2 RENOVATION POWER PLAN
NO SCALE



1 DEMOLITION/TEMPORARY POWER PLAN
NO SCALE

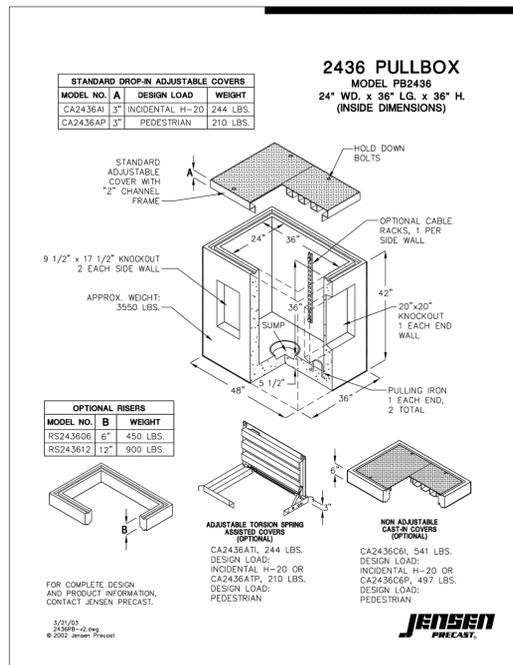


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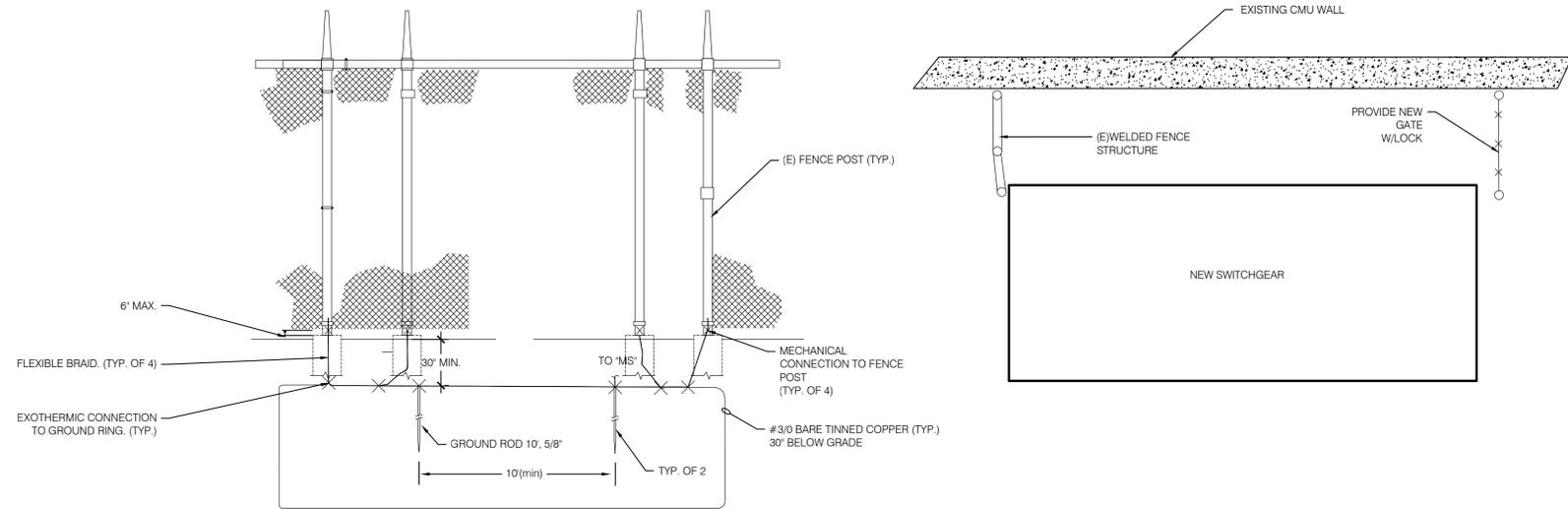


UNDER THE SUPERVISION OF: DATE: _____		FOR ENGINEER'S USE		CITY OF ORANGE	
		NAME	DATE	KILLEFER PARK (615 N LEMON ST, ORANGE, CA 92867) TEMPORARY/NEW POWER PLAN	
DRAWN	MN 10/11/19				
DESIGNED	MN 10/11/19				
CHECKED	WS 10/11/19				
REVISIONS		FOR CITY USE ONLY		APPROVED: _____ DATE: _____ CITY ENGINEER APPROVED: _____ DATE: _____ PUBLIC WORKS DIRECTOR	
DATE	DESCRIPTION	NAME	DATE		
STREETS		SCALE: HORIZ. AS NOTED VERT. AS NOTED		F.B. _____ PG. _____	
SEWER		100% CD SUBMITTAL		SHEET 3 OF 7	
DRAINAGE		E201			
WATER					
ST. SUPT.					
TRAFFIC					



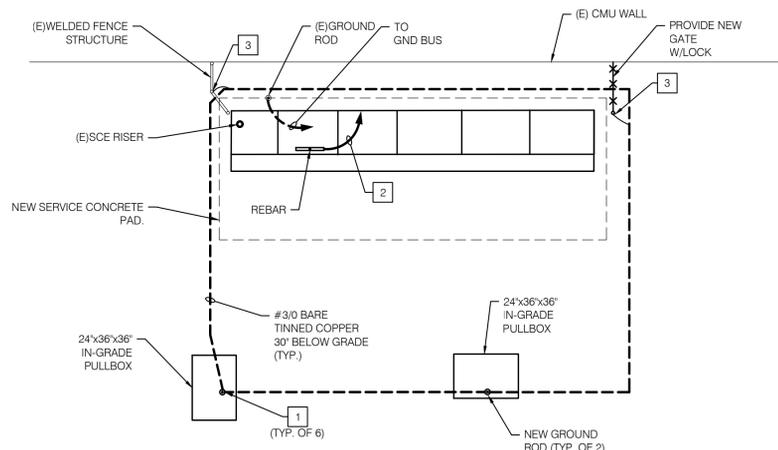
DETAIL NOTES

1. PROVIDE INSTALLATION PER MANUFACTURERS RECOMMENDATIONS.
2. PROVIDE INSTALLATION FLUSH WITH FINISHED GRADE.



2 TYPICAL FENCE GROUNDING
NO SCALE

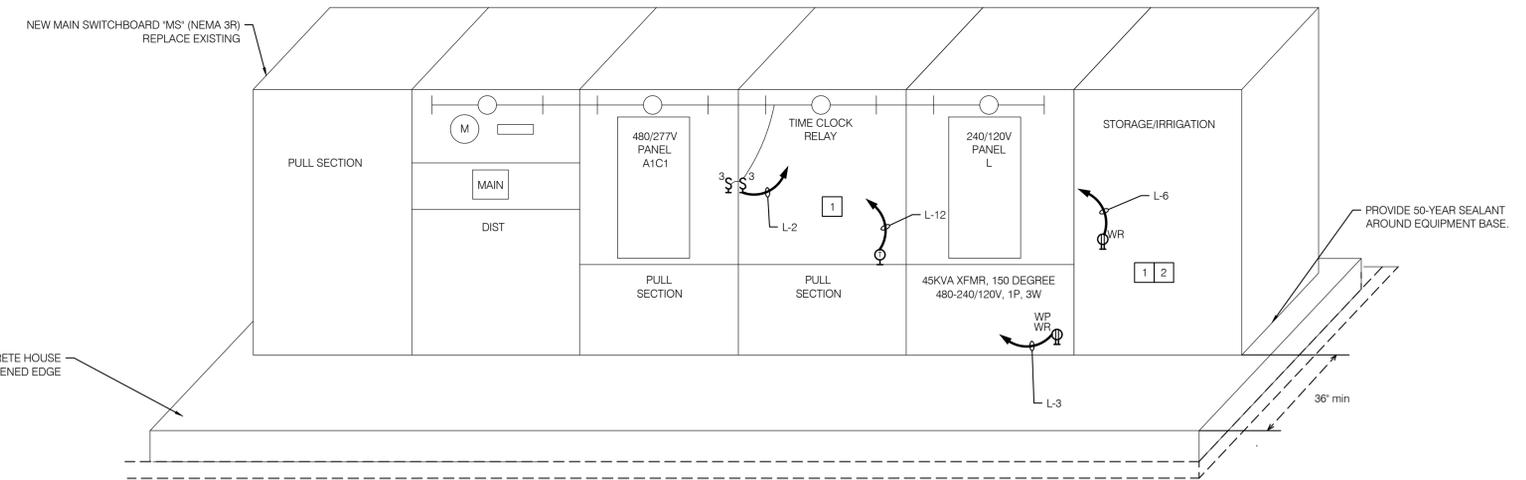
4 IN-GRADE PULL BOX
NO SCALE



NOTES

1. PROVIDE EXOTHERMIC CONNECTION.
2. PROVIDE EXOTHERMIC CONNECTION TO REINFORCING BAR WITHIN NEW PAD WITH #4AWG AND EXTEND TO GROUND BUS.
3. PROVIDE BOND TO WELDED FENCE STRUCTURE AND CHAIN-LINK GATE. USE MECHANICAL CONNECTION USING STAINLESS STEEL, INVENT ERICO#A235D2G6LH.

3 GROUNDING ELECTRODE SYSTEM
NO SCALE



NOTES

1. PROVIDE 3/4" EXTERIOR GRADE PLYWOOD BACK BOARD WITHIN TIMECLOCK/RELAY AND IRRIGATION CONTROL SECTIONS.
2. REINSTALL IRRIGATION CONTROLLER.
3. PROVIDE TIME CLOCKS AND RELAYS. REFERENCE DETAIL 2/E602.

1 SWITCHBOARD EQUIPMENT MOUNTING ELEVATION
NO SCALE

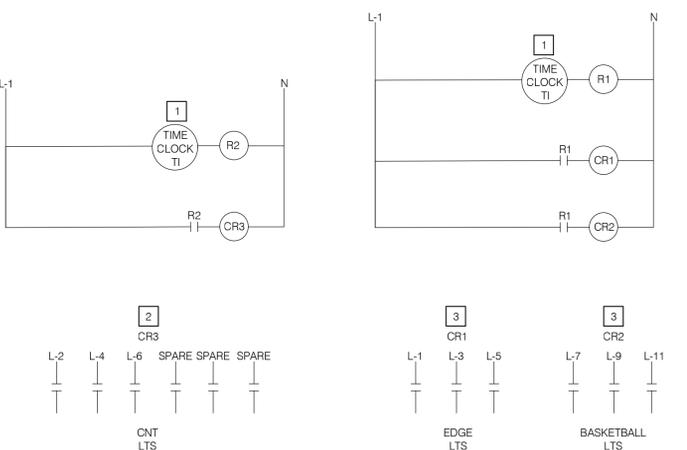
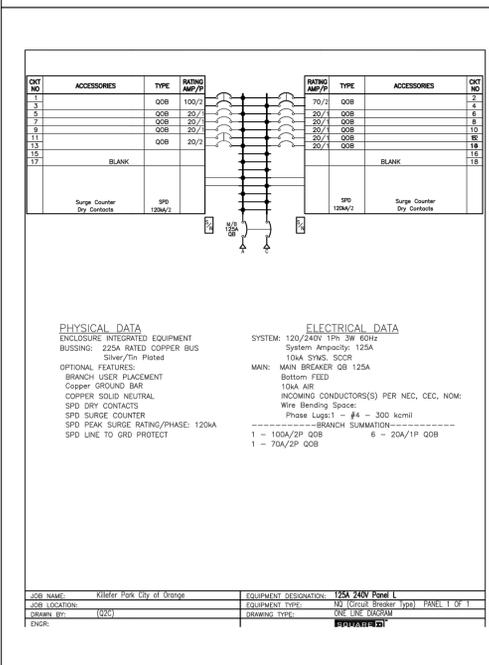
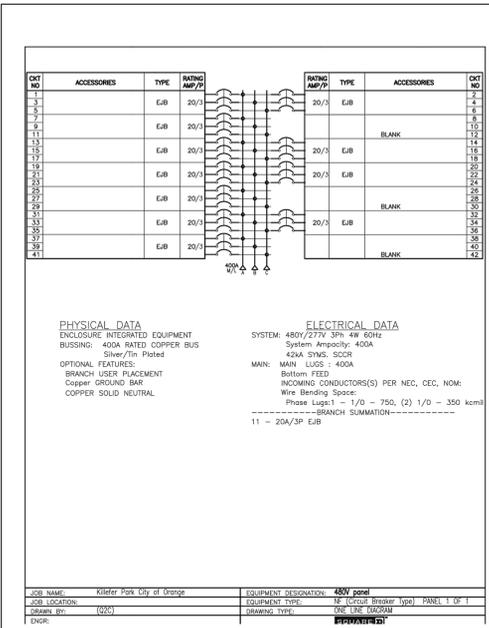


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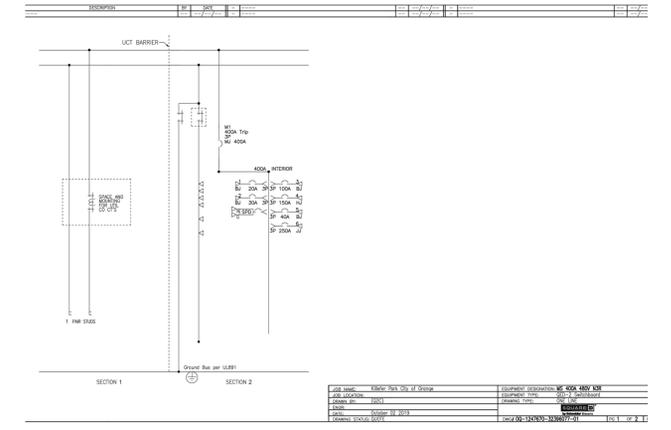
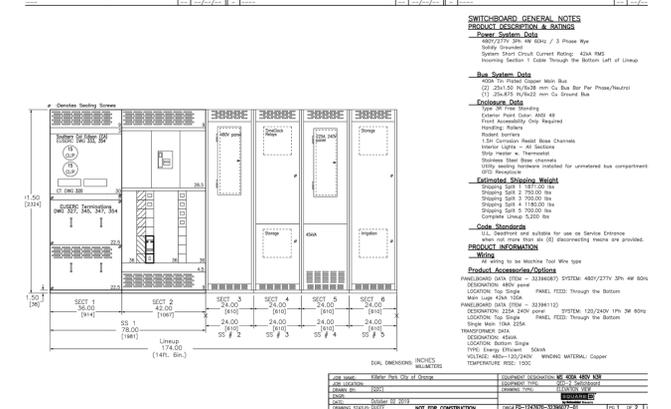
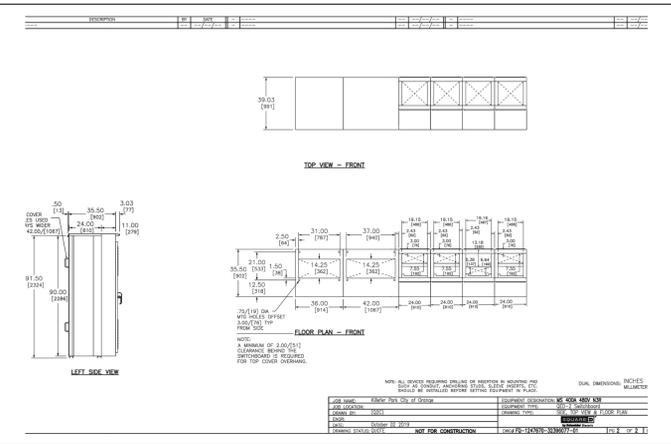
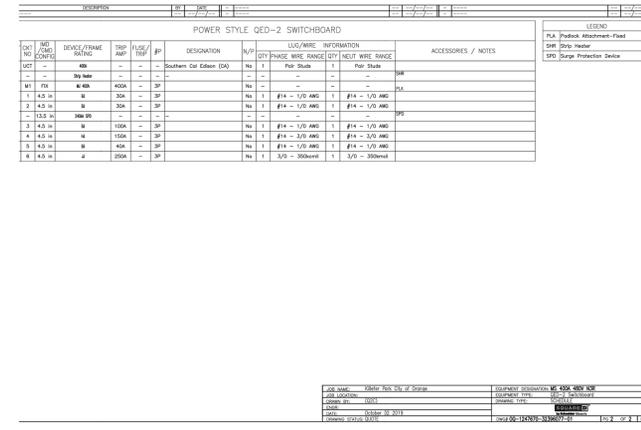
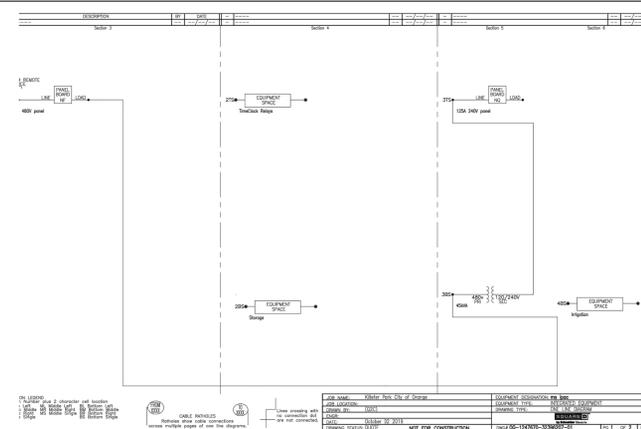
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UNDER THE SUPERVISION OF: DATE: _____	FOR ENGINEER'S USE		CITY OF ORANGE KILLEFER PARK (615 N LEMON ST, ORANGE, CA 92867) DETAILS AND ELEVATION	
	NAME	DATE		
	DRAWN	MN	10/11/19	
	DESIGNED	MN	10/11/19	
CHECKED	WS	10/11/19	APPROVED: _____ DATE: _____ CITY ENGINEER DATE: _____ PUBLIC WORKS DIRECTOR	
FOR CITY USE ONLY				
DATE	DESCRIPTION	NAME	DATE	SCALE: HORIZ. AS NOTED VERT. AS NOTED
				F.B. _____ PG. _____
				SHEET 5 OF 7
100% CD SUBMITTAL				E601



- NOTES**
- 1 PROVIDE ASTRONOMICAL TIME CLOCK.
 - 2 PROVIDE LIGHTING CONTROL RELAY. PROVIDE 30A, 277V, 6-POLE RELAY WITH 120V COIL. PROVIDE SQ-D#8903L060V02.
 - 3 PROVIDE LIGHTING CONTROL RELAY. PROVIDE 30A, 277V, 3-POLE RELAY WITH 120V COIL. PROVIDE SQ-D#8903L030V02.



2 LIGHTING CONTACTOR RELAYS
NO SCALE

1 NEW NEMA 3R SWITCHBOARD
NO SCALE



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<p>FOR ENGINEER'S USE</p> <p>UNDER THE SUPERVISION OF:</p> <p>DATE: _____</p>		<p>CITY OF ORANGE</p> <p>KILLEFER PARK (615 N LEMON ST, ORANGE, CA 92867)</p> <p>DETAILS</p>									
<p>DESIGNED MN 10/11/19</p> <p>CHECKED WS 10/11/19</p>	<p>NAME DATE</p> <p>MN 10/11/19</p> <p>WS 10/11/19</p>	<p>APPROVED:</p> <p>DATE: _____</p> <p>CITY ENGINEER</p>	<p>APPROVED:</p> <p>DATE: _____</p> <p>PUBLIC WORKS DIRECTOR</p>								
<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </tbody> </table>		DATE	DESCRIPTION							<p>SCALE: HORIZ. AS NOTED VERT. AS NOTED</p> <p>F.B. _____ PG. _____</p> <p>100% CD SUBMITTAL</p>	
DATE	DESCRIPTION										
<p>DATE: _____</p>		<p>SHEET 6 OF 7</p> <p>E602</p>									

SECTION 260500 COMMON WORK RESULTS FOR ELECTRICAL

PART 1 - GENERAL
1.1. SUBMITTALS
1.1.2. SUBMIT ALL DIVISION 26 SHOP DRAWINGS AND PRODUCT DATA GROUPED AND REFERENCED BY THE SPECIFICATION TECHNICAL SECTION NUMBERS IN ONE COMPLETE SUBMITTAL PACKAGE.

PART 3 - EXECUTION
3.1. GENERAL:
3.1.1. DO NOT EXCEED CABLE MANUFACTURER'S RECOMMENDATIONS FOR MAXIMUM PULLING TENSION AND MINIMUM BENDING RADIUS.

PART 2 - PRODUCTS
2.1. RIGID STEEL CONDUIT (RSC):
2.1.1. MANUFACTURERS:
2.1.1.1. ALLIED TUBE AND CONDUIT

3.2.5.4. HANGERS AND RACKS SHALL BE ATTACHED TO CONCRETE WITH INSETS, SET AT THE TIME THE CONCRETE IS POURED AND TO STEEL MEMBERS WITH BEAM CLAMPS OR MACHINE BOLTS.

3.4.1. COVERS:
3.4.1.1. INSTALL GALVANIZED STEEL COVERPLATES ON BOXES IN UNFINISHED AREAS, ABOVE ACCESSIBLE CEILING AND ON SURFACE MOUNTED OUTLETS.

SECTION 260519 LOW VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES
PART 1 - GENERAL
1.3. SUMMARY
1.3.1. THIS SECTION INCLUDES THE FOLLOWING:

3.6. CONNECTORS, SPLICES AND TERMINALS:
3.6.1. CONNECTORS:
3.6.1.1. EXCEPT WHERE EQUIPMENT IS FURNISHED WITH BOLTED OR SCREW TYPE LUG, USE COMPRESSION SET PRESSURE CONNECTORS WITH INSULATING COVERS.

2.6. PANEL BOARDS
2.6.1. CIRCUIT DIRECTORIES SHALL BE FILLED WITH TYPE WRITTEN LETTERING CLEARLY IDENTIFYING EACH CIRCUIT AS TO USE AND LOCATION.

3.2.7. BENDS:
3.2.7.1. KEEP BENDS AND OFFSETS IN RACEWAY RUNS TO AN ABSOLUTE MINIMUM.

PART 2 - PRODUCTS
2.1. MARKERS:
2.1.1. MANUFACTURERS:
2.1.1.1. THOMAS & BETTS

2.2.3. DESCRIPTION: FACTORY-FABRICATED CONNECTORS, SPLICES AND TERMINALS OF SIZE, AMPACITY RATING, MATERIAL, TYPE, AND CLASS FOR APPLICATION AND SERVICE INDICATED.

3.6.2. SPLICES:
3.6.2.1. SPLICE WIRES AND CABLE ONLY IN ONE ACCESSIBLE LOCATION, SUCH AS WITHIN JUNCTION BOXES.

3.1. INSTALLATION - GENERAL:
3.1.1. INSTALL WORK IN ACCORDANCE WITH STATE AND LOCAL STANDARDS AND CODES.

3.3. RACEWAY APPLICATION:
3.3.1. RIGID STEEL CONDUIT SHALL BE USED FOR THE FOLLOWING:
3.3.1.1. WHERE EXPOSED TO WEATHER, DAMP AND WET LOCATIONS

PART 3 - EXECUTION
3.1. INSTALLATION
3.1.1. LETTERING AND GRAPHICS: COORDINATE NAMES, ABBREVIATIONS, COLORS, AND OTHER DESIGNATIONS USED IN ELECTRICAL IDENTIFICATION WORK WITH CORRESPONDING DESIGNATIONS SPECIFIED OR INDICATED ON THE DRAWINGS.



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Form for City of Orange, Killefer Park, Specifications. Includes sections for Engineer's Use, Revisions, Date, and various approval fields. Contains the text 'CITY OF ORANGE', 'KILLEFER PARK', 'SPECIFICATIONS', 'APPROVED:', 'DATE', 'SCALE:', 'SHEET 7 OF 7', and 'E701'.

GENERAL

- MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE 2016 EDITION OF THE CALIFORNIA BUILDING CODE, TITLE 24, THE ORDINANCES OF THE LOCAL BUILDING OFFICIAL, AND THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
- REFERENCE TO CODES, RULES REGULATIONS, STANDARDS, MANUFACTURER'S INSTRUCTIONS OR REQUIREMENTS OF REGULATORY AGENCIES IS TO THE LATEST EDITION OF EACH IN EFFECT AT THE DATE OF SUBMISSION OF BID UNLESS THE DOCUMENT DATE IS SHOWN.
- DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION, WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, USE SIMILAR DETAILS OF CONSTRUCTION, SUBJECT TO REVIEW BY THE STRUCTURAL ENGINEER OF RECORD (SEOR).
- DETAILS ON SHEETS TITLED "TYPICAL DETAILS" APPLY TO SITUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME OF SIMILAR TO THOSE SPECIFICALLY REFERENCED. SUCH DETAILS ARE NOT NOTED AT EACH LOCATION THAT THEY OCCUR.
- SEE ELECTRICAL AND VENDOR CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
- VERIFY ALL DIMENSIONS, ELEVATIONS AND SITE CONDITIONS BEFORE STARTING WORK. NOTIFY THE ELECTRICAL ENGINEER OF RECORD (EOR) OF DISCREPANCIES.
- DO NOT SCALE THE DRAWINGS.
- TOLERANCES SHALL BE ACCORDING TO THE BUILDING CODE.
- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES. NOTIFY THE EOR OF ANY DISCREPANCIES AND RESOLVE BEFORE PROCEEDING WITH THE WORK.

DESIGN CRITERIA

- THE OBJECTIVE OF THIS WORK IS TO DESIGN AND PAD AND ANCHORAGE FOR REPLACEMENT SWITCHGEAR.
- DESIGN LOAD CRITERIA:

GRAVITY LOADS	
DEAD LOADS	ACTUAL OPERATING EQUIPMENT WEIGHTS
ULTIMATE WIND LOADS	
RISK CATEGORY	II (T.1604.5)
EXPOSURE CATEGORY	C
DESIGN WIND SPEED, V_{ULT} , V_{ASD}	110 MPH PER FIGURE 1609.3 (1), 85 PER EQN 16-33
ULTIMATE SEISMIC LOADS (COMPONENTS)	
IMPORTANCE FACTOR, I_p	1.0 (RISK CATEGORY II, T.1604.5)
MAPPED SPECTRAL ACCELERATIONS	$S_s = 1.50g$, $S_1 = 0.55g$
SITE CLASS	D (ASSUMED)
DESIGN SPECTRAL RESPONSE COEFFICIENTS	$S_{D1} = 1.00g$, $S_{D2} = 0.55g$
SEISMIC DESIGN CATEGORY	D

- FOUNDATIONS (BASED ON CBC TABLE 1806.2, ITEM 5):
 - ALLOWABLE BEARING PRESSURE: 500 PSF (LIMIT BASED ON SHALLOW SLAB TURN-DOWNS).
 - ALLOWABLE SLIDING RESISTANCE: 130 PSF (50% OF WEIGHT MAXIMUM)
 - ALLOWABLE PASSIVE PRESSURE: 100 PCF
 - FRICITION AND PASSIVE PRESSURE MAY BE COMBINED IN CALCULATION OF TOTAL RESISTANCE TO SLIDING.
 - A ONE-THIRD INCREASE IS APPLICABLE TO SOIL CAPACITIES FOR SHORT-TERM LOADING (WIND/SEISMIC).

SOILS AND FOUNDATIONS

- THE DESIGN OF THE FOUNDATION SYSTEM IS BASED UPON THE CRITERIA AND RECOMMENDATIONS CONTAINED IN CBC TABLE 1806.2, ITEM 5.
- LOCATE AND PROTECT EXISTING UTILITIES TO REMAIN DURING AND/OR AFTER CONSTRUCTION.
- REMOVE ABANDONED FOOTINGS, UTILITIES, ETC. WHICH INTERFERE WITH NEW CONSTRUCTION, UNLESS OTHERWISE INDICATED.
- NOTIFY THE EOR AND SEOR IF ANY BURIED STRUCTURES NOT INDICATED, SUCH AS CESSPOOLS, CISTERNS, FOUNDATIONS, ETC. ARE FOUND.
- REMOVE LOOSE SOIL AND STANDING WATER FROM FOUNDATION EXCAVATIONS PRIOR TO PLACING CONCRETE.
- BOTTOM OF FOOTINGS SHALL BE LEVEL.
- EXCAVATIONS FOR FOUNDATIONS MUST BE ACCEPTED BY THE CITY INSPECTOR PRIOR TO PLACING REINFORCING AND CONCRETE. NOTIFY THE CITY WHEN EXCAVATIONS ARE READY FOR INSPECTION.
- MECHANICALLY COMPACT EXCAVATION BACKFILLS IN LAYERS. PROVIDE 90% MINIMUM COMPACTION IN ACCORDANCE WITH THE ASTM D1557 TEST METHOD UON IN SOILS REPORT. PROVIDE 95% MINIMUM COMPACTION FOR FILL BENEATH FOOTINGS.
- SCARIFY AND RECOMPACT TOP 6 INCHES OF SOIL BENEATH FILL PER ITEM ABOVE.

EXISTING CONSTRUCTION

- THE CONTRACTOR SHALL REMOVE ALL INTERFERING ITEMS FOR NEW CONSTRUCTION AND SHALL REPAIR OR REPLACE ALL REMOVED ITEMS TO MATCH THE EXISTING CONDITIONS IN ACCORDANCE WITH THE ARCHITECTURAL DRAWINGS.
- INFORMATION SHOWN ON THE DRAWINGS RELATED TO EXISTING CONDITIONS REPRESENTS THE PRESENT KNOWLEDGE, BUT WITHOUT GUARANTEE OF ACCURACY. REPORT CONDITIONS THAT CONFLICT WITH THE CONTRACT DOCUMENTS TO THE ARCHITECT AND SEOR. DO NOT DEVIATE FROM THE CONTRACT DOCUMENTS WITHOUT WRITTEN DIRECTION FROM THE EOR AND/OR SEOR.

FORMWORK

- PROVIDE CURING WHERE FORMS ARE REMOVED IN LESS THAN 7 DAYS.
- REMOVE FORMS NO SOONER THAN 48 HOURS AFTER PLACING CONCRETE.

REINFORCING STEEL

- REINFORCING SHALL BE FABRICATED ACCORDING TO THE "MANUAL OF STANDARD PRACTICE FOR REINFORCED CONCRETE CONSTRUCTION" AND SHALL CONFORM TO ASTM A615, GRADE 60.
- PROVIDE REINFORCING SHOWN OR NOTED CONTINUOUS IN LENGTHS AS LONG AS PRACTICABLE.
- TERMINATE REINFORCING STEEL IN STANDARD HOOKS UNLESS OTHERWISE SHOWN.
- REINFORCING SHALL BE SECURELY TIED IN PLACE BEFORE CONCRETE IS PLACED.
- ACCURATELY POSITION, SUPPORT AND SECURE REINFORCEMENT FROM DISPLACING DUE TO FORMWORK, CONSTRUCTION, OR CONCRETE PLACEMENT OPERATIONS. LOCATE AND SUPPORT REINFORCING BY METAL CHAIRS, RUNNERS, BOLSTERS, SPACERS AND HANGERS AT A MAXIMUM SPACING OF 3'-0".
- FIELD BENDING OF REINFORCING STEEL EMBEDDED IN CONCRETE OR MASONRY SHALL NOT BE ALLOWED UNLESS APPROVED BY THE SEOR.
- MILL CERTIFICATIONS SHALL BE SUBMITTED FOR REVIEW.

CAST-IN-PLACE CONCRETE

- CONCRETE IS MILDLY REINFORCED AND CAST-IN-PLACE UNLESS OTHERWISE NOTED. WHERE REINFORCING IS NOT SPECIFICALLY SHOWN OR WHERE DETAILS ARE NOT GIVEN, PROVIDE REINFORCING SIMILAR TO THAT SHOWN FOR SIMILAR CONDITIONS, SUBJECT TO REVIEW BY THE SEOR.
- SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
- DIMENSIONS SHOWN FOR LOCATION OF REINFORCING ARE TO THE FACE OF BARS AND DENOTE CLEAR COVERAGE UNLESS OTHERWISE NOTED.
- THE MINIMUM CONCRETE CLEAR COVER TO REINFORCING BARS IS AS FOLLOWS:

LOCATIONS	CLEAR COVER, INCHES
CONCRETE PLACED AGAINST EARTH	3
SLABS ON GRADE (TOP CLEARANCE)	1 1/2

5. CONCRETE TYPES

USE	f_c (PSI) (a)	MAX SLUMP (IN)	NOMINAL MAX AGGREGATE (IN)	WATER CEMENTITIOUS RATIO (MAX)
TYPICAL	3,000*	4	1	0.50

*NOTE: CONCRETE DESIGNED USING $f_c = 2,500$ PSI (SPECIAL INSPECTION NOT REQUIRED)
 a. COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS.

- CONCRETE MIXES SHALL BE DESIGNED BY A QUALIFIED TESTING LABORATORY, BEARING A CALIFORNIA REGISTERED CIVIL ENGINEER'S STAMP, AND APPROVED BY THE SEOR PRIOR TO USE.
- PORTLAND CEMENT SHALL BE TYPE II OR V CONFORMING TO ASTM C150.
- COARSE AGGREGATE SHALL CONFORM TO ASTM C-33.
- ALL CONCRETE SHALL BE NORMAL WEIGHT (145 PCF) HARD ROCK TYPE.
- CONTINUOUSLY MOIST CURE CONCRETE FOR 7 DAYS MINIMUM. WATER FOG SPRAYS, PONDING, SATURATED ABSORPTIVE COVERS OR MOISTURE RETAINING COVERS MAY BE USED. IN LIEU OF MOIST CURING, CURING COMPOUNDS MAY BE SUBMITTED TO THE ARCHITECT FOR ACCEPTANCE.
- PROVIDE 1/4" CHAMFERS AT ALL EXPOSED CONCRETE EDGES UNLESS OTHERWISE NOTED.
- CONSOLIDATE CONCRETE PLACED IN FORMS BY MECHANICAL VIBRATING EQUIPMENT SUPPLEMENTED BY HAND-SPADING, RODDING OR TAMPING. USE EQUIPMENT & PROCEDURES FOR CONSOLIDATION OF CONCRETE IN ACCORDANCE WITH THE RECOMMENDED PRACTICES OF ACI 309 TO SUIT THE TYPE OF CONCRETE & PROJECT CONDITIONS.
- NO WOOD SPREADERS ALLOWED. NO WOOD STAKES ALLOWED IN AREAS TO BE CONCRETED.

EXPANSION (WEDGE) ANCHORS

- WHEN INSTALLING DRILLED-IN ANCHORS IN CONCRETE, USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE EXISTING REINFORCING.
- EXPANSION ANCHORS INTO CONCRETE SHALL BE HILTI KB-TZ (ICC ESR-1917).
- INSTALL ANCHORS IN ACCORDANCE WITH THE ICC REPORT.
- PROVIDE STAINLESS STEEL FASTENERS (EXTERIOR USE).
- IF REINFORCEMENT IS ENCOUNTERED DURING DRILLING, ABANDON HOLE AND SHIFT LOCATION TO AVOID THE REINFORCEMENT. PROVIDE A MINIMUM OF TWO ANCHOR DIAMETERS OR 1", WHICHEVER IS LARGER, OF SOUND CONCRETE BETWEEN THE ANCHOR AND THE ABANDONED HOLE. FILL THE ABANDONED HOLE WITH NON-SHRINK GROUT. IF THE ANCHOR MAY NOT BE SHIFTED AS NOTED ABOVE, CONTACT THE SEOR.
- INSTALL ANCHORS TO THE FOLLOWING SPECIFICATIONS (EFFECTIVE EMBEDMENTS SHOWN ON DETAILS):

HILTI KB-TZ ANCHOR		
ANCHOR DIAMETER (IN)	1/2	3/4
EFFECTIVE EMBED, h_{dev} (IN)	3 1/4	4
NOMINAL EMBED, h_{nom} (IN)	3 3/8	4 7/8
MIN HOLE DEPTH, h_o (IN)	4	4 1/2
INSTALL TORQUE (LB-FT)	40	60
MIN THICKNESS, h_{min} (IN)	6	6
MIN EDGE DIST, C_{min} (IN)	2 3/8	3 1/4
MIN SPACING, S_{min} (IN)	2 3/8	3

STATEMENT OF SPECIAL INSPECTIONS (& STRUCTURAL TESTS)

- STRUCTURAL TESTS AND INSPECTIONS SHALL BE ACCORDING TO 2016 CALIFORNIA BUILDING CODE.
- THE SPECIAL INSPECTIONS IDENTIFIED ARE IN ADDITION TO THOSE REQUIRED BY SECTION 110 OF THE CODE, AS AMENDED. SPECIAL INSPECTION IS NOT A SUBSTITUTE FOR INSPECTION BY THE GOVERNING JURISDICTION.
- AN INDEPENDENT TESTING AGENCY AND SPECIAL INSPECTORS WILL BE RETAINED BY THE OWNER (NOT THE CONTRACTOR OR ANY OTHER PERSON RESPONSIBLE FOR THE WORK) TO PERFORM TESTS AND SPECIAL INSPECTIONS. THE CONTRACTOR SHALL PROVIDE ACCESS AND FURNISH SAMPLES TO THE AGENCY AS REQUIRED.
- IF INITIAL TESTS OR INSPECTIONS MADE BY THE OWNER'S TESTING AGENCY REVEAL THAT ANY PORTION OF THE WORK DOES NOT COMPLY WITH THE CONTRACT DOCUMENTS, ADDITIONAL TESTS, INSPECTIONS AND NECESSARY REPAIRS WILL BE MADE AT THE CONTRACTOR'S EXPENSE.
- A CERTIFICATE OF SATISFACTORY COMPLETION OF WORK REQUIRING SPECIAL INSPECTION MUST BE COMPLETED AND SUBMITTED TO THE GOVERNING JURISDICTION AND SEOR.
- PERIODIC OR CONTINUOUS PRESENCE AND INSPECTION BY THE PROJECT OR SPECIAL INSPECTOR ARE REQUIRED FOR THE FOLLOWING TYPES OF WORK WHERE OCCURS:

REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION (CBC TABLE 1705.3)			
TYPE	INSPECTION FREQUENCY	REFERENCED STANDARD	IBC REFERENCE
1. NOT REQUIRED EXCEPT AS SHOWN BELOW (NOTE: $f_c = 2,500$ PSI USED IN DESIGN)			
4. INSPECT MECHANICAL ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS	PERIODIC	ACI 318: 17.8.2	---

STRUCTURAL OBSERVATION - NOT REQUIRED

ABBREVIATIONS

@	AT	MAX	MAXIMUM
CLR	CLEAR	MIN	MINIMUM
CONT	CONTINUOUS	NWC	NORMALWEIGHT CONCRETE
(E)	EXISTING	oc	ON CENTER
E.A	EXPANSION ANCHOR	REINF	REINFORCING STEEL
EOR	ELECTRICAL ENGINEER OF RECORD	S.E.D.	SEE ELEC DOCUMENTS
EMB	EMBEDMENT	SEOR	STRUCTURAL ENGINEER OF RECORD
EQ	EQUAL	S.O.G.	SLAB-ON-GRADE
EQUIP	EQUIPMENT	SS	STAINLESS STEEL
EW	EACH WAY	TOT	TOTAL
LBS	POUNDS	TYP	TYPICAL

GENERAL NOTES

SCALE: NONE

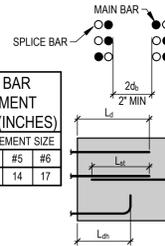
5

NOTES:

- ALL DETAILING OF REINF SHALL COMPLY WITH THIS SCHEDULE UNLESS SPECIFICALLY DETAILED OTHERWISE.
- REINF DEVELOPMENT LENGTH AND SPLICE TABLE IS BASED ON UNCOATED GRADE 60 STEEL PER ACI 318 CHAPTER 18 AND SECTION 18.8.5 (CONC) AND TMS 530 SECTION 3.3 (CMU).
- d_s = BAR DIAMETER.
- NP = NOT PERMITTED.
- TOP REINF IS HORIZONTAL REINF THAT HAS MORE THAN 12" OF CONCRETE PLACED BELOW IT.
- LAP LENGTHS SHOWN MEET REQUIREMENTS FOR CLASS "B" SPLICE.
- CLEAR SPACING OF BARS BEING DEVELOPED OR SPLICED SHALL NOT BE LESS THAN THE LARGER OF 2 BAR DIAMETERS OR 2". CLEAR COVER SHALL NOT BE LESS THAN THE LARGER OF THE BAR DIAMETER SIZE OR PER GENERAL NOTES. (ALTERNATE: SPLICE BY WELDING OR MECHANICAL CONNECTIONS).
- TYPE 1 SPLICES SHALL DEVELOP 125% OF THE YIELD STRENGTH OF THE REINF (75 KSI). TYPE 2 SPLICES SHALL DEVELOP THE TENSILE STRENGTH OF REINF (90 KSI).
- A WELDED SPLICE (COMPLETE JOINT PENETRATION): SEE TYPICAL DETAILS FOR ADDL INFO.
- MECHANICAL CONNECTORS: TENSION-COMPRESSION TYPE WITH A VALID ICC APPROVAL REPORT AND SHALL BE INSTALLED IN ACCORDANCE WITH THE REPORT.
- A STANDARD HOOK SHALL BE PROVIDED WHERE THE DEVELOPMENT LENGTH IS NOT POSSIBLE DUE TO SPACE RESTRICTIONS (REFER TO HOOKED BAR SCHEDULE).
- SMALLER BAR LAP LENGTH MAY BE USED WHEN SPLICING BARS OF DIFFERING DIAMETERS.
- AT CONC WALLS, SPLICES IN HORIZONTAL REINF SHALL BE STAGGERED.
- L_d = DEVELOPMENT LENGTH (DEV), L_{sp} = LAP SPLICE (LAP).

BASE MATERIAL	f_c (PSI)	CONDITION	REINFORCEMENT SIZE				
			#3	#4	#5	#6	
NWC	3,000	STD DEV	17	22	28	33	
			TOP DEV	23	29	37	43
			STD LAP	23	29	37	43
			TOP LAP	29	38	48	56

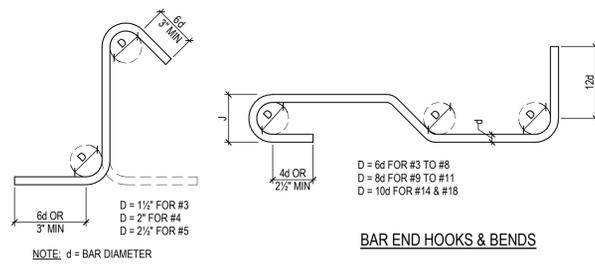
f_c (PSI)	REINFORCEMENT SIZE			
	#3	#4	#5	#6
3,000	9	11	14	17



TYPICAL DEVELOPMENT & LAP LENGTHS

SCALE: NONE

2



BAR END HOOKS & BENDS

END HOOKS, ALL GRADES		
BAR SIZE	D	J
#3	2 1/2"	3"
#4	3"	4"
#5	3 3/4"	5"
#6	4 1/2"	6"

STIRRUP / TIE HOOKS & BENDS



BAR OFFSET

NOTE: d = BAR DIAMETER

TYPICAL REINFORCEMENT BEND DETAILS

SCALE: NONE

1



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 Lake Forest, CA 92630 949.916.3440
 www.spirestructures.com
 JOB#: 18P2S03 ENG: HZ



UNDER THE SUPERVISION OF:

DATE: _____

REVISIONS	
DATE	DESCRIPTION

FOR ENGINEER'S USE		
NAME	DATE	
DRAWN: BTM	10/11/19	
DESIGNED: HZ	10/11/19	
CHECKED: JCW	10/11/19	
FOR CITY USE ONLY		
NAME	DATE	
STREETS		
SEWER		
DRAINAGE		
WATER		
ST. SUPT.		
TRAFFIC		

CITY OF ORANGE

KILLEFER PARK
 (615 N LEMON ST, ORANGE, CA 92867)

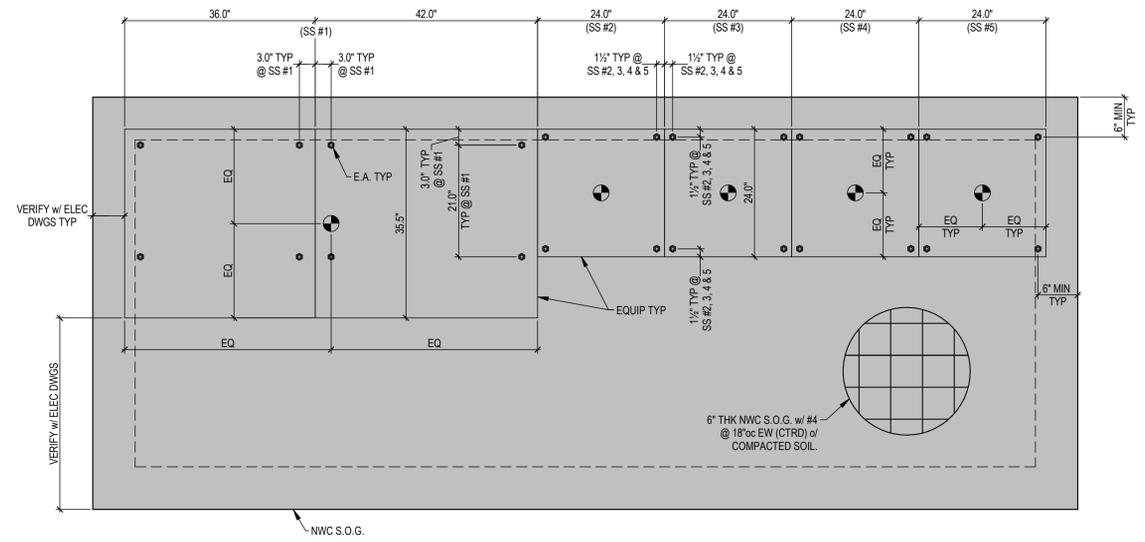
GENERAL NOTES & TYPICAL DETAILS

APPROVED: _____ APPROVED: _____

DATE: _____ CITY ENGINEER DATE: _____ PUBLIC WORKS DIRECTOR

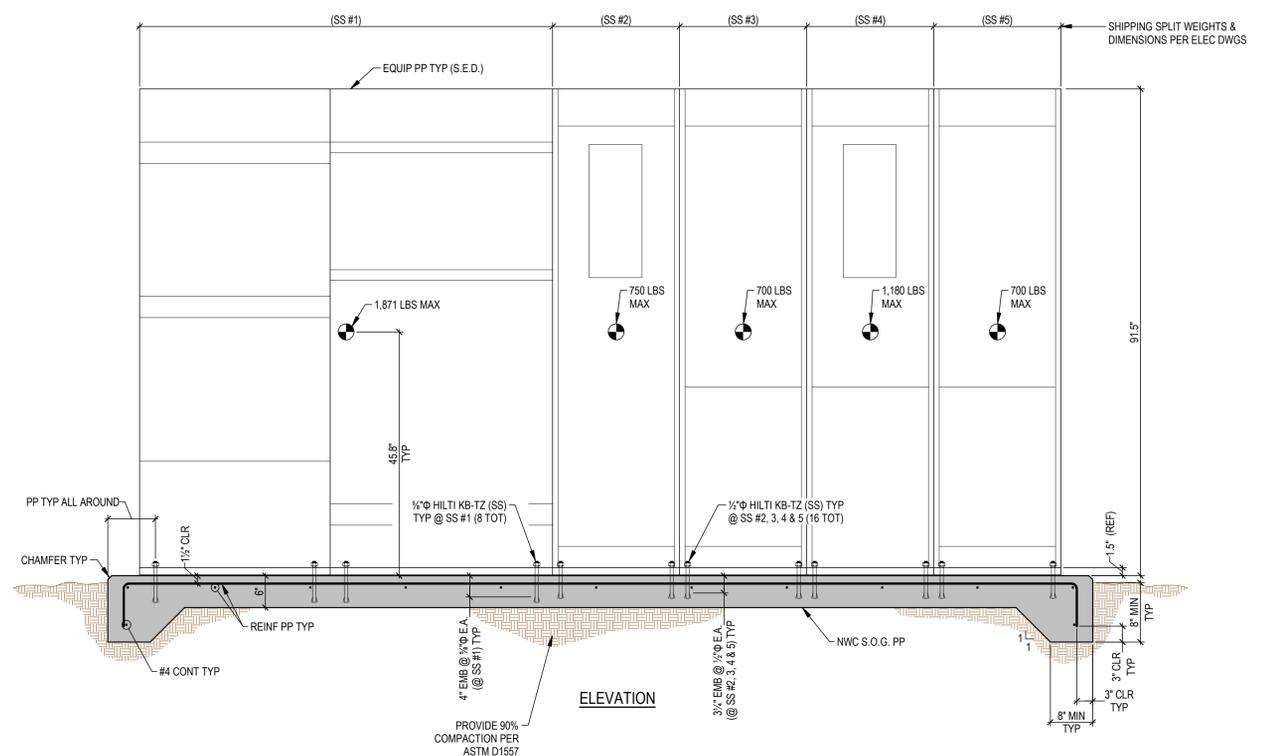
SCALE: HORIZ. AS NOTED VERT. AS NOTED F.B. _____ PG. _____ SHEET 1 OF 2 SHEETS

100% CD SUBMITTAL 5001



PLAN VIEW @ EQUIP BASE

NOTES:
 1. S.E.D. FOR EQUIP LOCATION & ADDL INFO.
 2. CONTRACTOR TO VERIFY DIMENSIONS w/ MFR PRIOR TO CONSTRUCTION.



ELEVATION

SWITCHBOARD PAD & ANCHORAGE (MS) SCALE: NONE 1

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 STRUCTURAL ENGINEERING
 26461 Rancho Parkway South tel:
 Lake Forest, CA 92630 949.916.3440
 www.spirestructures.com
 JOB#: 18P2S03 ENG: HZ



UNDER THE SUPERVISION OF:

DATE	DESCRIPTION

FOR ENGINEER'S USE

NAME	DATE
DRAWN: BTM	10/11/19
DESIGNED: HZ	10/11/19
CHECKED: JCW	10/11/19

FOR CITY USE ONLY

STREETS	NAME	DATE
SEWER		
DRAINAGE		
WATER		
ST. SUPT.		
TRAFFIC		

CITY OF ORANGE

KILLEFER PARK
 (615 N LEMON ST, ORANGE, CA 92867)

DETAILS

APPROVED:	APPROVED:
DATE: _____ CITY ENGINEER	DATE: _____ PUBLIC WORKS DIRECTOR

SCALE: HORIZ. AS NOTED VERT. AS NOTED F.B. _____ PG. _____ SHEET 2 OF 2 SHEETS

100% CD SUBMITTAL S002



October 9, 2019

STRUCTURAL DESIGN CALCULATIONS

City of Orange
Killefer Park

Spire Job #: 18P2S03
615 N. Lemon Street
Orange, CA 92867

Project Description:

Provide anchorage design for a switchboard that sits on an existing concrete pad.

- Page 1. Design Maps Summary Report
- Page 2. Anchorage to Topside of Concrete - Hilti KB-TZ (ESR-1917)
- Page 3-6. Switchboard Anchorage
- Page 7. Switchboard FTG
- Page A1-A2. Reference Equipment Info



10.09.19



Job:	18P2S03 City of Orange Killefer Park	1	
Calc By:	HZ		Date:



City of Orange Killefer Park

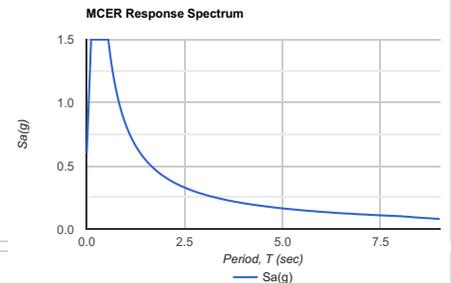
615 N Lemon St, Orange, CA 92867, USA

Latitude, Longitude: 33.7971379, -117.8548156

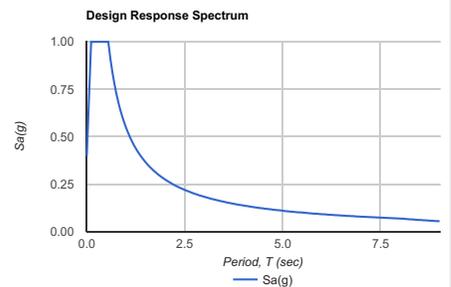


Date	10/7/2019, 5:24:21 PM
Design Code Reference Document	ASCE7-10
Risk Category	II
Site Class	D - Stiff Soil

Type	Value	Description
S _S	1.5	MCE _R ground motion. (for 0.2 second period)
S ₁	0.548	MCE _R ground motion. (for 1.0s period)
S _{MS}	1.5	Site-modified spectral acceleration value
S _{M1}	0.822	Site-modified spectral acceleration value
S _{DS}	1	Numeric seismic design value at 0.2 second SA
S _{D1}	0.548	Numeric seismic design value at 1.0 second SA



Type	Value	Description
SDC	D	Seismic design category
F _a	1	Site amplification factor at 0.2 second
F _v	1.5	Site amplification factor at 1.0 second
PGA	0.503	MCE _G peak ground acceleration
F _{PGA}	1	Site amplification factor at PGA
PGA _M	0.503	Site modified peak ground acceleration
T _L	8	Long-period transition period in seconds
SsRT	1.504	Probabilistic risk-targeted ground motion. (0.2 second)
SsUH	1.44	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration
SsD	1.5	Factored deterministic acceleration value. (0.2 second)
S1RT	0.548	Probabilistic risk-targeted ground motion. (1.0 second)
S1UH	0.509	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration.
S1D	0.6	Factored deterministic acceleration value. (1.0 second)
PGA _d	0.503	Factored deterministic acceleration value. (Peak Ground Acceleration)
C _{RS}	1.044	Mapped value of the risk coefficient at short periods
C _{R1}	1.076	Mapped value of the risk coefficient at a period of 1 s





Job:	18P2S03 City of Orange Killefer Park			2
Calc By:	HZ	Date:	10/09/19	

Anchorage to Topside of Concrete - Hilti KB-TZ (ESR-1917)

Mark =	1	2			
Conc =	NWC	NWC			Normal or lightweight concrete
Metal deck =	No	No			Concrete over metal deck?
f _c =	2,500	2,500			psi Concrete compressive strength
Anchor =	SS 1/2 (3 1/4)	SS 5/8 (4)			Hilti KB-TZ anchor
Steel Type =	Stainless	Stainless			Carbon steel or Stainless steel
d _o =	1/2	5/8			in Anchor O.D.
h _{ef} =	3 1/4	4			in Effective min anchor embedment
h =	6	6			in Concrete thickness
h _{min} =	6	6			in Min member thickness
s =	0.75	0.75			
	1.0	1.0			Seismic reduction per ACI Ch. 17
k _{cr} =	17	17			LWC reduction per ACI Ch. 17
k _{cp} =	2	2			Effectiveness factor
N _{p,eq} =	NA	5,840			Lbs Coefficient for pryout strength
N _{p,cr} =	NA	5,840			Lbs Adjusted by (f' _c /2500) ^{0.5}
N _b =	4,980	6,800			Lbs Adjusted by (f' _c /2500) ^{0.5}
S _{min} =	2	2 3/8			in = k _{cr} ·(f' _c) ^{0.5} ·h _{ef} ^{1.5}
s =	3.0	3.0			in Min anchor spacing
C _{min} =	3 1/4	4 1/4			in Anchor spacing
c =	6.0	6.0			in Min. edge distance
V _{cb} =	N/A	N/A			
ed,N =	1.00	1.00			Edge distance = $\sqrt{7(h_{ef}/d_o)^{0.2} \cdot d_o^{0.5} \cdot f_c^{0.5} \cdot c^{1.5}}$ = 0.7 + 0.3c/(1.5h _{ef}) ≤ 1.0
A _n =	62	90			in ² = 3h _{ef} ·(min(1.5h _{ef} ,s/2)+min(1.5h _{ef} ,c))
A _{no} =	95	144			in ² = 9·h _{ef} ²
N _{sa} =	11,554	17,880			lbs Steel strength in tension
V _{sa} =	6,880	9,350			lbs Steel strength in shear
t _{conc} =	0.65	0.65			
v _{conc} =	0.70	0.70			
t _{steel} =	0.75	0.75			
v _{steel} =	0.65	0.65			
P _{n,conc} =	1,587	1,779			Lbs = s _{t,conc} ·min(N _{p,eq} ,N _{p,cr} ,N _b)·(A _n /A _{no})
V _{n,conc} =	4,559	5,950			Lbs = v _{conc} ·k _{cp} ·N _b ·(A _n /A _{no})
P _{n,steel} =	8,666	13,410			Lbs = t _{steel} ·N _{sa}
V _{n,steel} =	4,472	6,078			Lbs = v _{steel} ·V _{sa}

Job:	18P2S03 City of Orange Killefer Park			3
Calc By:	HZ	Date:	10/09/19	

Floor Mounted Equipment - NEMA 3R Switchboard (SS#1)

Seismic Loads (ASCE 7-10, Chapter 13)

Design =	City	
$a_p =$	2.5	ASCE 7 Table 13.5-1 & Table 13.6-1
$R_p =$	6.0	ASCE 7 Table 13.5-1 & Table 13.6-1
$o =$	2.5	ASCE 7 Table 13.5-1 & Table 13.6-1
$S_{DS} =$	1.00 g	See USGS sheet
$I_p =$	1.00	ASCE Table 11.5-1
$z/h =$	0.00	
$F_{ph} =$	0.30 W_p	$F_{ph} = \frac{0.4S_{DS}a_p}{R_p/I_p} \left(1 + 2\frac{z}{h}\right) W_p$
$F_{pv} =$	0.20 W_p	
$W_p =$	1,871 Lbs	Equipment weight
$F_{ph} =$	561 Lbs (ULT)	$o \cdot F_{ph} = \boxed{1,403} \text{ Lbs (ULT)}$
$F_{pv} =$	374 Lbs (ULT)	

Wind Loads (ASCE 7-10, Section 29.5.1)

V =	110 mph	Basic wind velocity
Exp =	C	Exposure category
W =	78.0 in	Equipment width
D =	36.0 in	Equipment depth
H =	91.5 in	Equipment height
$A_r =$	50 ft ²	Vertical area exposed to wind
$A_r =$	20 ft ²	Horizontal area exposed to wind
$K_d =$	0.85	Table 26.6-1
$K_z =$	0.85	Table 29.3-1
$K_{zt} =$	1.00	Assumed
$q_z =$	22.4 psf	$= 0.00256 \cdot K_z \cdot K_{zt} \cdot K_d \cdot V^2$
G =	0.85	Section 26.9.1, rigid
$C_f =$	1.55	Figure 29.4-1
$F_h =$	1,459 Lbs (ULT)	$= q_z \cdot G \cdot C_f \cdot A_f$
$F_v =$	436 Lbs (ULT)	$= q_z \cdot A_r$

Unit Data

B =	72.0 in	Distance between anchors
D =	21.0 in	Distance between anchors
CG =	45.8 in	Height to centroid

Job:	18P2S03 City of Orange Killefer Park			4
Calc By:	HZ	Date:	10/09/19	

Floor Mounted Equipment - NEMA 3R Switchboard (SS#1)

Anchorage to NWC Conc. Pad (ULT)

* See "Anchorage to Topside of Concrete - Hilti KB-TZ (ESR-1917)" calculation sheet for additional info.

Anchor =	SS 5/8 (4)	5/8" ϕ Hilti KB-TZ (Stainless Steel) w/ 4" Embedment
n =	8	No. of anchors (total)
n _x =	8	No. of anchors resisting horizontal loads in one direction (min)
n _y =	2	No. of anchors resisting vertical loads from overturning (min)

Seismic

oP _u =	1,365	Lbs	Tension per anchor w/ Ω_o	= oF _{ph} ·CG / [min(B,D)·n _y] - (0.9W _p - F _{pv})/n										
oV _u =	175	Lbs	Shear per anchor w/ Ω_o	= oF _{ph} /n _x										
<table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="padding: 2px 5px;">Concrete</th> <th style="padding: 2px 5px;">Steel</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px 5px;">P_n = 1,779</td> <td style="padding: 2px 5px;">13,410</td> </tr> <tr> <td style="padding: 2px 5px;">V_n = 5,950</td> <td style="padding: 2px 5px;">6,078</td> </tr> <tr> <td style="padding: 2px 5px;">DCR_p = 0.77</td> <td style="padding: 2px 5px;">0.10</td> </tr> <tr> <td style="padding: 2px 5px;">DCR_v = 0.03</td> <td style="padding: 2px 5px;">0.03</td> </tr> </tbody> </table>					Concrete	Steel	P _n = 1,779	13,410	V _n = 5,950	6,078	DCR _p = 0.77	0.10	DCR _v = 0.03	0.03
Concrete	Steel													
P _n = 1,779	13,410													
V _n = 5,950	6,078													
DCR _p = 0.77	0.10													
DCR _v = 0.03	0.03													
(Concrete tension capacity has been multiplied by 0.75 for seismic)														
$\frac{oP_u}{P_n}$ $\frac{oV_u}{V_n}$														
$(DCR_{p,max})^{5/3} + (DCR_{v,max})^{5/3} \leq 1.0$														

Wind (Governs)

P _u =	1,434	Lbs	Tension per anchor	= F _h ·CG / [min(B,D)·n _y] - (0.9W _p - F _v)/n										
V _u =	182	Lbs	Shear per anchor	= F _h /n _x										
<table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="padding: 2px 5px;">Concrete</th> <th style="padding: 2px 5px;">Steel</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px 5px;">P_n = 2,372</td> <td style="padding: 2px 5px;">13,410</td> </tr> <tr> <td style="padding: 2px 5px;">V_n = 5,950</td> <td style="padding: 2px 5px;">6,078</td> </tr> <tr> <td style="padding: 2px 5px;">DCR_p = 0.60</td> <td style="padding: 2px 5px;">0.11</td> </tr> <tr> <td style="padding: 2px 5px;">DCR_v = 0.03</td> <td style="padding: 2px 5px;">0.03</td> </tr> </tbody> </table>					Concrete	Steel	P _n = 2,372	13,410	V _n = 5,950	6,078	DCR _p = 0.60	0.11	DCR _v = 0.03	0.03
Concrete	Steel													
P _n = 2,372	13,410													
V _n = 5,950	6,078													
DCR _p = 0.60	0.11													
DCR _v = 0.03	0.03													
$\frac{P_u}{P_n}$ $\frac{V_u}{V_n}$														
$(DCR_{p,max})^{5/3} + (DCR_{v,max})^{5/3} \leq 1.0$														



Job:	18P2S03 City of Orange Killefer Park			5
Calc By:	HZ	Date:	10/09/19	

Floor Mounted Equipment - NEMA 3R Switchboard (SS#2-#5)

Seismic Loads (ASCE 7-10, Chapter 13)

Design =	City	
$a_p =$	2.5	ASCE 7 Table 13.5-1 & Table 13.6-1
$R_p =$	6.0	ASCE 7 Table 13.5-1 & Table 13.6-1
$o =$	2.5	ASCE 7 Table 13.5-1 & Table 13.6-1
$S_{DS} =$	1.00 g	See USGS sheet
$I_p =$	1.00	ASCE Table 11.5-1
$z/h =$	0.00	
$F_{ph} =$	0.30 W_p	$F_{ph} = \frac{0.4S_{DS}a_p}{R_p/I_p} \left(1 + 2\frac{z}{h}\right) W_p$
$F_{pv} =$	0.20 W_p	$F_{pv} = 0.2 \cdot S_{DS} \cdot W_p$
$W_p =$	1,180 Lbs (max)	Equipment weight
$F_{ph} =$	354 Lbs (ULT)	$o \cdot F_{ph} =$ 885 Lbs (ULT)
$F_{pv} =$	236 Lbs (ULT)	

Wind Loads (ASCE 7-10, Section 29.5.1)

$V =$	110 mph	Basic wind velocity
Exp =	C	Exposure category
$W =$	24.0 in	Equipment width
$D =$	24.0 in	Equipment depth
$H =$	91.5 in	Equipment height
$A_r =$	15 ft ²	Vertical area exposed to wind
$A_r =$	4 ft ²	Horizontal area exposed to wind
$K_d =$	0.85	Table 26.6-1
$K_z =$	0.85	Table 29.3-1
$K_{zt} =$	1.00	Assumed
$q_z =$	22.4 psf	$= 0.00256 \cdot K_z \cdot K_{zt} \cdot K_d \cdot V^2$
$G =$	0.85	Section 26.9.1, rigid
$C_f =$	1.65	Figure 29.4-1
$F_h =$	478 Lbs (ULT)	$= q_z \cdot G \cdot C_f \cdot A_r$
$F_v =$	89 Lbs (ULT)	$= q_z \cdot A_r$

Unit Data

$B =$	21.0 in	Distance between anchors
$D =$	21.0 in	Distance between anchors
$CG =$	45.8 in	Height to centroid

Job:	18P2S03 City of Orange Killefer Park			6
Calc By:	HZ	Date:	10/09/19	

Floor Mounted Equipment - NEMA 3R Switchboard (SS#2-#5)

Anchorage to NWC Conc. Pad (ULT)

* See "Anchorage to Topside of Concrete - Hilti KB-TZ (ESR-1917)" calculation sheet for additional info.

Anchor =	SS 1/2 (3 1/4)	1/2"φ Hilti KB-TZ (Stainless Steel) w/ 3 1/4" Embedment
n =	4	No. of anchors (total)
n _x =	4	No. of anchors resisting horizontal loads in one direction (min)
n _y =	2	No. of anchors resisting vertical loads from overturning (min)

Seismic (Governs)

oP _u =	758	Lbs	Tension per anchor w/ Ω _o	= oF _{ph} ·CG / [min(B,D)·n _y] - (0.9W _p - F _{pv})/n
oV _u =	221	Lbs	Shear per anchor w/ Ω _o	= oF _{ph} /n _x
	Concrete	Steel		
P _n =	1,587	8,666	Lbs	(Concrete tension capacity has been multiplied by 0.75 for seismic)
V _n =	4,559	4,472	Lbs	
DCR _p =	0.48	0.09		oP _u / P _n
DCR _v =	0.05	0.05		oV _u / V _n
DCR _{p+v} =	0.30			(DCR _{p,max}) ^{5/3} + (DCR _{v,max}) ^{5/3} ≤ 1.0

Wind

P _u =	278	Lbs	Tension per anchor	= F _h ·CG / [min(B,D)·n _y] - (0.9W _p - F _v)/n
V _u =	120	Lbs	Shear per anchor	= F _h /n _x
	Concrete	Steel		
P _n =	2,116	8,666	Lbs	
V _n =	4,559	4,472	Lbs	
DCR _p =	0.13	0.03		P _u / P _n
DCR _v =	0.03	0.03		V _u / V _n
DCR _{p+v} =	0.04			(DCR _{p,max}) ^{5/3} + (DCR _{v,max}) ^{5/3} ≤ 1.0

Job:	18P2S03 City of Orange Killefer Park			7
Calc By:	HZ	Date:	10/09/19	

Footing Design - NEMA 3R Switchboard

Design =	City
$a_p =$	2.5
$R_p =$	6
$S_{DS} =$	1.00 g
$I_p =$	1.00
$z/h =$	0.00

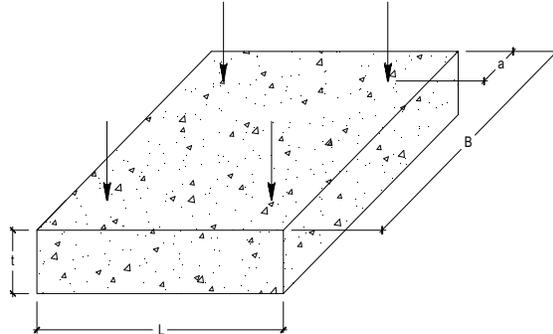
ASCE 7 T-13.5-1 & T-13.6-1
 ASCE 7 T-13.5-1 & T-13.6-1
 See USGS sheet
 ASCE 7 Table 11.5-1

$$F_{ph} = 0.30 W_p$$

$$F_{pv} = 0.20 W_p$$

Weight & Dimensions

$W_p =$	5,200 lbs	Equip weight
$CG_z =$	45.8 in	Dist to centroid (vertical)
$L =$	14.5 ft (min)	Length of footing
$B =$	5.9 ft (min)	Width of footing
$t =$	0.5 ft (min)	Thickness of footing
$a =$	3.0 ft	Cantilever length (max)
$b =$	3.0 ft	Backspan length (max)
$W_{FTG} =$	6,434 lbs	Footing weight



	ASD	ULT	
$F_{ph} =$	1,092 lbs	1,560 lbs	(From Equipment)
$F_{pv} =$	1,629 lbs	2,327 lbs	(Includes Footing)

Soil Bearing: (ASD)

$$SB_{allow} = 500 \text{ psf} \quad (\text{CBC Table 1806.2, Item 5})$$

CASE A: 0.9D+0.7E (ASD)		CASE B: D+0.7E (ASD)	
$P =$	8,842 lbs	$0.9 \cdot (W_p + W_{FTG}) - F_{pv}$	$13,263 \text{ lbs}$
$M =$	4,714 lb-ft	$F_{ph}(CG_z + t)$	$4,714 \text{ lb-ft}$
$e =$	0.5 ft < L/6	(L/6 = 2.4 ft)	0.4 ft < L/6
→ Full Soil Bearing $SB = P/(BL) + 6M/(BL^2)$		→ Full Soil Bearing $SB = P/(BL) + 6M/(BL^2)$	
$SB =$	126 psf < 500 psf (OK)	$SB =$	177 psf < 500 psf (OK)

Footing Reinforcing Design: (ULT)

$F_y =$	60 ksi	
$f'_c =$	2,500 psi	
Reinf =	#4 @ 18" oc (18" oc max)	bot cover = 3.0 in
$A_s =$	0.14 in ² /ft (10 bars total)	top cover = 1.5 in
$d =$	2.2 in	
$a =$	0.3 in	$= A_s \cdot F_y / (0.85 \cdot f'_c \cdot b)$

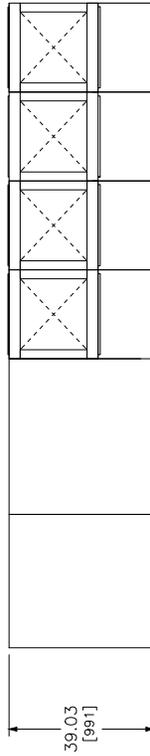
CASE A: 0.9D+E (ULT)		CASE B: 1.2D+E (ULT)	
$P =$	8,144 lbs	$0.9(W_p + W_{FTG}) - F_{pv}$	$16,288 \text{ lbs}$
$M =$	6,734 lb-ft	$F_{ph}(CG_z + t)$	$6,734 \text{ lb-ft}$
$e =$	0.8 ft < L/6	(L/6 = 2.4 ft)	0.4 ft < L/6
$w =$	127 plf /ft	$= P/(BL) + 6M/(BL^2)$	222 plf /ft
			$= P/(BL) + 6M/(BL^2)$

$M_u^- =$	0.3 kip-ft /ft	$= w \cdot b^2 / 8$	$V_u =$	1.6 k /ft	$= w \cdot L / 2$
$M_u^+ =$	1.0 kip-ft /ft	$= w \cdot a^2 / 2$	$V_c =$	2.0 k /ft	$= [2(f'_c)^{1/2}(12") \cdot d]$
$M_{u,max} =$	1.0 kip-ft /ft		DCR =	0.81 (OK)	$= V_u / V_c \leq 1.0$
$M_n =$	1.3 kip-ft /ft	$= 0.9 A_s \cdot F_y (d - a) / 2$			
DCR =	0.79 (OK)	$= M_u / M_n \leq 1.0$			

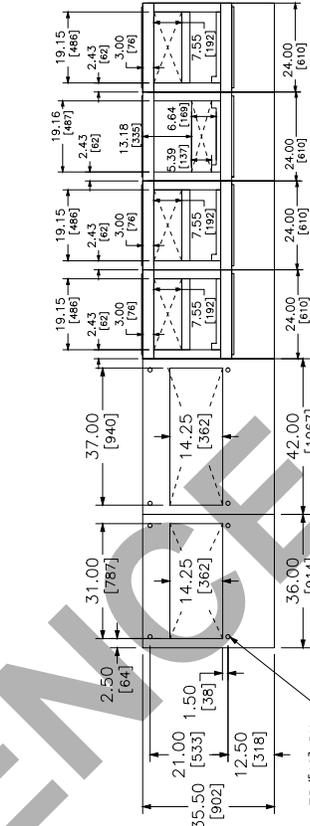


Job:	18P2S03 City of Orange Killefer Park			A2
Calc By:	HZ	Date:	10/08/19	

DESCRIPTION	BY	DATE

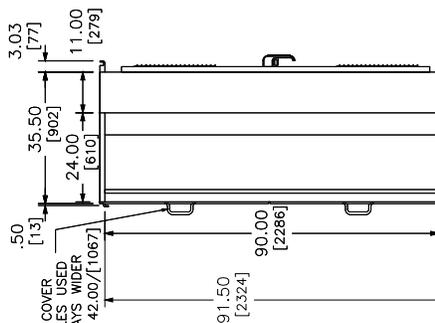


TOP VIEW - FRONT



FLOOR PLAN - FRONT

NOTE:
A MINIMUM BEARING CAPACITY OF 10,000 LBS IS REQUIRED FOR TOP COVER OVERHANG.



LEFT SIDE VIEW

NOTE: ALL DEVICES REQUIRING DRILLING OR INSERTION IN MOUNTING PAD SUCH AS CONDUIT, ANCHORING STUDS, SLEEVE INSERTS, ETC. SHOULD BE INSTALLED BEFORE SETTING EQUIPMENT IN PLACE.

DUAL DIMENSIONS: INCHES / MILLIMETER

JOB NAME:	Killefer Park City of Orange
JOB LOCATION:	(02C)
DRAWN BY:	(02C)
ENGINEER:	October 02 2019
DATE:	October 02 2019
DRAWING STATUS:	QUOTE
EQUIPMENT DESIGNATION:	MS 400A 480V N3R
EQUIPMENT TYPE:	GED-2 Switchboard
DRAWING TYPE:	SIDE TOP VIEW & FLOOR PLAN
PROJECT:	18P2S03
DWG#:	18P2S03-01
DATE:	10/08/19
SCALE:	AS SHOWN

PG 2 OF 2

NOT FOR CONSTRUCTION

DWG# 18P2S03-01

LEGEND

SYMBOL	DESCRIPTION
	NOTE CALLOUT
	DETAIL CALLOUT - NUMBER ON TOP DENOTES DETAIL NUMBER - NUMBER ON BOTTOM DENOTES SHEET DETAIL IS SHOWN
	NEW LINEWORK
	EXISTING LINEWORK
	DEMOLISHED LINEWORK
	CONDUIT CONCEALED IN WALL OR ABOVE CEILING
	CONDUIT TURNED UP
	CONDUIT CONCEALED UNDERGROUND OR BELOW FLOOR
	BRANCH CIRCUIT HOMERUN TO PANELBOARD AND CIRCUITS AS INDICATED
	CIRCUIT BREAKER
	SWITCH
	GROUND CONNECTION
	METER
	JUNCTION BOX

ABBREVIATIONS

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
1/C	SINGLE CONDUCTOR	KVA	KILOVOLT-AMPERES
ABV	AND	KW	KILOWATT
@	AT	LF	LINEAR FEET
A OR AMP	AMPERES	LS	LOAD INTERRUPTER SWITCH
A.C.	ASPHALT CONCRETE	LOC	LOCATION
AFF	ABOVE FINISHED FLOOR	LTG	LIGHTING
AFG	ABOVE FINISH GRADE	LV	LOW VOLTAGE
AIC	AMPERE INTERRUPTING CAPACITY	MAX	MAXIMUM
AL	ALUMINUM	MCC	MOTOR CONTROL CENTER
APPROX.	APPROXIMATE	MCP	MOTOR CIRCUIT PROTECTOR
ARCH.	ARCHITECT; ARCHITECTURAL	MFGR	MANUFACTURER
ATC	AIR TERMINAL CHAMBER	MH	MANHOLE
ATS	AUTOMATIC TRANSFER SWITCH	M.I.	MECHANICAL INTERLOCK
AUTO	AUTOMATIC	MRCT	MULTI-RATIO CURRENT TRANSFORMER
AUX	AUXILIARY	MTD	MOUNTED
AWG	AMERICAN WIRE GAUGE	MTG	MOUNTING
BAT	BATTERY	MV	MEDIUM VOLTAGE
BEL	BELOW	N	NORTH
BKBD	BACKBOARD	NAC	NOTIFICATION APPLIANCE CIRCUIT
BKR	BREAKER	NC	NORMALLY CLOSED
BLDG	BUILDING	NEC	NATIONAL ELECTRICAL CODE
B.S.	BARE STRANDED	NF	NON-FUSED
C	CONDUIT	NIC	NOT IN CONTRACT
CB	CIRCUIT BREAKER	NL	NIGHT LIGHT-24HRS ON
CC	CONSTANT CURRENT	NO.	NUMBER
CKT	CIRCUIT	OC	ON CENTER
CL	CENTER LINE	OD	OUTSIDE DIAMETER
CLG	CEILING	OE	OVERHEAD ELECTRICAL
CMU	CONCRETE MASONRY UNIT	OFC	OIL FUSED CUTOUT
C.O.	CONDUIT ONLY WITH FULL WIRE	OH	OVERHEAD
COL	COLUMN	OL	OIL LEVER SWITCH
CP	COMMUNICATION PROCESSOR	P	POLE
CPT	CONTROL POWER TRANSFORMER	PB	PULL BOX
CR	CONTROL RELAY	PC	PHOTOCELL
CSU	CALIFORNIA STATE UNIVERSITY	PCB	POLYCHLORINATED BIPHENYL
CSFD	COMBINATION SMOKE FIRE DAMPER	PDS	PRESSURE DIFFERENTIAL SWITCH
CT	CURRENT TRANSFORMER	PF	POWER FACTOR
CW	COLD WATER	PH OR Ø	PHASE
CU	COPPER	PILC	PAPER INSULATED, LEAD COVER
DIAG	DIAGRAM	PIV	POST INDICATING VALVE
DL	DAMP LOCATION LISTING	PL	PLATE
DM	DIGITAL METER	PNL	PANEL
DP	DISTRIBUTION PANEL	POC	POINT OF CONNECTION
DIST.	DISTANCE	PRI.	PRIMARY
DWG	DRAWING	PVC	POLY-VINYL CHLORIDE
DWP	DEPARTMENT OF WATER & POWER	PWR	POWER
EA	EACH	REC/RECEPT	RECEPTACLE
ELEC.	ELECTRICAL	REQD	REQUIRED
EMH	ELECTRICAL MANHOLE	RGS	RIGID GALVANIZED STEEL
EMT	ELECTRICAL METALLIC TUBING	RPBP	REDUCED PRESSURE BACK FLOW PREVENTER
EPO	EMERGENCY POWER OFF	RM	ROOM
EPR	ETHYLENE PROPYLENE RUBBER	SCE	SOUTHERN CALIFORNIA EDISON
EQUIP	EQUIPMENT	SF	SQUARE FEET
EXIST(E)	EXISTING	SHT	SHEET
EXP	EXPLOSION PROOF	SIG.	SIGNAL
FA	FIRE ALARM	SP	SPARE
FFE	FINISHED FLOOR ELEVATION	SPECS	SPECIFICATIONS
FIN.	FINISH	ST	STREET
FIP	FIELD INTERFACE PANEL	STD	STANDARD
FIXT	FIXTURE	SW	SWITCH
FLA	FULL LOAD AMPS	SWBD	SWITCHBOARD
FLR	FLOOR	SWGR	SWITCHGEAR
FLUOR	FLUORESCENT	SWST	SWITCHING STATION
FT	FEET	TB	TERMINAL BLOCK
FACP	FIRE ALARM CONTROL PANEL	TEL/TELE	TELEPHONE
FATC	FIRE ALARM TERMINAL CABINET	TMH	TELEPHONE MANHOLE
FO	FIBER OPTIC	T.O.D.	TOP OF DUCTBANK
FTG	FOOTING	T.O.M.	TOP OF MANHOLE
GFI	GROUND FAULT INTERRUPTER	TPS	TWISTED SHIELDED PAIR
GFR	GROUND FAULT RELAY	TRANSF/XFMR	TRANSFORMER
GG	GREEN GROUND	TS	TAMPER SWITCH
GND	GROUND	TYP	TYPICAL
HOA	HAND-OFF-AUTOMATIC	UG	UNDERGROUND
HP	HORSEPOWER	UON	UNLESS OTHERWISE NOTED
HT	HEIGHT	V	VOLTS
ISC	SHORT CIRCUIT CURRENT	VA	VOLT-AMPERES
JB	JUNCTION BOX	W/	WITH
KCMIL	THOUSAND CIRCULAR MILS	WP	WEATHERPROOF
KV	KILOVOLT	Z	IMPEDANCE

IN THE EVENT ABBREVIATIONS NOT MENTIONED HEREIN ARE USED, REFERENCE WILL BE MADE TO ANSI Y1.1, MILITARY STANDARD ABBREVIATIONS, AND OTHER STANDARD INDUSTRY CONVENTIONS.

SCOPE OF WORK:

- REPLACE AND UPGRADE EXISTING SWITCHBOARD.
- NO LOAD INCREASE.

GENERAL NOTES

- WORK SHALL COMPLY WITH THE 2016 EDITION OF THE CALIFORNIA ELECTRICAL CODE AND OTHER APPLICABLE FEDERAL, STATE, AND LOCAL AGENCY CODES. WHERE CONSTRUCTION DOCUMENTS INDICATE MORE RESTRICTIVE REQUIREMENTS, THE CONSTRUCTION DOCUMENTS SHALL GOVERN BUT THE CONSTRUCTION DOCUMENTS SHALL NOT BE INTERPRETTED AS AUTHORITY TO VIOLATE ANY CODE OR REGULATION.
- APPLICABLE CODES:
 - 2015 IBC AND 2016 CALIFORNIA AMENDMENTS (2016 CALIFORNIA BUILDING CODE - PART 2, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR))
 - 2014 NEC AND 2016 CALIFORNIA AMENDMENTS (2016 CALIFORNIA ELECTRICAL CODE (CEC) - PART 3, TITLE 24, CCR)
 - 2015 UMC AND 2016 CALIFORNIA AMENDMENTS (2016 CALIFORNIA MECHANICAL CODE - PART 4, TITLE 24, CCR)
 - 2015 UPC AND 2016 CALIFORNIA AMENDMENTS (2016 CALIFORNIA PLUMBING CODE - PART 5, TITLE 24, CCR)-(PUBLISHER:INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS (IAPMO))
 - 2015 IFC AND 2016 CALIFORNIA AMENDMENTS (2016 CALIFORNIA FIRE CODE - PART 9, TITLE 24, CCR)
- OBTAIN BUILDING AND LICENSING PERMITS, AND PAY ASSOCIATED COSTS AND EXPENSES REQUIRED BY FEDERAL, STATE, AND LOCAL AGENCIES.
- IDENTIFY, CONTACT, AND COORDINATE WORK WITH THE SERVING UTILITY (POWER). PAY FEES ASSOCIATED WITH UTILITY COORDINATION AND INSTALLATION. PROVIDE INSTALLATIONS COMPLIANT WITH THE CONTRACT DOCUMENTS AND THE SERVING UTILITY'S REQUIREMENTS.
- VISIT THE SITE, INCLUDING AREAS INDICATED ON THE DRAWINGS. OBTAIN AND INSPECT CONTRACT DOCUMENTS IMMEDIATELY UPON RECEIPT INCLUDING CONTRACT DOCUMENTS OF OTHER DISCIPLINES. NOTIFY OWNER OF DISCREPANCIES WITHIN 24 HOURS.
- SUBMIT A CHANGE ORDER TO THE OWNER DETAILING AND SPECIFYING REQUIRED WORK, AND OBTAIN APPROVAL BEFORE PROCEEDING WITH WORK. WHERE CONDITIONS DEVELOP NOT COVERED BY THE CONTRACT DOCUMENTS OR WHERE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).
- PROVIDE NEW EQUIPMENT AND MATERIALS LISTED BY UNDERWRITERS LABORATORIES (UL) OR OTHER TESTING AGENCY APPROVED BY THE AUTHORITY HAVING JURISDICTION (AHJ). PROVIDE INSTALLATIONS COMPLIANT WITH THE LISTING REQUIREMENTS AND THE MANUFACTURER'S INSTALLATION REQUIREMENTS AND RECOMMENDATIONS. PROVIDE MATERIALS, EQUIPMENT, AND INSTALLATIONS COMPLIANT WITH THE REQUIREMENTS OF THE FOLLOWING:
 - AMERICAN SOCIETY OF TESTING MATERIALS (ASTM)
 - INSULATED POWER CABLE ENGINEERS ASSOCIATION (IPCEA)
 - NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)
 - AMERICAN STANDARD ASSOCIATION (ASA)
 - NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
 - AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
 - CALIFORNIA CODE OF REGULATIONS TITLE 24 (CCR)
 - INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE)
 - ILLUMINATION ENGINEERING SOCIETY OF NORTH AMERICA (IESNA)
- COMPLY WITH THE MOST STRINGENT REQUIREMENT WHERE DIFFERENT REQUIREMENTS ARE SPECIFIED IN THE PLANS AND SPECIFICATIONS.
- COORDINATE AND SCHEDULE WORK WITH OTHER TRADES AND THE OWNER. BEFORE PROCEEDING WITH THE INSTALLATION.
 - A. ORANGE COLOR FOR HIGH-LEG OF DELTA-CONNECTED SYSTEM WHERE THE MIDPOINT OF ONE PHASE WINDING IS GROUNDED PER CEC 110.15
 - B. ARC-FLASH HAZARD WARNING PER CEC 110.16
 - C. IDENTIFICATION OF DISCONNECTING MEANS PER CEC 110.22
 - D. AVAILABLE FAULT CURRENT PER CEC 110.24
 - E. PANELBOARD CIRCUIT DIRECTORY PER CEC 408.4(A)
 - F. SOURCE OF SUPPLY FOR SWITCHBOARDS, SWITCHGEAR, AND PANELBOARDS PER CEC 408.4(B)
 - G. IDENTIFICATION OF BRANCH CIRCUITS PER CEC 210.5
 - H. POSTING OF IDENTIFICATION MEANS LISTING THE FEEDER POWER SOURCE PER CEC 210.5(C)(1)(b).
- NOTIFY OWNER 48 HOURS PRIOR TO PROJECT COMPLETION TO ALLOW FOR OWNER'S INSPECTION OF WORK. PROVIDE COMPETENT PERSONNEL TO ASSIST AND DEMONSTRATE EQUIPMENT OR SYSTEM OPERATION. FINAL ACCEPTANCE OF WORK BY THE OWNER WILL BE AFTER APPROVAL AND ACCEPTANCE BY AHJ.
- FURNISH A ONE-YEAR WRITTEN GUARANTEE FOR MATERIALS AND WORKMANSHIP FROM THE DATE OF SUBSTANTIAL COMPLETION, UNLESS OTHERWISE NOTED FOR A LONGER TERM IN THE EQUIPMENT SPECIFICATION.
- PROVIDE AND MAINTAIN REQUIRED WORKING SPACE, DEDICATED EQUIPMENT SPACE, AND EGRESS REQUIREMENTS PER CEC 110.26.
- INSTALL CONDUIT 24 INCHES MINIMUM BELOW FINISHED GRADE WHERE SUBJECT TO VEHICULAR TRAFFIC. INSTALL PVC CONDUIT 24 INCHES MINIMUM BELOW FINISHED GRADE IN CLASSIFIED LOCATIONS AND 18 INCHES MINIMUM OTHERWISE. COMPLY WITH MINIMUM COVER REQUIREMENTS SPECIFIED IN CEC TABLE 300.5
- INSTALL CONDUITS AND EQUIPMENT PLUMB AND LEVEL.
- PROVIDE SAWCUTTING, TRENCHING, BACKFILLING, COMPACTION, AND PATCHING OF CONCRETE AND ASPHALT FOR UNDERGROUND INSTALLATIONS. OBTAIN THE SERVICES OF DIG ALERT PRIOR TO EXCAVATION. REPAIR UNDERGROUND INSTALLATIONS AND EQUIPMENT DAMAGED DURING EXCAVATION TO MATCH THE QUALITY OF THE ORIGINAL INSTALLATION.
- PROVIDE FIELD BENDS FOR EMT AND RIGID CONDUIT 1 INCH AND SMALLER. DO NOT KINK CONDUIT OR REDUCE CROSS SECTIONAL AREA. USE BENDING EQUIPMENT APPROVED BY CONDUIT MANUFACTURER. REPAIR SCRATCHES AND MARKS WITH CONDUIT MANUFACTURER APPROVED PRODUCT.
- PROVIDE EQUIPMENT GROUNDING CONDUCTOR, WITH FEEDERS AND BRANCH CIRCUITS, SIZED PER CEC 250.122.
- PROVIDE COPPER CONDUCTORS. USE TYPE XHHW-2 CONDUCTOR INSULATION UNDERGROUND EXTERIOR TO BUILDING. USE TYPE THHN/THWN-2 CONDUCTOR INSULATION ABOVE GRADE EXTERIOR TO BUILDING AND UNDERGROUND INTERIOR TO BUILDING. USE TYPE THHN/THWN CONDUCTOR INSULATION ABOVE GRADE INTERIOR TO BUILDING.

SHEET INDEX

SHEET	DESCRIPTION
E001	GENERAL NOTES, LEGEND, ABBREVIATIONS AND SHEET INDEX
E101	SITE PLAN
E201	TEMPORARY/NEW POWER PLAN
E501	SINGLE LINE DIAGRAM
E601	DETAILS AND ELEVATIONS
E602	DETAIL
E701	SPECIFICATIONS
S001	GENERAL NOTES AND DETAILS



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UNDER THE SUPERVISION OF:		FOR ENGINEER'S USE		CITY OF ORANGE	
		NAME	DATE		
DESIGNED	MN	8/30/19		McPHERSON PARK (333 S. PROSPECT ST, ORANGE, CA 92869) GENERAL NOTES, LEGEND, ABBREVIATIONS & SHEET INDEX	
CHECKED	WS	8/30/19			
DATE	FOR CITY USE ONLY				
REVISIONS		NAME	DATE	APPROVED: _____ DATE _____ CITY ENGINEER DATE _____ PUBLIC WORKS DIRECTOR SCALE: HORIZ. AS NOTED VERT. AS NOTED F.B. _____ PG. _____ SHEET 1 OF 7	
DATE	DESCRIPTION				
100% CD SUBMITTAL				E001	

GENERAL NOTES

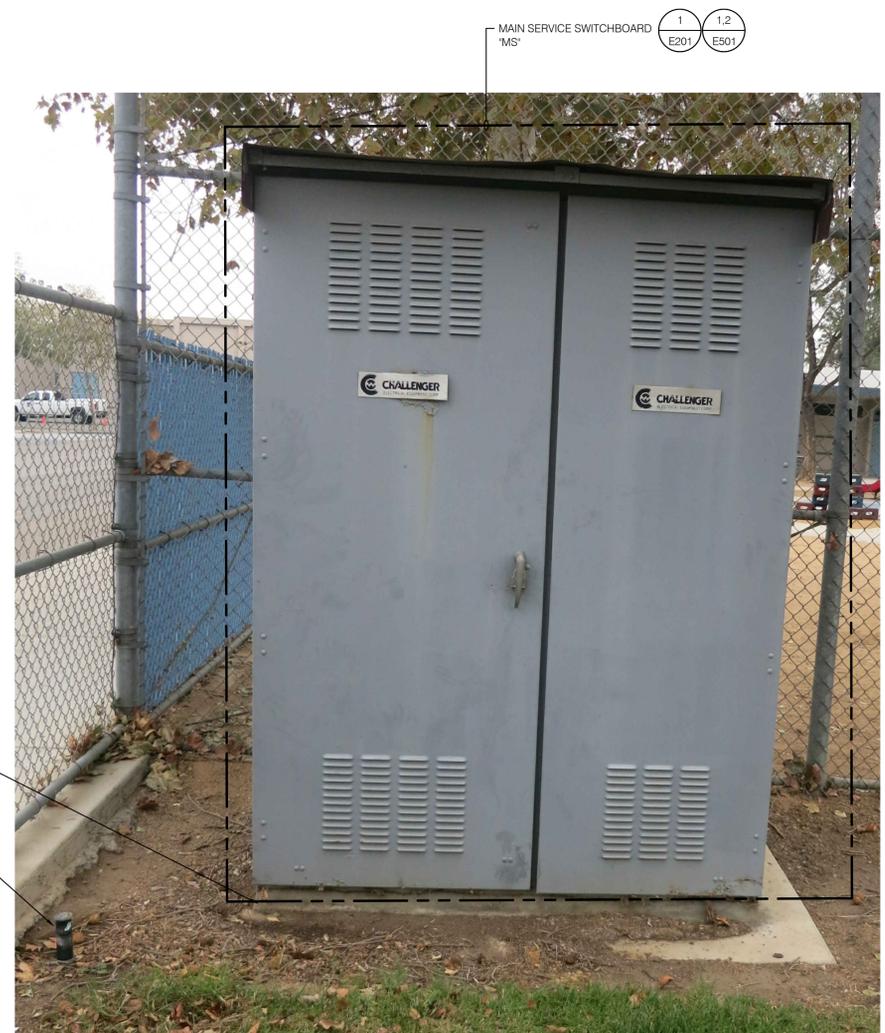
1. COORDINATE CONSTRUCTION WITH SOUTHERN CALIFORNIA EDISON. CALL SANTA ANA SERVICE PLANNING OFFICE AT (714) 973-5663.
2. PROVIDE TEMPORARY POWER TO AFFECTED FEEDER CIRCUITS DURING CONSTRUCTION. PROVIDE TEMPORARY GENERATOR WITH 12-HOURS MINIMUM FUEL. CHECK AND REFILL FUEL DAILY. REFERENCE DETAIL 1/E201 AND DETAIL 1/E501.
3. PROVIDE TEMPORARY POWER FOR CONSTRUCTION.
4. PROVIDE PROTECTIVE CHAIN-LINK FENCING WITH VISUAL BLOCKING MATERIAL AROUND CONSTRUCTION SITE AND GENERATOR. REFERENCE DETAIL 1/E201.
5. PROVIDE CABLE PROTECTION AT PATHWAYS PER CEC 590.4(H).
6. REFERENCE SINGLE LINE DIAGRAM FOR CONDUIT AND FEEDER SIZES.
7. PROVIDE TEMPORARY POWER CABLES RATED FOR EXTRA-HARD USAGE AND WET LOCATIONS.
8. CAP SPARE CONDUITS AND SEAL FEEDER CONDUITS WITHIN NEW SWITCHBOARD.

NOTES

1. COORDINATE SPRINKLER AND SPRINKLER PIPING RELOCATION TO FACILITATE SERVICE REPLACEMENT WITH CITY REPRESENTATIVE.
2. DEMOLISH EXISTING SERVICE EQUIPMENT PAD. PROTECT EXISTING UTILITY CONDUIT AND FEEDER CONDUCTORS FOR REUSE. EXTEND EXISTING UTILITY FEEDER CONDUIT TO THREE (3) INCHES ABOVE NEW PAD. CONCEAL UTILITY CONDUCTORS FROM VIEW TO PREVENT THEFT.



1 SITE PLAN
1/8" = 1'-0"



2 SWITCHBOARD "MS"
NO SCALE



UNDERGROUND SERVICE ALERT
OF SOUTHERN CALIFORNIA
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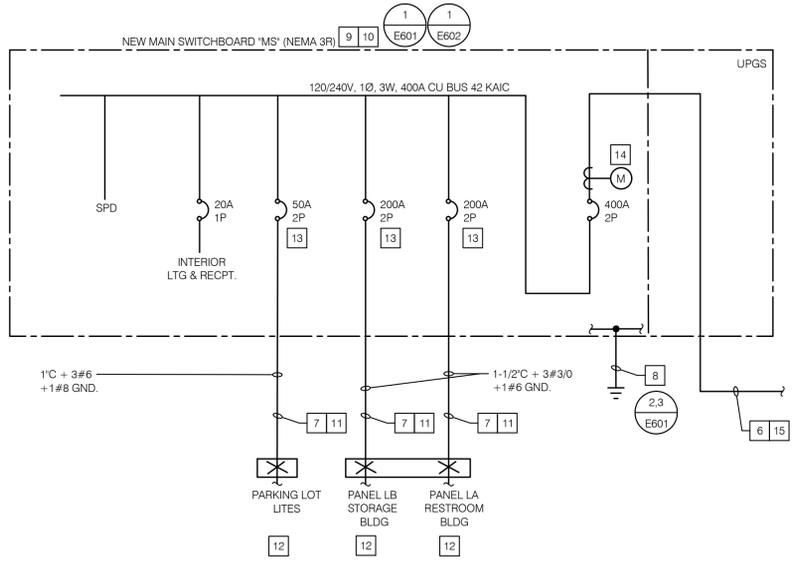
UNDER THE SUPERVISION OF: _____ DATE: _____		FOR ENGINEER'S USE		CITY OF ORANGE											
		NAME	DATE	McPHERSON PARK (333 S. PROSPECT ST, ORANGE, CA 92869) SITE PLAN											
DRAWN	MN 8/30/19														
CHECKED	WS 8/30/19														
REVISIONS <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>		DATE	DESCRIPTION									FOR CITY USE ONLY		APPROVED: DATE: _____ CITY ENGINEER DATE: _____ PUBLIC WORKS DIRECTOR	
		DATE	DESCRIPTION												
NAME	DATE	SCALE: HORIZ. AS NOTED VERT. AS NOTED													
STREETS				F.B. _____ PG. _____ SHEET 2 OF 7 E101											
SEWER															
DRAINAGE															
WATER															
ST. SUPT.		100% CD SUBMITTAL													
TRAFFIC		100% CD SUBMITTAL													

GENERAL NOTES

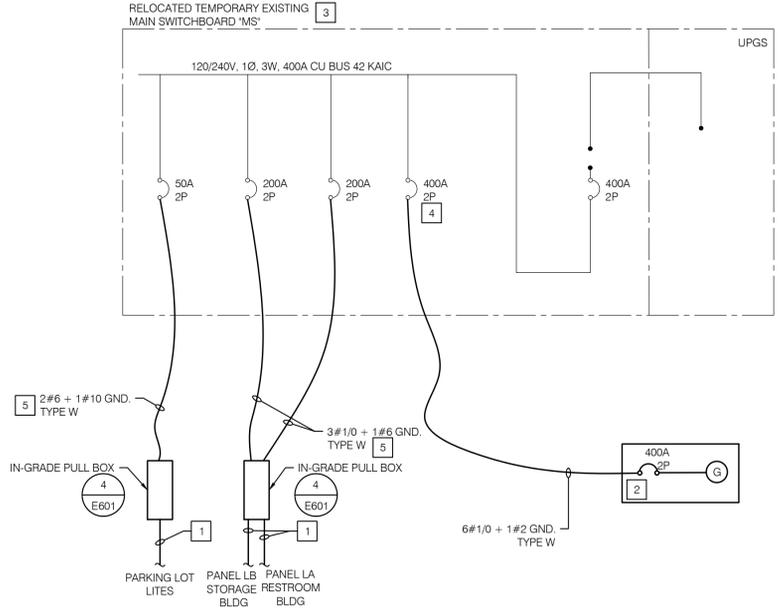
- COORDINATE CONSTRUCTION WITH SOUTHERN CALIFORNIA EDISON. CALL SANTA ANA SERVICE PLANNING OFFICE AT (714) 973-5653.
- PROVIDE TEMPORARY POWER TO AFFECTED FEEDER CIRCUITS DURING CONSTRUCTION. PROVIDE TEMPORARY GENERATOR WITH 12-HOURS MINIMUM FUEL. CHECK AND REFILL FUEL DAILY. REFERENCE DETAIL 1/E201 AND DETAIL 1/E501.
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- PROVIDE PROTECTIVE CHAIN-LINK FENCING WITH VISUAL BLOCKING MATERIAL AROUND CONSTRUCTION SITE AND GENERATOR. REFERENCE DETAIL 1/E201.
- PROVIDE CABLE PROTECTION AT PATHWAYS PER CEC 590.4(H).
- REFERENCE SINGLE LINE DIAGRAM FOR CONDUIT AND FEEDER SIZES.
- PROVIDE TEMPORARY POWER CABLES RATED FOR EXTRA-HARD USAGE AND WET LOCATIONS.
- CAP SPARE CONDUITS AND SEAL FEEDER CONDUITS WITHIN NEW SWITCHBOARD.

NOTES

- LOCATE AND INTERCEPT EXISTING FEEDERS AND REROUTE TO NEW IN-GRADE TRAFFIC RATED PULL BOXES LOCATED SIX FEET MINIMUM FROM EXISTING SERVICE EQUIPMENT PAD. REFERENCE DETAIL 4/E601.
- PROVIDE 80KW, 120/240V, 1P, 3W, EMERGENCY GENERATOR WITH FUEL TANK CONTAINING 12-HOURS MINIMUM FUEL.
- REMOVE EXISTING SERVICE EQUIPMENT AND RELOCATE TO TEMPORARY LOCATION FOR USE AS TEMPORARY SWITCHBOARD.
- PROVIDE GENERATOR CONNECTION. PROVIDE 400A/2P CIRCUIT BREAKER FOR TEMPORARY GENERATOR CONNECTION TO TEMPORARY SWITCHBOARD.
- EXTEND EXISTING FEEDERS FROM IN-GRADE PULL BOXES TO TEMPORARY SWITCHBOARD TO MAINTAIN POWER TO EXISTING FACILITIES.
- DEMOLISH EXISTING SERVICE EQUIPMENT PAD. PROTECT EXISTING UTILITY CONDUIT AND FEEDER CONDUCTORS FOR REUSE. EXTEND EXISTING UTILITY FEEDER CONDUIT TO THREE (3) INCHES ABOVE NEW PAD. CONCEAL UTILITY CONDUCTORS FROM VIEW TO PREVENT THEFT.
- EXTEND EXISTING FEEDER CONDUITS FROM IN-GRADE PULL BOXES TO NEW SERVICE DISTRIBUTION SECTION LOCATION.
- PROVIDE NEW GROUNDING ELECTRODE SYSTEM. REFERENCE DETAILS 2 AND 3/E601.
- PROVIDE NEW CONCRETE SERVICE EQUIPMENT PAD. REFERENCE SHEET S001.
- PROVIDE NEW NEMA 3R, 400A, 240/120V, 1P, 3W, METERED MAIN WITH DISTRIBUTION AND UTILITY PULL-SECTION. REFERENCE SHEET E602.
- EXTEND EXISTING CONDUCTORS FROM NEW IN-GRADE PULL BOXES TO NEW SERVICE. USE WET LOCATION RATED HIGH PRESSURE SPLICES WITHIN IN-GRADE PULL BOXES.
- LOCATE EACH FEEDER LOAD TERMINATION LOCATION AND DISCONNECT FEEDER FROM LOAD PRIOR TO TESTING OF FEEDER CONDUCTORS. TEST EXISTING FEEDER CONDUCTORS PER ANSI/NETA ACCEPTANCE TESTING SPECIFICATIONS (ATS) 7.3.2. TERMINATE AND TEST PER SERVICE EQUIPMENT PER ATS 7.1.
- PROVIDE BLACK LABELS WITH WHITE ENGRAVED LETTERS FOR IDENTIFICATION OF EACH FEEDER. VERIFY CIRCUIT NAMES WITH CITY REPRESENTATIVE.
- PROVIDE RED LABEL WITH WHITE LETTERS BELOW METER LISTING THE AVAILABLE SHORT CIRCUIT CURRENT AND DATE. OBTAIN WRITTEN DOCUMENTATION OF UTILITY'S CONTRIBUTION TO THE AVAILABLE SHORT CIRCUIT CURRENT FROM THE SERVICE PLANNER. REFERENCE CEC 110.24
- COORDINATE AND REESTABLISH UTILITY POWER TO NEW SERVICE.



2 RENOVATION - SINGLE LINE DIAGRAM
NO SCALE



1 TEMPORARY POWER - SINGLE LINE DIAGRAM
NO SCALE



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UNDER THE SUPERVISION OF:		FOR ENGINEER'S USE		CITY OF ORANGE	
		NAME	DATE		
DATE	DESIGNED	MN	8/30/19	APPROVED:	
	CHECKED	WS	8/30/19		
REVISIONS		FOR CITY USE ONLY		DATE	PUBLIC WORKS DIRECTOR
DATE	DESCRIPTION	NAME	DATE	SCALE:	HORIZ. AS NOTED
				VERT. AS NOTED	F.B. PG.
				SHEET 4 OF 7	
				100% CD SUBMITTAL	
				E501	

GENERAL

- MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE 2016 EDITION OF THE CALIFORNIA BUILDING CODE, TITLE 24, THE ORDINANCES OF THE LOCAL BUILDING OFFICIAL, AND THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
- REFERENCE TO CODES, RULES REGULATIONS, STANDARDS, MANUFACTURER'S INSTRUCTIONS OR REQUIREMENTS OF REGULATORY AGENCIES IS TO THE LATEST EDITION OF EACH IN EFFECT AT THE DATE OF SUBMISSION OF BID UNLESS THE DOCUMENT DATE IS SHOWN.
- DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION, WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, USE SIMILAR DETAILS OF CONSTRUCTION, SUBJECT TO REVIEW BY THE STRUCTURAL ENGINEER OF RECORD (SEOR).
- DETAILS ON SHEETS TITLED "TYPICAL DETAILS" APPLY TO SITUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME OF SIMILAR TO THOSE SPECIFICALLY REFERENCED. SUCH DETAILS ARE NOT NOTED AT EACH LOCATION THAT THEY OCCUR.
- SEE ELECTRICAL AND VENDOR CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
- VERIFY ALL DIMENSIONS, ELEVATIONS AND SITE CONDITIONS BEFORE STARTING WORK. NOTIFY THE ELECTRICAL ENGINEER OF RECORD (EOR) OF DISCREPANCIES.
- DO NOT SCALE THE DRAWINGS.
- TOLERANCES SHALL BE ACCORDING TO THE BUILDING CODE.
- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES. NOTIFY THE EOR OF ANY DISCREPANCIES AND RESOLVE BEFORE PROCEEDING WITH THE WORK.

DESIGN CRITERIA

- THE OBJECTIVE OF THIS WORK IS TO DESIGN AND PAD AND ANCHORAGE FOR REPLACEMENT SWITCHGEAR.
- DESIGN LOAD CRITERIA:

GRAVITY LOADS	
DEAD LOADS	ACTUAL OPERATING EQUIPMENT WEIGHTS
ULTIMATE WIND LOADS	
RISK CATEGORY	II (T.1604.5)
EXPOSURE CATEGORY	C
DESIGN WIND SPEED, V_{ult} , V_{ASD}	110 MPH PER FIGURE 1609.3 (1), 85 PER EQN 16-33
ULTIMATE SEISMIC LOADS (COMPONENTS)	
IMPORTANCE FACTOR, I_p	1.0 (RISK CATEGORY II, T.1604.5)
MAPPED SPECTRAL ACCELERATIONS	$S_s = 1.50g$, $S_1 = 0.56g$
SITE CLASS	D (ASSUMED)
DESIGN SPECTRAL RESPONSE COEFFICIENTS	$S_{D1} = 1.00g$, $S_{D2} = 0.56g$
SEISMIC DESIGN CATEGORY	D

- FOUNDATIONS (BASED ON CBC TABLE 1806.2, ITEM 5):
 - ALLOWABLE BEARING PRESSURE: 500 PSF (LIMIT BASED ON SHALLOW SLAB TURN-DOWNS)
 - ALLOWABLE SLIDING RESISTANCE: 130 PSF (50% OF WEIGHT MAXIMUM)
 - ALLOWABLE PASSIVE PRESSURE: 100 PCF
 - FRICITION AND PASSIVE PRESSURE MAY BE COMBINED IN CALCULATION OF TOTAL RESISTANCE TO SLIDING.
 - A ONE-THIRD INCREASE IS APPLICABLE TO SOIL CAPACITIES FOR SHORT-TERM LOADING (WIND/SEISMIC).

SOILS AND FOUNDATIONS

- THE DESIGN OF THE FOUNDATION SYSTEM IS BASED UPON THE CRITERIA AND RECOMMENDATIONS CONTAINED IN CBC TABLE 1806.2, ITEM 5.
- LOCATE AND PROTECT EXISTING UTILITIES TO REMAIN DURING AND/OR AFTER CONSTRUCTION.
- REMOVE ABANDONED FOOTINGS, UTILITIES, ETC. WHICH INTERFERE WITH NEW CONSTRUCTION, UNLESS OTHERWISE INDICATED.
- NOTIFY THE EOR AND SEOR IF ANY BURIED STRUCTURES NOT INDICATED, SUCH AS CESSPOOLS, CISTERNS, FOUNDATIONS, ETC. ARE FOUND.
- REMOVE LOOSE SOIL AND STANDING WATER FROM FOUNDATION EXCAVATIONS PRIOR TO PLACING CONCRETE.
- BOTTOM OF FOOTINGS SHALL BE LEVEL.
- EXCAVATIONS FOR FOUNDATIONS MUST BE ACCEPTED BY THE CITY INSPECTOR PRIOR TO PLACING REINFORCING AND CONCRETE. NOTIFY THE CITY WHEN EXCAVATIONS ARE READY FOR INSPECTION.
- MECHANICALLY COMPACT EXCAVATION BACKFILLS IN LAYERS. PROVIDE 90% MINIMUM COMPACTION IN ACCORDANCE WITH THE ASTM D1557 TEST METHOD UON IN SOILS REPORT. PROVIDE 95% MINIMUM COMPACTION FOR FILL BENEATH FOOTINGS.
- SCARIFY AND RECOMPACT TOP 6 INCHES OF SOIL BENEATH FILL PER ITEM ABOVE.

EXISTING CONSTRUCTION

- THE CONTRACTOR SHALL REMOVE ALL INTERFERING ITEMS FOR NEW CONSTRUCTION AND SHALL REPAIR OR REPLACE ALL REMOVED ITEMS TO MATCH THE EXISTING CONDITIONS IN ACCORDANCE WITH THE ARCHITECTURAL DRAWINGS.
- INFORMATION SHOWN ON THE DRAWINGS RELATED TO EXISTING CONDITIONS REPRESENTS THE PRESENT KNOWLEDGE, BUT WITHOUT GUARANTEE OF ACCURACY. REPORT CONDITIONS THAT CONFLICT WITH THE CONTRACT DOCUMENTS TO THE ARCHITECT AND SEOR. DO NOT DEVIATE FROM THE CONTRACT DOCUMENTS WITHOUT WRITTEN DIRECTION FROM THE EOR AND/OR SEOR.

FORMWORK

- PROVIDE CURING WHERE FORMS ARE REMOVED IN LESS THAN 7 DAYS.
- REMOVE FORMS NO SOONER THAN 48 HOURS AFTER PLACING CONCRETE.

REINFORCING STEEL

- REINFORCING SHALL BE FABRICATED ACCORDING TO THE "MANUAL OF STANDARD PRACTICE FOR REINFORCED CONCRETE CONSTRUCTION" AND SHALL CONFORM TO ASTM A615, GRADE 60.
- PROVIDE REINFORCING SHOWN OR NOTED CONTINUOUS IN LENGTHS AS LONG AS PRACTICABLE.
- TERMINATE REINFORCING STEEL IN STANDARD HOOKS UNLESS OTHERWISE SHOWN.
- REINFORCING SHALL BE SECURELY TIED IN PLACE BEFORE CONCRETE IS PLACED.
- ACCURATELY POSITION, SUPPORT AND SECURE REINFORCEMENT FROM DISPLACING DUE TO FORMWORK, CONSTRUCTION, OR CONCRETE PLACEMENT OPERATIONS. LOCATE AND SUPPORT REINFORCING BY METAL CHAIRS, RUNNERS, BOLSTERS, SPACERS AND HANGERS AT A MAXIMUM SPACING OF 3'-0".
- FIELD BENDING OF REINFORCING STEEL EMBEDDED IN CONCRETE OR MASONRY SHALL NOT BE ALLOWED UNLESS APPROVED BY THE SEOR.
- MILL CERTIFICATIONS SHALL BE SUBMITTED FOR REVIEW.

CAST-IN-PLACE CONCRETE

- CONCRETE IS MILDLY REINFORCED AND CAST-IN-PLACE UNLESS OTHERWISE NOTED. WHERE REINFORCING IS NOT SPECIFICALLY SHOWN OR WHERE DETAILS ARE NOT GIVEN, PROVIDE REINFORCING SIMILAR TO THAT SHOWN FOR SIMILAR CONDITIONS, SUBJECT TO REVIEW BY THE SEOR.
- REFERENCE TO CODES, RULES REGULATIONS, STANDARDS, MANUFACTURER'S INSTRUCTIONS OR REQUIREMENTS OF REGULATORY AGENCIES IS TO THE LATEST EDITION OF EACH IN EFFECT AT THE DATE OF SUBMISSION OF BID UNLESS THE DOCUMENT DATE IS SHOWN.
- DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION, WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, USE SIMILAR DETAILS OF CONSTRUCTION, SUBJECT TO REVIEW BY THE STRUCTURAL ENGINEER OF RECORD (SEOR).
- DETAILS ON SHEETS TITLED "TYPICAL DETAILS" APPLY TO SITUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME OF SIMILAR TO THOSE SPECIFICALLY REFERENCED. SUCH DETAILS ARE NOT NOTED AT EACH LOCATION THAT THEY OCCUR.
- SEE ELECTRICAL AND VENDOR CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
- VERIFY ALL DIMENSIONS, ELEVATIONS AND SITE CONDITIONS BEFORE STARTING WORK. NOTIFY THE ELECTRICAL ENGINEER OF RECORD (EOR) OF DISCREPANCIES.
- DO NOT SCALE THE DRAWINGS.
- TOLERANCES SHALL BE ACCORDING TO THE BUILDING CODE.
- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES. NOTIFY THE EOR OF ANY DISCREPANCIES AND RESOLVE BEFORE PROCEEDING WITH THE WORK.

LOCATIONS	CLEAR COVER, INCHES
CONCRETE PLACED AGAINST EARTH	3
SLABS ON GRADE (TOP CLEARANCE)	1 1/2

CONCRETE TYPES

USE	f_c (PSI) (a)	MAX SLUMP (IN)	NOMINAL MAX AGGREGATE (IN)	WATER CEMENTITIOUS RATIO (MAX)
TYPICAL	3,000*	4	1	0.50

*NOTE: CONCRETE DESIGNED USING $f_c = 2,500$ PSI (SPECIAL INSPECTION NOT REQUIRED)
 a. COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS.

- CONCRETE MIXES SHALL BE DESIGNED BY A QUALIFIED TESTING LABORATORY, BEARING A CALIFORNIA REGISTERED CIVIL ENGINEER'S STAMP, AND APPROVED BY THE SEOR PRIOR TO USE.
- PORTLAND CEMENT SHALL BE TYPE II OR V CONFORMING TO ASTM C150.
- COARSE AGGREGATE SHALL CONFORM TO ASTM C-33.
- ALL CONCRETE SHALL BE NORMAL WEIGHT (145 PCF) HARD ROCK TYPE.
- CONTINUOUSLY MOIST CURE CONCRETE FOR 7 DAYS MINIMUM. WATER FOG SPRAYS, PONDING, SATURATED ABSORPTIVE COVERS OR MOISTURE RETAINING COVERS MAY BE USED. IN LIEU OF MOIST CURING, CURING COMPOUNDS MAY BE SUBMITTED TO THE ARCHITECT FOR ACCEPTANCE.
- PROVIDE 1/2" CHAMFERS AT ALL EXPOSED CONCRETE EDGES UNLESS OTHERWISE NOTED.
- CONSOLIDATE CONCRETE PLACED IN FORMS BY MECHANICAL VIBRATING EQUIPMENT SUPPLEMENTED BY HAND-SPADING, RODDING OR TAMPING. USE EQUIPMENT & PROCEDURES FOR CONSOLIDATION OF CONCRETE IN ACCORDANCE WITH THE RECOMMENDED PRACTICES OF ACI 309 TO SUIT THE TYPE OF CONCRETE & PROJECT CONDITIONS.
- NO WOOD SPREADERS ALLOWED. NO WOOD STAKES ALLOWED IN AREAS TO BE CONCRETED.

EXPANSION (WEDGE) ANCHORS

- WHEN INSTALLING DRILLED-IN ANCHORS IN CONCRETE, USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE EXISTING REINFORCING.
- EXPANSION ANCHORS INTO CONCRETE SHALL BE HILTI KB-TZ (ICC ESR-1917).
- INSTALL ANCHORS IN ACCORDANCE WITH THE ICC REPORT.
- PROVIDE STAINLESS STEEL FASTENERS (EXTERIOR USE).
- IF REINFORCEMENT IS ENCOUNTERED DURING DRILLING, ABANDON HOLE AND SHIFT LOCATION TO AVOID THE REINFORCEMENT. PROVIDE A MINIMUM OF TWO ANCHOR DIAMETERS OR 1", WHICHEVER IS LARGER, OF SOUND CONCRETE BETWEEN THE ANCHOR AND THE ABANDONED HOLE. FILL THE ABANDONED HOLE WITH NON-SHRINK GROUT. IF THE ANCHOR MAY NOT BE SHIFTED AS NOTED ABOVE, CONTACT THE SEOR.
- INSTALL ANCHORS TO THE FOLLOWING SPECIFICATIONS (EFFECTIVE EMBEDMENTS SHOWN ON DETAILS):

HILTI KB-TZ ANCHOR	
ANCHOR DIAMETER (IN)	3/4
EFFECTIVE EMBED, h_{ef} (IN)	4
NOMINAL EMBED, h_{nom} (IN)	4 7/16
MIN HOLE DEPTH, h_u (IN)	4 1/2
INSTALL TORQUE (LB-FT)	60
MIN THICKNESS, t_{min} (IN)	6
MIN EDGE DIST, c_{min} (IN)	3 1/4
MIN SPACING, s_{min} (IN)	3

STATEMENT OF SPECIAL INSPECTIONS (& STRUCTURAL TESTS)

- STRUCTURAL TESTS AND INSPECTIONS SHALL BE ACCORDING TO 2016 CALIFORNIA BUILDING CODE.
- THE SPECIAL INSPECTIONS IDENTIFIED ARE IN ADDITION TO THOSE REQUIRED BY SECTION 110 OF THE CODE, AS AMENDED. SPECIAL INSPECTION IS NOT A SUBSTITUTE FOR INSPECTION BY THE GOVERNING JURISDICTION.
- AN INDEPENDENT TESTING AGENCY AND SPECIAL INSPECTORS WILL BE RETAINED BY THE OWNER (NOT THE CONTRACTOR OR ANY OTHER PERSON RESPONSIBLE FOR THE WORK) TO PERFORM TESTS AND SPECIAL INSPECTIONS. THE CONTRACTOR SHALL PROVIDE ACCESS AND FURNISH SAMPLES TO THE AGENCY AS REQUIRED.
- IF INITIAL TESTS OR INSPECTIONS MADE BY THE OWNER'S TESTING AGENCY REVEAL THAT ANY PORTION OF THE WORK DOES NOT COMPLY WITH THE CONTRACT DOCUMENTS, ADDITIONAL TESTS, INSPECTIONS AND NECESSARY REPAIRS WILL BE MADE AT THE CONTRACTOR'S EXPENSE.
- A CERTIFICATE OF SATISFACTORY COMPLETION OF WORK REQUIRING SPECIAL INSPECTION MUST BE COMPLETED AND SUBMITTED TO THE GOVERNING JURISDICTION AND SEOR.
- PERIODIC OR CONTINUOUS PRESENCE AND INSPECTION BY THE PROJECT OR SPECIAL INSPECTOR ARE REQUIRED FOR THE FOLLOWING TYPES OF WORK WHERE OCCURS:

REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION (CBC TABLE 1705.3)			
TYPE	INSPECTION FREQUENCY	REFERENCED STANDARD	IBC REFERENCE
1. NOT REQUIRED EXCEPT AS SHOWN BELOW (NOTE: $f_c = 2,500$ PSI USED IN DESIGN)			
4. INSPECT MECHANICAL ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS	PERIODIC	ACI 318: 17.8.2	---

STRUCTURAL OBSERVATION - NOT REQUIRED

ABBREVIATIONS

@	AT	MAX	MINIMUM
CLR	CLEAR	MIN	MINIMUM
CONT	CONTINUOUS	NWC	NORMALWEIGHT CONCRETE
(E)	EXISTING	OC	ON CENTER
E.A.	EXPANSION ANCHOR	REIN	REINFORCING STEEL
EOR	ELECTRICAL ENGINEER OF RECORD	S.E.D.	SEE ELEC DOCUMENTS
EMB	EMBEDMENT	SEOR	STRUCTURAL ENGINEER OF RECORD
EQ	EQUAL	S.O.G.	SLAB-ON-GRADE
EQUIP	EQUIPMENT	SS	STAINLESS STEEL
EW	EACH WAY	TOT	TOTAL
LBS	POUNDS	TYP	TYPICAL

GENERAL NOTES
SCALE: NONE

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SPiRE
 STRUCTURAL ENGINEERING
 26461 Rancho Parkway South
 Lake Forest, CA 92630 949.916.3440
 www.spirestructures.com
 JOB#: 18P2S02 ENG: HZ



SWITCHBOARD ANCHORAGE
(MS) SCALE: NONE

UNDER THE SUPERVISION OF:

DATE: _____

REVISIONS	
DATE	DESCRIPTION

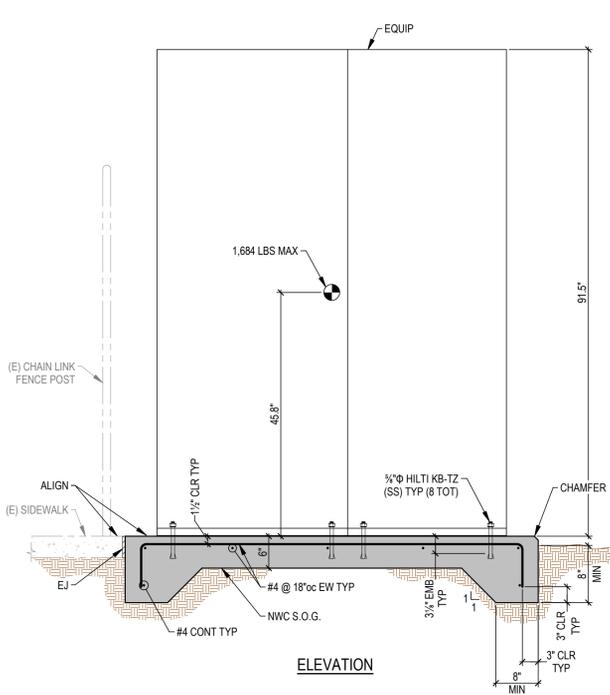
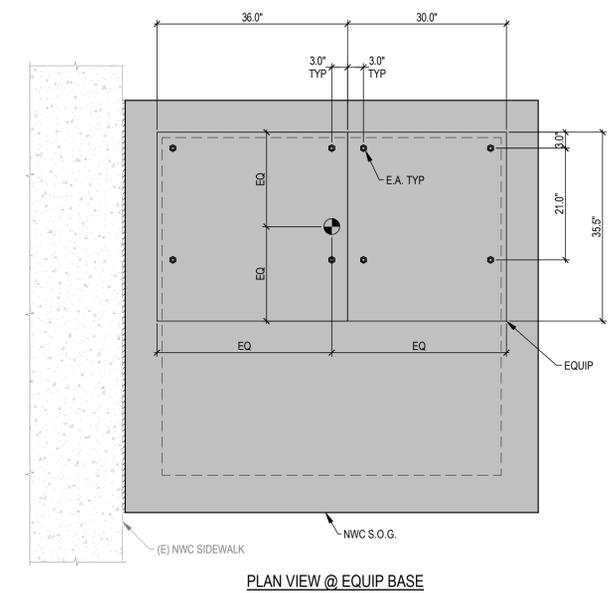
TYPICAL REINFORCEMENT BEND DETAILS
SCALE: NONE

FOR ENGINEER'S USE	
NAME	DATE
DRAWN BTM	8/7/19
DESIGNED HZ	8/7/19
CHECKED JCW	8/7/19
FOR CITY USE ONLY	
NAME	DATE
STREETS	
SEWER	
DRAINAGE	
WATER	
ST. SUPT.	
TRAFFIC	

CITY OF ORANGE
 McPHERSON PARK
 (333 S. PROSPECT ST, ORANGE, CA 92869)
 GENERAL NOTES & DETAILS

APPROVED:	APPROVED:
DATE: _____	DATE: _____
CITY ENGINEER	PUBLIC WORKS DIRECTOR
SCALE: HORIZ. AS NOTED	F.B. _____ PG. _____
VERT. AS NOTED	SHEET 1 OF 1 SHEETS

100% CD SUBMITTAL

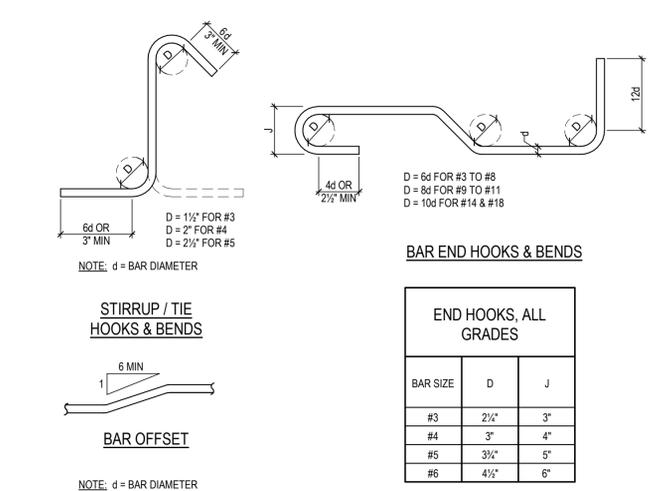


- NOTES:**
- ALL DETAILING OF REIN SHALL COMPLY WITH THIS SCHEDULE UNLESS SPECIFICALLY DETAILED OTHERWISE.
 - REIN DEVELOPMENT LENGTH AND SPLICE TABLE IS BASED ON UNCOATED GRADE 60 STEEL PER ACI 318 CHAPTER 18 AND SECTION 18.8.5 (CONC) AND TMS 530 SECTION 3.3 (CMU).
 - d_s = BAR DIAMETER.
 - NP = NOT PERMITTED.
 - TOP REIN IS HORIZONTAL REIN THAT HAS MORE THAN 12" OF CONCRETE PLACED BELOW IT.
 - LAP LENGTHS SHOWN MEET REQUIREMENTS FOR CLASS "B" SPLICE.
 - CLEAR SPACING OF BARS BEING DEVELOPED OR SPLICED SHALL NOT BE LESS THAN THE LARGER OF 2 BAR DIAMETERS OR 2". CLEAR COVER SHALL NOT BE LESS THAN THE LARGER OF THE BAR DIAMETER SIZE OR PER GENERAL NOTES. (ALTERNATE: SPLICE BY WELDING OR MECHANICAL CONNECTIONS).
 - TYPE 1 SPLICES SHALL DEVELOP 125% OF THE YIELD STRENGTH OF THE REIN (75 KSI). TYPE 2 SPLICES SHALL DEVELOP THE TENSILE STRENGTH OF REIN (90 KSI).
 - A WELDED SPLICE (COMPLETE JOINT PENETRATION); SEE TYPICAL DETAILS FOR ADDL INFO.
 - MECHANICAL CONNECTORS: TENSION-COMPRESSION TYPE WITH A VALID ICC APPROVAL REPORT AND SHALL BE INSTALLED IN ACCORDANCE WITH THE REPORT.
 - A STANDARD HOOK SHALL BE PROVIDED WHERE THE DEVELOPMENT LENGTH IS NOT POSSIBLE DUE TO SPACE RESTRICTIONS (REFER TO HOOKED BAR SCHEDULE).
 - SMALLER BAR LAP LENGTH MAY BE USED WHEN SPLICING BARS OF DIFFERING DIAMETERS.
 - AT CONC WALLS, SPLICES IN HORIZONTAL REIN SHALL BE STAGGERED.
 - L_d = DEVELOPMENT LENGTH (DEV), L_{sp} = LAP SPLICE (LAP).

REINFORCEMENT DEVELOPMENT & LAP LENGTHS (INCHES)						
BASE MATERIAL	f_c (PSI)	CONDITION	REINFORCEMENT SIZE			
			#3	#4	#5	#6
NWC	3,000	STD DEV	17	22	28	33
		TOP DEV	23	29	37	43
		STD LAP	23	29	37	43
		TOP LAP	29	38	48	56



TYPICAL DEVELOPMENT & LAP LENGTHS
SCALE: NONE



END HOOKS, ALL GRADES		
BAR SIZE	D	J
#3	2 1/2"	3"
#4	3"	4"
#5	3 1/2"	5"
#6	4 1/2"	6"



August 7, 2019

STRUCTURAL DESIGN CALCULATIONS

City of Orange McPherson Park

Spire Job #: 18P2S02
333 S. Prospect Street
Orange, CA 92869

Project Description:

Provide anchorage design for a switchboard that sits on a new concrete pad.



08.07.19



Job:	18P2S02 City of Orange McPherson Pk		1
Calc By:	HZ	Date: 08/07/19	

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Job:	18P2S02 City of Orange McPherson Pk		2
Calc By:	HZ	Date: 08/07/19	



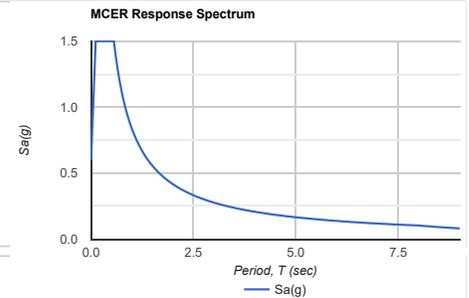
333 S. Prospect St, Orange, CA 92869

Latitude, Longitude: 33.7834176, -117.8177253

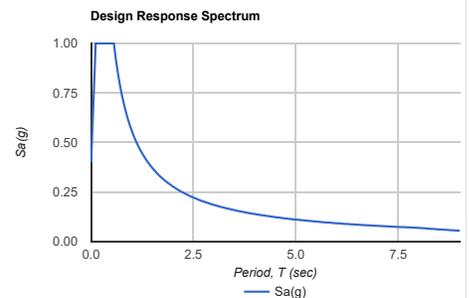


Date	8/7/2019, 11:46:45 AM
Design Code Reference Document	ASCE7-10
Risk Category	II
Site Class	D - Stiff Soil

Type	Value	Description
S_s	1.5	MCE_R ground motion. (for 0.2 second period)
S_1	0.555	MCE_R ground motion. (for 1.0s period)
S_{MS}	1.5	Site-modified spectral acceleration value
S_{M1}	0.832	Site-modified spectral acceleration value
S_{DS}	1	Numeric seismic design value at 0.2 second SA
S_{D1}	0.555	Numeric seismic design value at 1.0 second SA



Type	Value	Description
SDC	D	Seismic design category
F_a	1	Site amplification factor at 0.2 second
F_v	1.5	Site amplification factor at 1.0 second
PGA	0.523	MCE_G peak ground acceleration
F_{PGA}	1	Site amplification factor at PGA
PGA_M	0.523	Site modified peak ground acceleration
T_L	8	Long-period transition period in seconds
S_sRT	1.52	Probabilistic risk-targeted ground motion. (0.2 second)
S_sUH	1.461	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration
S_sD	1.5	Factored deterministic acceleration value. (0.2 second)
S_1RT	0.555	Probabilistic risk-targeted ground motion. (1.0 second)
S_1UH	0.518	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration.
S_1D	0.6	Factored deterministic acceleration value. (1.0 second)
PGA_d	0.523	Factored deterministic acceleration value. (Peak Ground Acceleration)
C_{RS}	1.04	Mapped value of the risk coefficient at short periods
C_{R1}	1.07	Mapped value of the risk coefficient at a period of 1 s



Job:	18P2S02 City of Orange McPherson Pk			3
Calc By:	HZ	Date:	08/07/19	

Anchorage to Topside of Concrete - Hilti KB-TZ (ESR-1917)

Mark =	1				
Conc =	NWC				Normal or lightweight concrete
Metal deck =	No				Concrete over metal deck?
f_c =	2,500				psi Concrete compressive strength
Anchor =	SS 5/8 (3 1/8)				Hilti KB-TZ anchor
Steel Type =	Stainless				Carbon steel or Stainless steel
d_o =	5/8				in Anchor O.D.
h_{ef} =	3 1/8				in Effective min anchor embedment
h =	6				in Concrete thickness
h_{min} =	5				in Min member thickness
ϕ_s =	0.75				Seismic reduction per ACI Ch. 17
λ =	1.0				LWC reduction per ACI Ch. 17
k_{cr} =	17				Effectiveness factor
k_{cp} =	2				Coefficient for pryout strength
$N_{p,eq}$ =	NA				Lbs Adjusted by $(f_c/2500)^{0.5}$
$N_{p,cr}$ =	NA				Lbs Adjusted by $(f_c/2500)^{0.5}$
N_b =	4,696				Lbs $= k_{cr} \cdot (f_c)^{0.5} \cdot h_{ef}^{1.5}$
s_{min} =	2 3/4				in Min anchor spacing
s =	5.0				in Anchor spacing
c_{min} =	4 1/8				in Min. edge distance
c =	6.0				in Edge distance
ϕV_{cb} =	N/A				$= \alpha \lambda \phi_{vc} (7(h_{ef}/d_o)^{0.2} \cdot d_o^{0.5}) \cdot f_c^{0.5} \cdot c^{1.5}$
$\psi_{ed,N}$ =	1.00				$= 0.7 + 0.3c/(1.5h_{ef}) \leq 1.0$
A_n =	67				in ² $= 3h_{ef} \cdot (\min(1.5h_{ef}, s/2) + \min(1.5h_{ef}, c))$
A_{no} =	88				in ² $= 9 \cdot h_{ef}^2$
N_{sa} =	17,880				lbs Steel strength in tension
V_{sa} =	9,350				lbs Steel strength in shear
$\phi_{t,conc}$ =	0.65				
$\phi_{v,conc}$ =	0.70				
$\phi_{t,steel}$ =	0.75				
$\phi_{v,steel}$ =	0.65				
$\phi P_{n,conc}$ =	1,755				Lbs $= \phi_s \lambda \phi_{t,conc} \cdot \min(N_{p,eq}, N_{p,cr}, N_b) \cdot (A_n/A_{no})$
$\phi V_{n,conc}$ =	5,040				Lbs $= \lambda \phi_{v,conc} \cdot k_{cp} \cdot N_b \cdot (A_n/A_{no})$
$\phi P_{n,steel}$ =	13,410				Lbs $= \phi_{t,steel} \cdot N_{sa}$
$\phi V_{n,steel}$ =	6,078				Lbs $= \phi_{v,steel} \cdot V_{sa}$

Job:	18P2S02 City of Orange McPherson Pk		4
Calc By:	HZ	Date: 08/07/19	

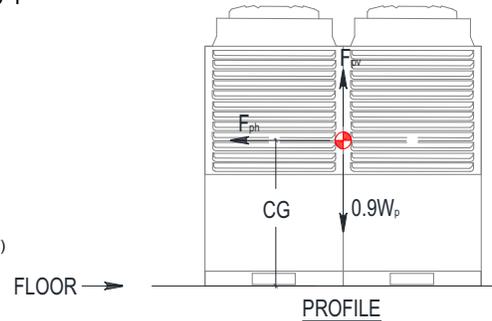
Floor Mounted Equipment - McPherson Switchboard

Seismic Loads (ASCE 7-10, Chapter 13)

(ULT)

Design = **City**

$a_p =$	2.5	ASCE 7 Table 13.5-1 & Table 13.6-1
$R_p =$	6.0	ASCE 7 Table 13.5-1 & Table 13.6-1
$o =$	2.5	ASCE 7 Table 13.5-1 & Table 13.6-1
$S_{DS} =$	1.00 g	See USGS sheet
$I_p =$	1.00	ASCE Table 11.5-1
$z/h =$	0.00	
$F_{ph} =$	0.30 W_p	$F_{ph} = \frac{0.4S_{DS}a_p}{R_p/I_p} \left(1 + 2\frac{z}{h}\right) W_p$
$F_{pv} =$	0.20 W_p	$F_{pv} = 0.2 \cdot S_{DS} \cdot W_p$
$W_p =$	1,700 Lbs	Equipment weight & curb
$F_{ph} =$	510 Lbs (ULT)	$o \cdot F_{ph} =$ 1,275 Lbs (ULT)
$F_{pv} =$	340 Lbs (ULT)	



Wind Loads (ASCE 7-10, Section 29.5.1)

$V =$	110 mph	Basic wind velocity
Exp =	C	Exposure category
$W =$	66.0 in	Equipment width
$D =$	35.5 in	Equipment depth
$H =$	91.5 in	Equipment height
$A_f =$	42 ft ²	Vertical area exposed to wind
$A_r =$	16 ft ²	Horizontal area exposed to wind
$K_d =$	0.85	Table 26.6-1
$K_z =$	0.85	Table 29.3-1
$K_{zt} =$	1.00	Assumed
$q_z =$	22.4 psf	$= 0.00256 \cdot K_z \cdot K_{zt} \cdot K_d \cdot V^2$
$G =$	0.85	Section 26.9.1, rigid
$C_f =$	1.55	Figure 29.4-1
$F_h =$	1,235 Lbs (ULT)	$= q_z \cdot G \cdot C_f \cdot A_f$
$F_v =$	364 Lbs (ULT)	$= q_z \cdot A_r$

Unit Data

$B =$	60.0 in	Distance between anchors
$D =$	21.0 in	Distance between anchors
$CG =$	45.8 in	Height to centroid

Job:	18P2S02 City of Orange McPherson Pk			5
Calc By:	HZ	Date:	08/07/19	

Floor Mounted Equipment - McPherson Switchboard

Anchorage to NWC Conc. Pad (ULT)

* See "Anchorage to Topside of Concrete - Hilti KB-TZ (ESR-1917)" calculation sheet for additional info.

Anchor = SS 5/8 (3 1/8) 5/8" ϕ Hilti KB-TZ (Stainless Steel) w/ 3 1/8" Embedment
 $n =$ 8 No. of anchors (total)
 $n_x =$ 4 No. of anchors resisting horizontal loads in one direction (min)
 $n_y =$ 2 No. of anchors resisting vertical loads from overturning (min)

Seismic (Governs)

${}_oP_u =$ 1,242 Lbs Tension per anchor w/ Ω_o = ${}_oF_{ph} \cdot CG / [\min(B,D) \cdot n_y] - (0.9W_p - F_{pv})/n$
 ${}_oV_u =$ 319 Lbs Shear per anchor w/ Ω_o = ${}_oF_{ph}/n_x$

	Concrete	Steel	
$P_n =$	1,755	13,410	Lbs
$V_n =$	5,040	6,078	Lbs
$DCR_p =$	0.71	0.09	
$DCR_v =$	0.06	0.05	

(Concrete tension capacity has been multiplied by 0.75 for seismic)

$$\frac{{}_oP_u}{P_n}$$

$$\frac{{}_oV_u}{V_n}$$

$DCR_{p+v} =$ 0.57

$$(DCR_{p,max})^{5/3} + (DCR_{v,max})^{5/3} \leq 1.0$$

Wind

$P_u =$ 1,199 Lbs Tension per anchor = $F_h \cdot CG / [\min(B,D) \cdot n_y] - (0.9W_p - F_v)/n$
 $V_u =$ 154 Lbs Shear per anchor = F_h/n_x

	Concrete	Steel	
$P_n =$	2,340	13,410	Lbs
$V_n =$	5,040	6,078	Lbs
$DCR_p =$	0.51	0.09	
$DCR_v =$	0.03	0.03	

$$\frac{P_u}{P_n}$$

$$\frac{V_u}{V_n}$$

$DCR_{p+v} =$ 0.33

$$(DCR_{p,max})^{5/3} + (DCR_{v,max})^{5/3} \leq 1.0$$

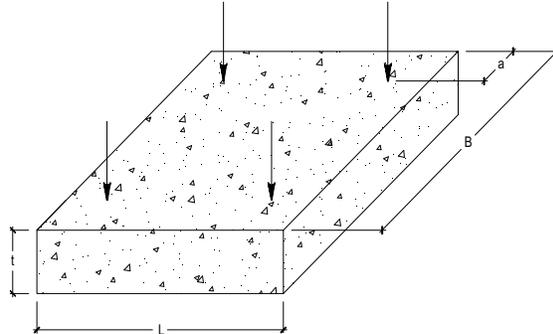
Job:	18P2S02 City of Orange McPherson Pk			6
Calc By:	HZ	Date:	08/07/19	

Footing Analysis - McPherson Switchboard

Design =	City		
$a_p =$	2.5	ASCE 7 T-13.5-1 & T-13.6-1	$F_{ph} = 0.30 W_p$
$R_p =$	6	ASCE 7 T-13.5-1 & T-13.6-1	$F_{pv} = 0.20 W_p$
$S_{DS} =$	1.00 g	See USGS sheet	
$I_p =$	1.00	ASCE 7 Table 11.5-1	
$z/h =$	0.00		

Weight & Dimensions

$W_p =$	1,700 lbs	Equip weight
$CG_z =$	45.8 in	Dist to centroid (vertical)
$L =$	6.5 ft (min)	Length of footing
$B =$	6.5 ft (min)	Width of footing
$t =$	0.5 ft	Thickness of footing
$a =$	3.0 ft	Cantilever length (max)
$b =$	5.5 ft	Backspan length (max)
$W_{FTG} =$	3,144 lbs	Footing weight



	ASD	ULT	
$F_{ph} =$	357 lbs	510 lbs	(From Equipment)
$F_{pv} =$	678 lbs	969 lbs	(Includes Footing)

Soil Bearing: (ASD)

$SB_{allow} = 1,500$ psf (CBC Table 1806.2, Item 5)

CASE A: 0.9D+0.7E (ASD)	CASE B: D+0.7E (ASD)
$P = 3,682$ lbs $0.9 \cdot (W_p + W_{FTG}) - F_{pv}$	$P = 5,523$ lbs $W_p + W_{FTG} + F_{pv}$
$M = 1,541$ lb-ft $F_{ph}(CG_z + t)$	$M = 1,541$ lb-ft $F_{ph}(CG_z + t)$
$e = 0.4$ ft $< L/6$ ($L/6 = 1.1$ ft)	$e = 0.3$ ft $< L/6$ ($L/6 = 1.1$ ft)
→ Full Soil Bearing $SB = P/(BL) + 6M/(BL^2)$	→ Full Soil Bearing $SB = P/(BL) + 6M/(BL^2)$
$SB = 122$ psf $< 1,500$ psf (OK)	$SB = 166$ psf $< 1,500$ psf (OK)

Footing Reinforcing Design: (ULT)

$F_y =$	60 ksi		
$f'_c =$	2,500 psi		
Reinf =	#4 @ 18" oc (18" oc max)	bot cover = 3.0 in	
$A_s =$	0.12 in ² /ft (4 bars total)	top cover = 1.5 in	
$d =$	2.2 in		
$a =$	0.3 in	$= A_s \cdot F_y / (0.85 \cdot f'_c \cdot b)$	

CASE A: 0.9D+E (ULT)	CASE B: 1.2D+E (ULT)
$P = 3,391$ lbs $0.9(W_p + W_{FTG}) - F_{pv}$	$P = 6,782$ lbs $1.2(W_p + W_{FTG}) + F_{pv}$
$M = 2,202$ lb-ft $F_{ph}(CG_z + t)$	$M = 2,202$ lb-ft $F_{ph}(CG_z + t)$
$e = 0.6$ ft $< L/6$ ($L/6 = 1.1$ ft)	$e = 0.3$ ft $< L/6$ ($L/6 = 1.1$ ft)
$w = 129$ plf /ft $= P/(BL) + 6M/(BL^2)$	$w = 210$ plf /ft $= P/(BL) + 6M/(BL^2)$

$M_u^- = 0.8$ kip-ft /ft $= w \cdot b^2 / 8$	$V_u = 0.7$ k /ft $= w \cdot L / 2$
$M_u^+ = 0.9$ kip-ft /ft $= w \cdot a^2 / 2$	$V_c = 2.0$ k /ft $= [2(f'_c)^{1/2}(12") \cdot d]$
$M_{u,max} = 0.9$ kip-ft /ft	DCR = 0.35 (OK) $= V_u / V_c \leq 1.0$
$M_n = 1.1$ kip-ft /ft $= 0.9A_s \cdot F_y (d - a / 2)$	
DCR = 0.83 (OK) $= M_u / M_n \leq 1.0$	



Job:	18P2S02 City of Orange McPherson Pk			A1
Calc By:	HZ	Date:	08/07/19	

DESCRIPTION	BY	DATE

SWITCHBOARD GENERAL NOTES
PRODUCT DESCRIPTION & RATINGS

Power System Data

- 120/240V 1Ph 3W 60Hz / 1 Phase
- Solidly grounded/Mid Point Grounded
- System Short Circuit Current Rating: 42KA RMS
- Incoming Section 2 Cable Through the Bottom Right of Lineup

Bus System Data

- 400A Tin Plated Copper Main Bus
- (2) .25x1.50 IN/6x38 mm Cu Bus Bar Per Phase
- (1) .25x.875 IN/6x22 mm Cu Ground Bus

Enclosure Data

- Type 3R Stainless Steel Free Standing
- Exterior Paint Color: ANSI 49 painted stainless steel
- Front Accessibility Only Required
- Handling: Rollers
- Rodent barriers
- 1.5H Corrosion Resist Base Channels
- Interior Lights - All Sections
- 120V duplex GFCI receptacle - flush mounted in section 1
- Utility sealing hardware installed for unmetered bus compartments

Estimated Shipping Weight

- Shipping Split 1 1684.00 lbs / 763.86 kgs
- Complete Lineup 1684.00 lbs / 763.86 kgs

Code Standards

- U.L. Deadfront and suitable for use as Service Entrance when not more than six (6) disconnecting means are provided.

Rating Nameplates

- ST1 - Service Entrance - Section Bus 400A
- ST2 - Deadfront - Section Bus 400A

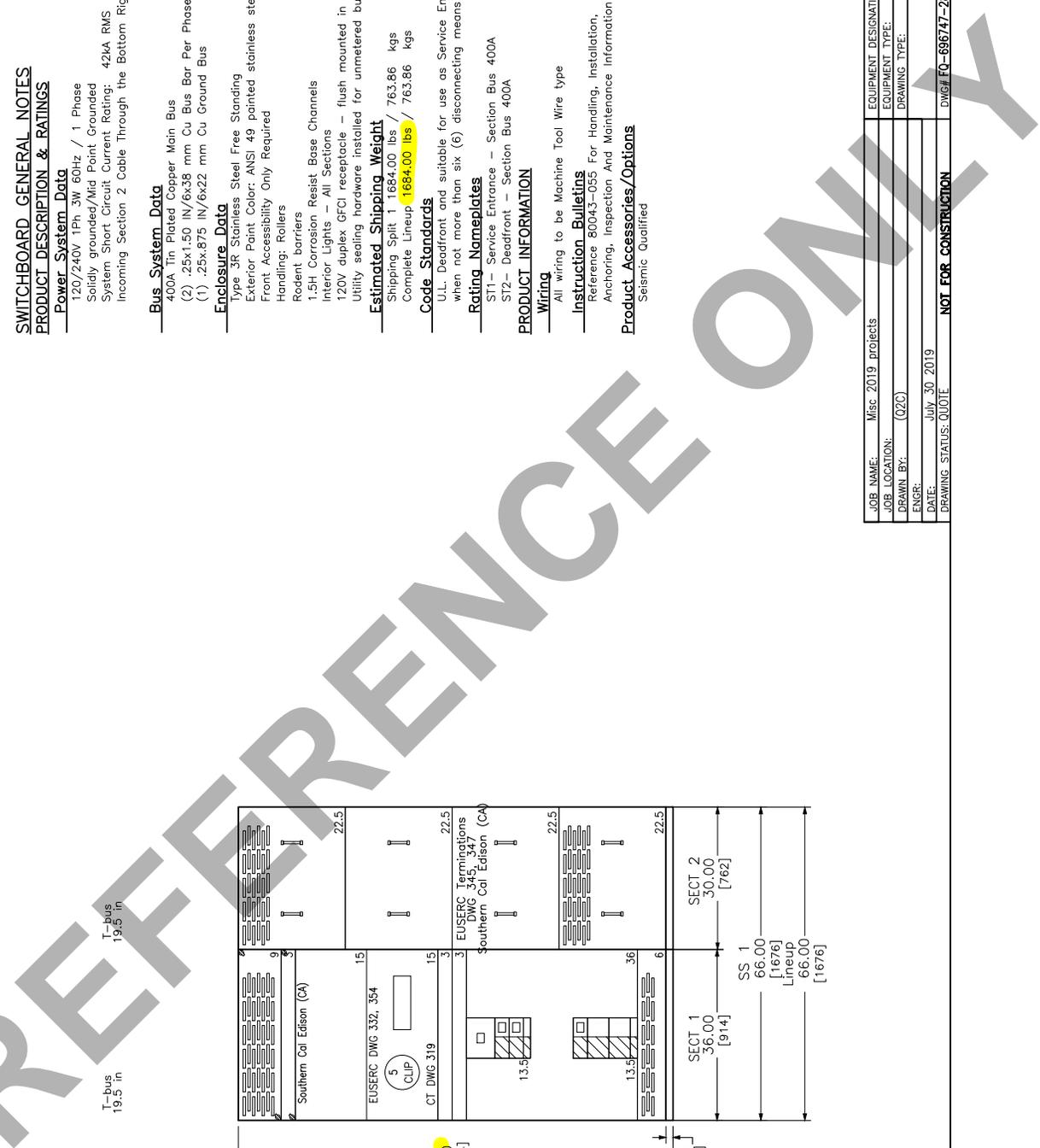
PRODUCT INFORMATION

- Wiring**
All wiring to be Machine Tool Wire type
- Instruction Bulletins**
Reference 80043-055 For Handling, Installation, Anchoring, Inspection And Maintenance information
- Product Accessories/Options**
Seismic Qualified

DUAL DIMENSIONS: INCHES MILLIMETER

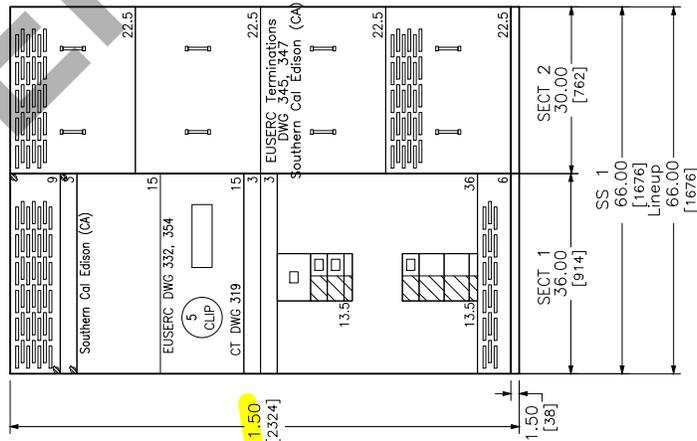
JOB NAME:	Misc 2019 projects	EQUIPMENT DESIGNATION:	MS 400A 1ph N3R
JOB LOCATION:		EQUIPMENT TYPE:	QED-2 Switchboard
DRAWN BY:	(QZC)	DRAWING TYPE:	ELEVATION VIEW
ENGR:			
DATE:	July 30 2019		
DRAWING STATUS:	QUOTE	DWG#	FO-696747-2871512-01

PG 1 OF 2



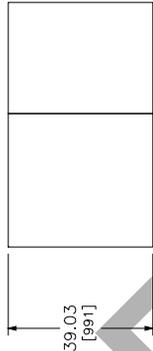
T₁ bus
19.5 in

T₂ bus
19.5 in

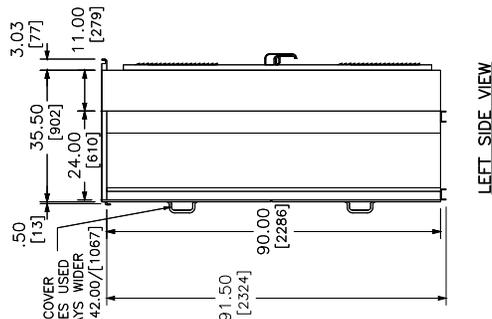


Job:	18P2S02 City of Orange McPherson Pk		
Calc By:	HZ	Date:	08/07/19
A2			

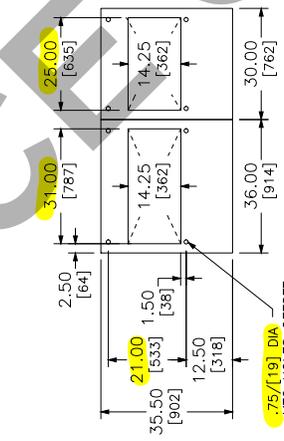
DESCRIPTION	BY	DATE	REVISION



TOP VIEW -- FRONT



LEFT SIDE VIEW



FLOOR PLAN -- FRONT

NOTE: ALL DEVICES REQUIRING DRILLING OR INSERTION IN MOUNTING PAD SHOULD BE INSTALLED BEFORE SETTING EQUIPMENT IN PLACE.

DUAL DIMENSIONS: INCHES / MILLIMETER

JOB NAME:	Misc. 2019 projects
JOB LOCATION:	(02C)
ENGR. BY:	
DATE:	JULY 30 2019
DRAWING STATUS:	QUOTE
EQUIPMENT DESIGNATION:	MS 400A 1ph N3R
EQUIPMENT TYPE:	QED-2 Switchboard
DRAWING TYPE:	SIDE, TOP VIEW & FLOOR PLAN
DWG#:	FO-696747-28715712-01
NOT FOR CONSTRUCTION	

NOTE:
 A MINIMUM OF 2.00' [51] CLEARANCE BEHIND THE SWITCHBOARD IS REQUIRED FOR TOP COVER OVERHANG.

ATTACHMENT NO. 1

[Behind this page.]

ATTACHMENT NO. 1

CALIFORNIA LABOR CODE SECTIONS 1725.5, 1771, 1771.1, 1771.4, 1775, 1776, 1777.5, 1813 and 1815

Section 1725.5. Registration of contractors; mandatory registration; qualifications and application; fees; exempt contractors

A contractor shall be registered pursuant to this section to be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any public work contract that is subject to the requirements of this chapter. For the purposes of this section, "contractor" includes a subcontractor as defined by Section 1722.1.

(a) To qualify for registration under this section, a contractor shall do all of the following:

(1)(A) Register with the Department of Industrial Relations in the manner prescribed by the department and pay an initial nonrefundable application fee of four hundred dollars (\$400) to qualify for registration under this section and an annual renewal fee on or before July 1 of each year thereafter. The annual renewal fee shall be in a uniform amount set by the Director of Industrial Relations, and the initial registration and renewal fees may be adjusted no more than annually by the director to support the costs specified in Section 1771.3.

(B) Beginning June 1, 2019, a contractor may register or renew according to this subdivision in annual increments up to three years from the date of registration. Contractors who wish to do so will be required to prepay the applicable nonrefundable application or renewal fees to qualify for the number of years for which they wish to preregister.

(2) Provide evidence, disclosures, or releases as are necessary to establish all of the following:

(A) Workers' compensation coverage that meets the requirements of Division 4 (commencing with Section 3200) and includes sufficient coverage for any worker whom the contractor employs to perform work that is subject to prevailing wage requirements other than a contractor who is separately registered under this section. Coverage may be evidenced by a current and valid certificate of workers' compensation insurance or certification of self-insurance required under Section 7125 of the Business and Professions Code.

(B) If applicable, the contractor is licensed in accordance with Chapter 9 (commencing with Section 7000) of the Business and Professions Code.

(C) The contractor does not have any delinquent liability to an employee or the state for any assessment of back wages or related damages, interest, fines, or penalties pursuant to any final judgment, order, or determination by a court or any federal, state, or local administrative agency, including a confirmed arbitration award. However, for purposes of this paragraph, the contractor shall not be disqualified for any judgment, order, or determination that is under appeal, provided that the contractor has secured the payment of any amount eventually found due through a bond or other appropriate means.

(D) The contractor is not currently debarred under Section 1777.1 or under any other federal or state law providing for the debarment of contractors from public works.

(E) The contractor has not bid on a public works contract, been listed in a bid proposal, or engaged in the performance of a contract for public works without being lawfully registered in accordance with this section, within the preceding 12 months or since the effective date of the requirements set forth in subdivision (e), whichever is earlier. If a contractor is found to be in violation of the requirements of this paragraph, the period of disqualification shall be waived if both of the following are true:

- (i) The contractor has not previously been found to be in violation of the requirements of this paragraph within the preceding 12 months.
- (ii) The contractor pays an additional nonrefundable penalty registration fee of two thousand dollars (\$2,000).
- (b) Fees received pursuant to this section shall be deposited in the State Public Works Enforcement Fund established by Section 1771.3 and shall be used only for the purposes specified in that section.
- (c) A contractor who fails to pay the renewal fee required under paragraph (1) of subdivision (a) on or before the expiration of any prior period of registration shall be prohibited from bidding on or engaging in the performance of any contract for public work until once again registered pursuant to this section. If the failure to pay the renewal fee was inadvertent, the contractor may renew its registration retroactively by paying an additional nonrefundable penalty renewal fee equal to the amount of the renewal fee within 90 days of the due date of the renewal fee.
- (d) If, after a body awarding a contract accepts the contractor's bid or awards the contract, the work covered by the bid or contract is determined to be a public work to which Section 1771 applies, either as the result of a determination by the director pursuant to Section 1773.5 or a court decision, the requirements of this section shall not apply, subject to the following requirements:
- (1) The body that awarded the contract failed, in the bid specification or in the contract documents, to identify as a public work that portion of the work that the determination or decision subsequently classifies as a public work.
- (2) Within 20 days following service of notice on the awarding body of a determination by the Director of Industrial Relations pursuant to Section 1773.5 or a decision by a court that the contract was for public work as defined in this chapter, the contractor and any subcontractors are registered under this section or are replaced by a contractor or subcontractors who are registered under this section.
- (3) The requirements of this section shall apply prospectively only to any subsequent bid, bid proposal, contract, or work performed after the awarding body is served with notice of the determination or decision referred to in paragraph (2).
- (e) The requirements of this section shall apply to any bid proposal submitted on or after March 1, 2015, to any contract for public work, as defined in this chapter, executed on or after April 1, 2015, and to any work performed under a contract for public work on or after January 1, 2018, regardless of when the contract for public work was executed.
- (f) This section does not apply to work performed on a public works project of twenty-five thousand dollars (\$25,000) or less when the project is for construction, alteration, demolition, installation, or repair work or to work performed on a public works project of fifteen thousand dollars (\$15,000) or less when the project is for maintenance work.

Section 1771. Payment of general prevailing rate

Except for public works projects of one thousand dollars (\$1,000) or less, not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the public work is performed, and not less than the general prevailing rate of per diem wages for holiday and overtime work fixed as provided in this chapter, shall be paid to all workers employed on public works.

This section is applicable only to work performed under contract, and is not applicable to work carried out by a public agency with its own forces. This section is applicable to contracts let for maintenance work.

Section 1771.1. Registration as a contractor or subcontractor required prior to bid submission; exceptions; violations; penalties

(a) A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

(b) Notice of the requirement described in subdivision (a) shall be included in all bid invitations and public works contracts, and a bid shall not be accepted nor any contract or subcontract entered into without proof of the contractor or subcontractor's current registration to perform public work pursuant to Section 1725.5.

(c) An inadvertent error in listing a subcontractor who is not registered pursuant to Section 1725.5 in a bid proposal shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive, provided that any of the following apply:

(1) The subcontractor is registered prior to the bid opening.

(2) Within 24 hours after the bid opening, the subcontractor is registered and has paid the penalty registration fee specified in subparagraph (E) of paragraph (2) of subdivision (a) of Section 1725.5.

(3) The subcontractor is replaced by another registered subcontractor pursuant to Section 4107 of the Public Contract Code.

(d) Failure by a subcontractor to be registered to perform public work as required by subdivision (a) shall be grounds under Section 4107 of the Public Contract Code for the contractor, with the consent of the awarding authority, to substitute a subcontractor who is registered to perform public work pursuant to Section 1725.5 in place of the unregistered subcontractor.

(e) The department shall maintain on its Internet Web site a list of contractors who are currently registered to perform public work pursuant to Section 1725.5.

(f) A contract entered into with any contractor or subcontractor in violation of subdivision (a) shall be subject to cancellation, provided that a contract for public work shall not be unlawful, void, or voidable solely due to the failure of the awarding body, contractor, or any subcontractor to comply with the requirements of Section 1725.5 or this section.

(g) If the Labor Commissioner or his or her designee determines that a contractor or subcontractor engaged in the performance of any public work contract without having been registered in accordance with this section, the contractor or subcontractor shall forfeit, as a civil penalty to the state, one hundred dollars (\$100) for each day of work performed in violation of the registration requirement, not to exceed an aggregate penalty of eight thousand dollars (\$8,000) in addition to any penalty registration fee assessed pursuant to clause (ii) of subparagraph (E) of paragraph (2) of subdivision (a) of Section 1725.5.

(h)(1) In addition to, or in lieu of, any other penalty or sanction authorized pursuant to this chapter, a higher tiered public works contractor or subcontractor who is found to have entered into a subcontract with an unregistered lower tier subcontractor to perform any public work in violation of the requirements of Section 1725.5 or this section shall be subject to forfeiture, as a civil penalty to the state, of one hundred dollars (\$100)

for each day the unregistered lower tier subcontractor performs work in violation of the registration requirement, not to exceed an aggregate penalty of ten thousand dollars (\$10,000).

(2) The Labor Commissioner shall use the same standards specified in subparagraph (A) of paragraph (2) of subdivision (a) of Section 1775 when determining the severity of the violation and what penalty to assess, and may waive the penalty for a first time violation that was unintentional and did not hinder the Labor Commissioner's ability to monitor and enforce compliance with the requirements of this chapter.

(3) A higher tiered public works contractor or subcontractor shall not be liable for penalties assessed pursuant to paragraph (1) if the lower tier subcontractor's performance is in violation of the requirements of Section 1725.5 due to the revocation of a previously approved registration.

(4) A subcontractor shall not be liable for any penalties assessed against a higher tiered public works contractor or subcontractor pursuant to paragraph (1). A higher tiered public works contractor or subcontractor may not require a lower tiered subcontractor to indemnify or otherwise be liable for any penalties pursuant to paragraph (1).

(i) The Labor Commissioner or his or her designee shall issue a civil wage and penalty assessment, in accordance with the provisions of Section 1741, upon determination of penalties pursuant to subdivision (g) and subparagraph (B) of paragraph (1) of subdivision (h). Review of a civil wage and penalty assessment issued under this subdivision may be requested in accordance with the provisions of Section 1742. The regulations of the Director of Industrial Relations, which govern proceedings for review of civil wage and penalty assessments and the withholding of contract payments under Article 1 (commencing with Section 1720) and Article 2 (commencing with Section 1770), shall apply.

(j)(1) Where a contractor or subcontractor engages in the performance of any public work contract without having been registered in violation of the requirements of Section 1725.5 or this section, the Labor Commissioner shall issue and serve a stop order prohibiting the use of the unregistered contractor or the unregistered subcontractor on all public works until the unregistered contractor or unregistered subcontractor is registered. The stop order shall not apply to work by registered contractors or subcontractors on the public work.

(2) A stop order may be personally served upon the contractor or subcontractor by either of the following methods:

(A) Manual delivery of the order to the contractor or subcontractor personally.

(B) Leaving signed copies of the order with the person who is apparently in charge at the site of the public work and by thereafter mailing copies of the order by first class mail, postage prepaid to the contractor or subcontractor at one of the following:

(i) The address of the contractor or subcontractor on file with either the Secretary of State or the Contractors' State License Board.

(ii) If the contractor or subcontractor has no address on file with the Secretary of State or the Contractors' State License Board, the address of the site of the public work.

(3) The stop order shall be effective immediately upon service and shall be subject to appeal by the party contracting with the unregistered contractor or subcontractor, by the unregistered contractor or subcontractor, or both. The appeal, hearing, and any further review of the hearing decision shall be governed by the procedures, time limits, and other requirements specified in subdivision (a) of Section 238.1.

(4) Any employee of an unregistered contractor or subcontractor who is affected by a work stoppage ordered by the commissioner pursuant to this subdivision shall be paid at his or her regular hourly prevailing wage rate by that employer for any hours the employee would have worked but for the work stoppage, not to exceed 10 days.

(k) Failure of a contractor or subcontractor, owner, director, officer, or managing agent of the contractor or subcontractor to observe a stop order issued and served upon him or her pursuant to subdivision (j) is guilty of a misdemeanor punishable by imprisonment in county jail not exceeding 60 days or by a fine not exceeding ten thousand dollars (\$10,000), or both.

(l) This section shall apply to any bid proposal submitted on or after March 1, 2015, and any contract for public work entered into on or after April 1, 2015. This section shall also apply to the performance of any public work, as defined in this chapter, on or after January 1, 2018, regardless of when the contract for public work was entered.

(m) Penalties received pursuant to this section shall be deposited in the State Public Works Enforcement Fund established by Section 1771.3 and shall be used only for the purposes specified in that section.

(n) This section shall not apply to work performed on a public works project of twenty-five thousand dollars (\$25,000) or less when the project is for construction, alteration, demolition, installation, or repair work or to work performed on a public works project of fifteen thousand dollars (\$15,000) or less when the project is for maintenance work.

Section 1771.4. Additional requirements when bidding and awarding public works contracts

(a) All of the following are applicable to all public works projects that are otherwise subject to the requirements of this chapter:

(1) The call for bids and contract documents shall specify that the project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

(2) The awarding body shall post or require the prime contractor to post job site notices, as prescribed by regulation.

(3) Each contractor and subcontractor shall furnish the records specified in Section 1776 directly to the Labor Commissioner, in the following manner:

(A) At least monthly or more frequently if specified in the contract with the awarding body.

(B) In a format prescribed by the Labor Commissioner.

(4) If the contractor or subcontractor is not registered pursuant to Section 1725.5 and is performing work on a project for which registration is not required because of subdivision (f) of Section 1725.5, the unregistered contractor or subcontractor is not required to furnish the records specified in Section 1776 directly to the Labor Commissioner but shall retain the records specified in Section 1776 for at least three years after completion of the work.

(5) The department shall undertake those activities it deems necessary to monitor and enforce compliance with prevailing wage requirements.

(b) The Labor Commissioner may exempt a public works project from compliance with all or part of the requirements of subdivision (a) if either of the following occurs:

(1) The awarding body has enforced an approved labor compliance program, as defined in Section 1771.5, on all public works projects under its authority, except those deemed exempt pursuant to subdivision (a) of Section 1771.5, continuously since December 31, 2011.

(2) The awarding body has entered into a collective bargaining agreement that binds all contractors performing work on the project and that includes a mechanism for resolving disputes about the payment of wages.

(c) The requirements of paragraph (1) of subdivision (a) shall only apply to contracts for public works projects awarded on or after January 1, 2015.

(d) The requirements of paragraph (3) of subdivision (a) shall apply to all contracts for public work, whether new or ongoing, on or after January 1, 2016.

Section 1775. Penalties for violations

(a)(1) The contractor and any subcontractor under the contractor shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit not more than two hundred dollars (\$200) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rates as determined by the director for the work or craft in which the worker is employed for any public work done under the contract by the contractor or, except as provided in subdivision (b), by any subcontractor under the contractor.

(2)(A) The amount of the penalty shall be determined by the Labor Commissioner based on consideration of both of the following:

(i) Whether the failure of the contractor or subcontractor to pay the correct rate of per diem wages was a good faith mistake and, if so, the error was promptly and voluntarily corrected when brought to the attention of the contractor or subcontractor.

(ii) Whether the contractor or subcontractor has a prior record of failing to meet its prevailing wage obligations.

(B)(i) The penalty may not be less than forty dollars (\$40) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, unless the failure of the contractor or subcontractor to pay the correct rate of per diem wages was a good faith mistake and, if so, the error was promptly and voluntarily corrected when brought to the attention of the contractor or subcontractor.

(ii) The penalty may not be less than eighty dollars (\$80) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, if the contractor or subcontractor has been assessed penalties within the previous three years for failing to meet its prevailing wage obligations on a separate contract, unless those penalties were subsequently withdrawn or overturned.

(iii) The penalty may not be less than one hundred twenty dollars (\$120) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, if the Labor Commissioner determines that the violation was willful, as defined in subdivision (c) of Section 1777.1.

(C) If the amount due under this section is collected from the contractor or subcontractor, any outstanding wage claim under Chapter 1 (commencing with Section 1720) of Part 7 of Division 2 against that contractor

or subcontractor shall be satisfied before applying that amount to the penalty imposed on that contractor or subcontractor pursuant to this section.

(D) The determination of the Labor Commissioner as to the amount of the penalty shall be reviewable only for abuse of discretion.

(E) The difference between the prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing wage rate shall be paid to each worker by the contractor or subcontractor, and the body awarding the contract shall cause to be inserted in the contract a stipulation that this section will be complied with.

(b) If a worker employed by a subcontractor on a public works project is not paid the general prevailing rate of per diem wages by the subcontractor, the prime contractor of the project is not liable for any penalties under subdivision (a) unless the prime contractor had knowledge of that failure of the subcontractor to pay the specified prevailing rate of wages to those workers or unless the prime contractor fails to comply with all of the following requirements:

(1) The contract executed between the contractor and the subcontractor for the performance of work on the public works project shall include a copy of the provisions of this section and Sections 1771, 1776, 1777.5, 1813, and 1815.

(2) The contractor shall monitor the payment of the specified general prevailing rate of per diem wages by the subcontractor to the employees, by periodic review of the certified payroll records of the subcontractor.

(3) Upon becoming aware of the failure of the subcontractor to pay his or her workers the specified prevailing rate of wages, the contractor shall diligently take corrective action to halt or rectify the failure, including, but not limited to, retaining sufficient funds due the subcontractor for work performed on the public works project.

(4) Prior to making final payment to the subcontractor for work performed on the public works project, the contractor shall obtain an affidavit signed under penalty of perjury from the subcontractor that the subcontractor has paid the specified general prevailing rate of per diem wages to his or her employees on the public works project and any amounts due pursuant to Section 1813.

(c) The Division of Labor Standards Enforcement shall notify the contractor on a public works project within 15 days of the receipt by the Division of Labor Standards Enforcement of a complaint of the failure of a subcontractor on that public works project to pay workers the general prevailing rate of per diem wages.

Section 1776. Payroll records; retention; inspection; redacted information; agencies entitled to receive nonredacted copies of certified records; noncompliance penalties; rules

(a) Each contractor and subcontractor shall keep accurate payroll records, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the public work. Each payroll record shall contain or be verified by a written declaration that it is made under penalty of perjury, stating both of the following:

(1) The information contained in the payroll record is true and correct.

(2) The employer has complied with the requirements of Sections 1771, 1811, and 1815 for any work performed by his or her employees on the public works project.

(b) The payroll records enumerated under subdivision (a) shall be certified and shall be available for inspection at all reasonable hours at the principal office of the contractor on the following basis:

(1) A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request.

(2) A certified copy of all payroll records enumerated in subdivision (a) shall be made available for inspection or furnished upon request to a representative of the body awarding the contract and the Division of Labor Standards Enforcement of the Department of Industrial Relations.

(3) A certified copy of all payroll records enumerated in subdivision (a) shall be made available upon request by the public for inspection or for copies thereof. However, a request by the public shall be made through either the body awarding the contract or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to paragraph (2), the requesting party shall, prior to being provided the records, reimburse the costs of preparation by the contractor, subcontractors, and the entity through which the request was made. The public may not be given access to the records at the principal office of the contractor.

(c) Unless required to be furnished directly to the Labor Commissioner in accordance with paragraph (3) of subdivision (a) of Section 1771.4, the certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the division. The payroll records may consist of printouts of payroll data that are maintained as computer records, if the printouts contain the same information as the forms provided by the division and the printouts are verified in the manner specified in subdivision (a).

(d) A contractor or subcontractor shall file a certified copy of the records enumerated in subdivision (a) with the entity that requested the records within 10 days after receipt of a written request.

(e) Except as provided in subdivision (f), any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the awarding body or the Division of Labor Standards Enforcement shall be marked or obliterated to prevent disclosure of an individual's name, address, and social security number. The name and address of the contractor awarded the contract or the subcontractor performing the contract shall not be marked or obliterated. Any copy of records made available for inspection by, or furnished to, a multiemployer Taft-Hartley trust fund (29 U.S.C. Sec. 186(c)(5)) that requests the records for the purposes of allocating contributions to participants shall be marked or obliterated only to prevent disclosure of an individual's full social security number, but shall provide the last four digits of the social security number. Any copy of records made available for inspection by, or furnished to, a joint labor-management committee established pursuant to the federal Labor Management Cooperation Act of 1978 (29 U.S.C. Sec. 175a) shall be marked or obliterated only to prevent disclosure of an individual's social security number.

(f)(1) Notwithstanding any other provision of law, agencies that are included in the Joint Enforcement Strike Force on the Underground Economy established pursuant to Section 329 of the Unemployment Insurance Code and other law enforcement agencies investigating violations of law shall, upon request, be provided nonredacted copies of certified payroll records. Any copies of records or certified payroll made available for inspection and furnished upon request to the public by an agency included in the Joint Enforcement Strike Force on the Underground Economy or to a law enforcement agency investigating a violation of law shall be marked or redacted to prevent disclosure of an individual's name, address, and social security number.

(2) An employer shall not be liable for damages in a civil action for any reasonable act or omission taken in good faith in compliance with this subdivision.

(g) The contractor shall inform the body awarding the contract of the location of the records enumerated under subdivision (a), including the street address, city, and county, and shall, within five working days, provide a notice of a change of location and address.

(h) The contractor or subcontractor has 10 days in which to comply subsequent to receipt of a written notice requesting the records enumerated in subdivision (a). In the event that the contractor or subcontractor fails to comply within the 10-day period, he or she shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit one hundred dollars (\$100) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due. A contractor is not subject to a penalty assessment pursuant to this section due to the failure of a subcontractor to comply with this section.

(i) The body awarding the contract shall cause to be inserted in the contract stipulations to effectuate this section.

(j) The director shall adopt rules consistent with the California Public Records Act (Chapter 3.5 (commencing with Section 6250) of Division 7 of Title 1 of the Government Code) and the Information Practices Act of 1977 (Title 1.8 (commencing with Section 1798) of Part 4 of Division 3 of the Civil Code) governing the release of these records, including the establishment of reasonable fees to be charged for reproducing copies of records required by this section.

Section 1777.5. Employment of registered apprentices; wages; standards; number; apprenticeable craft or trade; exemptions; contributions; compliance program

(a)(1) This chapter does not prevent the employment upon public works of properly registered apprentices who are active participants in an approved apprenticeship program.

(2) For purposes of this chapter, “apprenticeship program” means a program under the jurisdiction of the California Apprenticeship Council established pursuant to Section 3070.

(b)(1) Every apprentice employed upon public works shall be paid the prevailing rate of per diem wages for apprentices in the trade to which he or she is registered and shall be employed only at the work of the craft or trade to which he or she is registered.

(2) Unless otherwise provided by a collective bargaining agreement, when a contractor requests the dispatch of an apprentice pursuant to this section to perform work on a public works project and requires the apprentice to fill out an application or undergo testing, training, an examination, or other preemployment process as a condition of employment, the apprentice shall be paid for the time spent on the required preemployment activity, including travel time to and from the required activity, if any, at the prevailing rate of per diem wages for apprentices in the trade to which he or she is registered. Unless otherwise provided by a collective bargaining agreement, a contractor is not required to compensate an apprentice for the time spent on preemployment activities if the apprentice is required to take a preemployment drug or alcohol test and he or she fails to pass that test.

(c) Only apprentices, as defined in Section 3077, who are in training under apprenticeship standards that have been approved by the Chief of the Division of Apprenticeship Standards and who are parties to written

apprentice agreements under Chapter 4 (commencing with Section 3070) of Division 3 are eligible to be employed at the apprentice wage rate on public works. The employment and training of each apprentice shall be in accordance with either of the following:

- (1) The apprenticeship standards and apprentice agreements under which he or she is training.
- (2) The rules and regulations of the California Apprenticeship Council.

(d) If the contractor to whom the contract is awarded by the state or any political subdivision, in performing any of the work under the contract, employs workers in any apprenticeable craft or trade, the contractor shall employ apprentices in at least the ratio set forth in this section and may apply to any apprenticeship program in the craft or trade that can provide apprentices to the site of the public work for a certificate approving the contractor under the apprenticeship standards for the employment and training of apprentices in the area or industry affected. However, the decision of the apprenticeship program to approve or deny a certificate shall be subject to review by the Administrator of Apprenticeship. The apprenticeship program or programs, upon approving the contractor, shall arrange for the dispatch of apprentices to the contractor. A contractor covered by an apprenticeship program's standards shall not be required to submit any additional application in order to include additional public works contracts under that program. "Apprenticeable craft or trade," as used in this section, means a craft or trade determined as an apprenticeable occupation in accordance with rules and regulations prescribed by the California Apprenticeship Council. As used in this section, "contractor" includes any subcontractor under a contractor who performs any public works not excluded by subdivision (o).

(e) Before commencing work on a contract for public works, every contractor shall submit contract award information to an applicable apprenticeship program that can supply apprentices to the site of the public work. The information submitted shall include an estimate of journeyman hours to be performed under the contract, the number of apprentices proposed to be employed, and the approximate dates the apprentices would be employed. A copy of this information shall also be submitted to the awarding body, if requested by the awarding body. Within 60 days after concluding work on the contract, each contractor and subcontractor shall submit to the awarding body, if requested, and to the apprenticeship program a verified statement of the journeyman and apprentice hours performed on the contract. The information under this subdivision shall be public. The apprenticeship programs shall retain this information for 12 months.

(f) The apprenticeship program supplying apprentices to the area of the site of the public work shall ensure equal employment and affirmative action in apprenticeship for women and minorities.

(g) The ratio of work performed by apprentices to journeymen employed in a particular craft or trade on the public work may be no higher than the ratio stipulated in the apprenticeship standards under which the apprenticeship program operates if the contractor agrees to be bound by those standards. However, except as otherwise provided in this section, in no case shall the ratio be less than one hour of apprentice work for every five hours of journeyman work.

(h) This ratio of apprentice work to journeyman work shall apply during any day or portion of a day when any journeyman is employed at the jobsite and shall be computed on the basis of the hours worked during the day by journeymen so employed. Any work performed by a journeyman in excess of eight hours per day or 40 hours per week shall not be used to calculate the ratio. The contractor shall employ apprentices for the number of hours computed as above before the end of the contract or, in the case of a subcontractor, before the end of the subcontract. However, the contractor shall endeavor, to the greatest extent possible, to employ apprentices during the same time period that the journeymen in the same craft or trade are employed at the jobsite. When an hourly apprenticeship ratio is not feasible for a particular craft or trade, the Administrator

of Apprenticeship, upon application of an apprenticeship program, may order a minimum ratio of not less than one apprentice for each five journeymen in a craft or trade classification.

(i) A contractor covered by this section who has agreed to be covered by an apprenticeship program's standards upon the issuance of the approval certificate, or who has been previously approved for an apprenticeship program in the craft or trade, shall employ the number of apprentices or the ratio of apprentices to journeymen stipulated in the applicable apprenticeship standards, but in no event less than the 1-to-5 ratio required by subdivision (g).

(j) Upon proper showing by a contractor that he or she employs apprentices in a particular craft or trade in the state on all of his or her contracts on an annual average of not less than one hour of apprentice work for every five hours of labor performed by journeymen, the Administrator of Apprenticeship may grant a certificate exempting the contractor from the 1-to-5 hourly ratio, as set forth in this section for that craft or trade.

(k) An apprenticeship program has the discretion to grant to a participating contractor or contractor association a certificate, which shall be subject to the approval of the Administrator of Apprenticeship, exempting the contractor from the 1-to-5 ratio set forth in this section when it finds that any one of the following conditions is met:

(1) Unemployment for the previous three-month period in the area exceeds an average of 15 percent.

(2) The number of apprentices in training in the area exceeds a ratio of 1 to 5.

(3) There is a showing that the apprenticeable craft or trade is replacing at least one-thirtieth of its journeymen annually through apprenticeship training, either on a statewide basis or on a local basis.

(4) Assignment of an apprentice to any work performed under a public works contract would create a condition that would jeopardize his or her life or the life, safety, or property of fellow employees or the public at large, or the specific task to which the apprentice is to be assigned is of a nature that training cannot be provided by a journeyman.

(l) If an exemption is granted pursuant to subdivision (k) to an organization that represents contractors in a specific trade from the 1-to-5 ratio on a local or statewide basis, the member contractors shall not be required to submit individual applications for approval to local joint apprenticeship committees, if they are already covered by the local apprenticeship standards.

(m)(1) A contractor to whom a contract is awarded, who, in performing any of the work under the contract, employs journeymen or apprentices in any apprenticeable craft or trade shall contribute to the California Apprenticeship Council the same amount that the director determines is the prevailing amount of apprenticeship training contributions in the area of the public works site. A contractor may take as a credit for payments to the council any amounts paid by the contractor to an approved apprenticeship program that can supply apprentices to the site of the public works project. The contractor may add the amount of the contributions in computing his or her bid for the contract.

(2)(A) At the conclusion of the 2002-03 fiscal year and each fiscal year thereafter, the California Apprenticeship Council shall distribute training contributions received by the council under this subdivision, less the expenses of the Department of Industrial Relations for administering this subdivision, by making grants to approved apprenticeship programs for the purpose of training apprentices. The grant funds shall be distributed as follows:

(i) If there is an approved multiemployer apprenticeship program serving the same craft or trade and geographic area for which the training contributions were made to the council, a grant to that program shall be made.

(ii) If there are two or more approved multiemployer apprenticeship programs serving the same craft or trade and county for which the training contributions were made to the council, the grant shall be divided among those programs based on the number of apprentices from that county registered in each program.

(iii) All training contributions not distributed under clauses (i) and (ii) shall be used to defray the future expenses of the Department of Industrial Relations for the administration and enforcement of apprenticeship and preapprenticeship standards and requirements under this code.

(B) An apprenticeship program shall only be eligible to receive grant funds pursuant to this subdivision if the apprenticeship program agrees, prior to the receipt of any grant funds, to keep adequate records that document the expenditure of grant funds and to make all records available to the Department of Industrial Relations so that the Department of Industrial Relations is able to verify that grant funds were used solely for training apprentices. For purposes of this subparagraph, adequate records include, but are not limited to, invoices, receipts, and canceled checks that account for the expenditure of grant funds. This subparagraph shall not be deemed to require an apprenticeship program to provide the Department of Industrial Relations with more documentation than is necessary to verify the appropriate expenditure of grant funds made pursuant to this subdivision.

(C) The Department of Industrial Relations shall verify that grants made pursuant to this subdivision are used solely to fund training apprentices. If an apprenticeship program is unable to demonstrate how grant funds are expended or if an apprenticeship program is found to be using grant funds for purposes other than training apprentices, then the apprenticeship program shall not be eligible to receive any future grant pursuant to this subdivision and the Department of Industrial Relations may initiate the process to rescind the registration of the apprenticeship program.

(3) All training contributions received pursuant to this subdivision shall be deposited in the Apprenticeship Training Contribution Fund, which is hereby created in the State Treasury. Upon appropriation by the Legislature, all moneys in the Apprenticeship Training Contribution Fund shall be used for the purpose of carrying out this subdivision and to pay the expenses of the Department of Industrial Relations.

(n) The body awarding the contract shall cause to be inserted in the contract stipulations to effectuate this section. The stipulations shall fix the responsibility of compliance with this section for all apprenticeable occupations with the prime contractor.

(o) This section does not apply to contracts of general contractors or to contracts of specialty contractors not bidding for work through a general or prime contractor when the contracts of general contractors or those specialty contractors involve less than thirty thousand dollars (\$30,000).

(p) An awarding body that implements an approved labor compliance program in accordance with subdivision (b) of Section 1771.5 may, with the approval of the director, assist in the enforcement of this section under the terms and conditions prescribed by the director.

Section 1813. Forfeiture for violations; contract stipulation; report of violations

The contractor or subcontractor shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit twenty- five dollars (\$25) for each worker employed in the execution of

the contract by the respective contractor or subcontractor for each calendar day during which the worker is required or permitted to work more than 8 hours in any one calendar day and 40 hours in any one calendar week in violation of the provisions of this article. In awarding any contract for public work, the awarding body shall cause to be inserted in the contract a stipulation to this effect. The awarding body shall take cognizance of all violations of this article committed in the course of the execution of the contract, and shall report them to the Division of Labor Standards Enforcement.

Section 1815. Overtime

Notwithstanding the provisions of Sections 1810 to 1814, inclusive, of this code, and notwithstanding any stipulation inserted in any contract pursuant to the requirements of said sections, work performed by employees of contractors in excess of 8 hours per day, and 40 hours during any one week, shall be permitted upon public work upon compensation for all hours worked in excess of 8 hours per day at not less than 1 ½ times the basic rate of pay.

ATTACHMENT NO. 2

[Behind this page.]

ATTACHMENT NO. 2

CALIFORNIA PUBLIC CONTRACT CODE SECTION 9204

Section 9204. Legislative findings and declarations regarding timely and complete payment of contractors for public works projects; claims process (Eff: January 1, 2017)

(a) The Legislature finds and declares that it is in the best interests of the state and its citizens to ensure that all construction business performed on a public works project in the state that is complete and not in dispute is paid in full and in a timely manner.

(b) Notwithstanding any other law, including, but not limited to, Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2, Chapter 10 (commencing with Section 19100) of Part 2, and Article 1.5 (commencing with Section 20104) of Chapter 1 of Part 3, this section shall apply to any claim by a contractor in connection with a public works project.

(c) For purposes of this section:

(1) "Claim" means a separate demand by a contractor sent by registered mail or certified mail with return receipt requested, for one or more of the following:

(A) A time extension, including, without limitation, for relief from damages or penalties for delay assessed by a public entity under a contract for a public works project.

(B) Payment by the public entity of money or damages arising from work done by, or on behalf of, the contractor pursuant to the contract for a public works project and payment for which is not otherwise expressly provided or to which the claimant is not otherwise entitled.

(C) Payment of an amount that is disputed by the public entity.

(2) "Contractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who has entered into a direct contract with a public entity for a public works project.

(3)(A) "Public entity" means, without limitation, except as provided in subparagraph (B), a state agency, department, office, division, bureau, board, or commission, the California State University, the University of California, a city, including a charter city, county, including a charter county, city and county, including a charter city and county, district, special district, public authority, political subdivision, public corporation, or nonprofit transit corporation wholly owned by a public agency and formed to carry out the purposes of the public agency.

(B) "Public entity" shall not include the following:

(i) The Department of Water Resources as to any project under the jurisdiction of that department.

(ii) The Department of Transportation as to any project under the jurisdiction of that department.

(iii) The Department of Parks and Recreation as to any project under the jurisdiction of that department.

(iv) The Department of Corrections and Rehabilitation with respect to any project under its jurisdiction pursuant to Chapter 11 (commencing with Section 7000) of Title 7 of Part 3 of the Penal Code.

(v) The Military Department as to any project under the jurisdiction of that department.

(vi) The Department of General Services as to all other projects.

(vii) The High-Speed Rail Authority.

(4) "Public works project" means the erection, construction, alteration, repair, or improvement of any public structure, building, road, or other public improvement of any kind.

(5) "Subcontractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who either is in direct contract with a contractor or is a lower tier subcontractor.

(d)(1)(A) Upon receipt of a claim pursuant to this section, the public entity to which the claim applies shall conduct a reasonable review of the claim and, within a period not to exceed 45 days, shall provide the claimant a written statement identifying what portion of the claim is disputed and what portion is undisputed. Upon receipt of a claim, a public entity and a contractor may, by mutual agreement, extend the time period provided in this subdivision.

(B) The claimant shall furnish reasonable documentation to support the claim.

(C) If the public entity needs approval from its governing body to provide the claimant a written statement identifying the disputed portion and the undisputed portion of the claim, and the governing body does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified mail, return receipt requested, the public entity shall have up to three days following the next duly publicly noticed meeting of the governing body after the 45-day period, or extension, expires to provide the claimant a written statement identifying the disputed portion and the undisputed portion.

(D) Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. If the public entity fails to issue a written statement, paragraph (3) shall apply.

(2)(A) If the claimant disputes the public entity's written response, or if the public entity fails to respond to a claim issued pursuant to this section within the time prescribed, the claimant may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the public entity shall schedule a meet and confer conference within 30 days for settlement of the dispute.

(B) Within 10 business days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, the public entity shall provide the claimant a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. Any disputed portion of the claim, as identified by the contractor in writing, shall be submitted to nonbinding mediation, with the public entity and the claimant sharing the associated costs equally. The public entity and claimant shall mutually agree to a mediator within 10 business days after the disputed portion of the claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator. If mediation is unsuccessful, the parts of the claim remaining in dispute shall be subject to applicable procedures outside this section.

(C) For purposes of this section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.

(D) Unless otherwise agreed to by the public entity and the contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.

(E) This section does not preclude a public entity from requiring arbitration of disputes under private arbitration or the Public Works Contract Arbitration Program, if mediation under this section does not resolve the parties' dispute.

(3) Failure by the public entity to respond to a claim from a contractor within the time periods described in this subdivision or to otherwise meet the time requirements of this section shall result in the claim being deemed rejected in its entirety. A claim that is denied by reason of the public entity's failure to have responded to a claim, or its failure to otherwise meet the time requirements of this section, shall not constitute an adverse finding with regard to the merits of the claim or the responsibility or qualifications of the claimant.

(4) Amounts not paid in a timely manner as required by this section shall bear interest at 7 percent per annum.

(5) If a subcontractor or a lower tier subcontractor lacks legal standing to assert a claim against a public entity because privity of contract does not exist, the contractor may present to the public entity a claim on behalf of a subcontractor or lower tier subcontractor. A subcontractor may request in writing, either on their own behalf or on behalf of a lower tier subcontractor, that the contractor present a claim for work which was performed by the subcontractor or by a lower tier subcontractor on behalf of the subcontractor. The subcontractor requesting that the claim be presented to the public entity shall furnish reasonable documentation to support the claim. Within 45 days of receipt of this written request, the contractor shall notify the subcontractor in writing as to whether the contractor presented the claim to the public entity and, if the original contractor did not present the claim, provide the subcontractor with a statement of the reasons for not having done so.

(e) The text of this section or a summary of it shall be set forth in the plans or specifications for any public works project that may give rise to a claim under this section.

(f) A waiver of the rights granted by this section is void and contrary to public policy, provided, however, that (1) upon receipt of a claim, the parties may mutually agree to waive, in writing, mediation and proceed directly to the commencement of a civil action or binding arbitration, as applicable; and (2) a public entity may prescribe reasonable change order, claim, and dispute resolution procedures and requirements in addition to the provisions of this section, so long as the contractual provisions do not conflict with or otherwise impair the timeframes and procedures set forth in this section.

(g) This section applies to contracts entered into on or after January 1, 2017.

(h) Nothing in this section shall impose liability upon a public entity that makes loans or grants available through a competitive application process, for the failure of an awardee to meet its contractual obligations.

(i) This section shall remain in effect only until January 1, 2027, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2027, deletes or extends that date.



Agenda Item

City Council

Item #: 3.26.

9/8/2020

File #: 20-071

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Cash, Public Works Director

1. SUBJECT

Award of Contract to DBX, Inc. for Lemon Street at Palm Avenue Traffic Signal Installation; Bid No. 190-61 (SP-4133).

2. SUMMARY

Bids for Lemon Street at Palm Avenue Traffic Signal Installation were received and opened on August 6, 2020. Seven bidders responded to the notice inviting bids. The apparent low bidder is DBX, Inc. of Temecula, California in the amount of \$343,418.

3. RECOMMENDED ACTION

1. Award the contract to DBX, Inc. of Temecula, California, in the amount of \$343,418; and authorize the Mayor and City Clerk to execute on behalf of the City.
2. Authorize \$34,342 (10%) of the contract amount for contingency purposes.

4. FISCAL IMPACT

The total expenditure for this project, including the 10% contingency, is \$377,760 and will be funded in Lemon Palm Signal Installation (30132) through Reimbursable Capital Projects (550).

5. STRATEGIC PLAN GOALS

Goal 1: Provide for a safe community

- b: Provide and maintain infrastructure necessary to ensure the safety of the public.

Goal 4: Provide outstanding public service

- b: Provide facilities and services to meet customer expectations.

6. DISCUSSION AND BACKGROUND

The intersection of Lemon Street and Palm Avenue has seen significant increases in pedestrian and vehicular demands. Because both the necessity and benefits of a new traffic signal at the Lemon Street/Palm Avenue intersection are generally attributed to Chapman University, the University has offered to fund the entire project, including construction, through a payment agreement approved by the City Council in November 2019.

The project will install a new traffic signal at the intersection Lemon Street and Palm Avenue. The new traffic signal will better organize traffic and reduce conflicts between the various road users

(motorists and pedestrians), improving the quality of traffic flow at this location. The scope of work of this project also includes the construction of an Americans with Disabilities Act compliant access ramp and repair of existing roadway. This intersection is within the Old Towne Historic District and the project will be constructed to comply with the City's Standard Plans and Specifications for Old Towne.

The City Council previously approved an advertisement for bids on July 14, 2020. The bid solicitation was advertised on July 23, 2020 for a period of two weeks and bids were opened on August 6, 2020. Seven bids were received as follows:

Rank	Company	Bid
1	DBX, Inc.	\$343,418
2	MSL Electric, Inc.	\$362,100
3	Crosstown Electrical & Data, Inc.	\$388,573
4	Elecnor Belcor Electric, Inc.	\$389,169
5	Alfaro Communications Construction, Inc.	\$392,940
6	California Professional Engineering, Inc.	\$396,885
7	Calpromax Engineering, Inc.	\$463,000

Staff checked the references and qualifications for DBX, Inc. and found them to be acceptable, with adequate years of experience in completing contracts of similar nature to this project. Therefore, staff recommends that DBX, Inc. be awarded the contract in the total amount of \$377,760, representing an original amount of \$343,418, plus a 10% contingency of \$34,342, for Lemon Street at Palm Avenue Traffic Signal Installation.

Traditionally, the procurement of poles for a traffic signal project such as this would be included as a component of the construction bid. However, because of the long lead time involved, the City decided to purchase the poles in advance to ensure the project can be expedited in accordance with Chapman's goals. In June 2020, the City Council authorized the procurement of the project's decorative traffic signal poles. The poles were purchased at a cost of \$91,910. The total project cost, including both poles and construction, is \$469,670 and all costs will be reimbursed by Chapman University.

As part of the final environmental impact report (EIR) prepared for Chapman University's Specific Plan Amendment No. 5, this project was identified as a future mitigation measure. Because the EIR was certified by the City Council and prepared in accordance with the California Environmental Quality Act, no additional environmental review is required.

Construction is scheduled to begin in December 2020 and is expected to be completed within 45 calendar days.

7. ATTACHMENTS

- Bid Abstract for Bid No. 190-61
- Contract Agreement with DBX, Inc.
- Location Map



Agenda Item

City Council

Item #: 3.26.

9/8/2020

File #: 20-071

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Cash, Public Works Director

1. SUBJECT

Award of Contract to DBX, Inc. for Lemon Street at Palm Avenue Traffic Signal Installation; Bid No. 190-61 (SP-4133).

2. SUMMARY

Bids for Lemon Street at Palm Avenue Traffic Signal Installation were received and opened on August 6, 2020. Seven bidders responded to the notice inviting bids. The apparent low bidder is DBX, Inc. of Temecula, California in the amount of \$343,418.

3. RECOMMENDED ACTION

1. Award the contract to DBX, Inc. of Temecula, California, in the amount of \$343,418; and authorize the Mayor and City Clerk to execute on behalf of the City.
2. Authorize \$34,342 (10%) of the contract amount for contingency purposes.

4. FISCAL IMPACT

The total expenditure for this project, including the 10% contingency, is \$377,760 and will be funded in Lemon Palm Signal Installation (30132) through Reimbursable Capital Projects (550).

5. STRATEGIC PLAN GOALS

Goal 1: Provide for a safe community

- b: Provide and maintain infrastructure necessary to ensure the safety of the public.

Goal 4: Provide outstanding public service

- b: Provide facilities and services to meet customer expectations.

6. DISCUSSION AND BACKGROUND

The intersection of Lemon Street and Palm Avenue has seen significant increases in pedestrian and vehicular demands. Because both the necessity and benefits of a new traffic signal at the Lemon Street/Palm Avenue intersection are generally attributed to Chapman University, the University has offered to fund the entire project, including construction, through a payment agreement approved by the City Council in November 2019.

The project will install a new traffic signal at the intersection Lemon Street and Palm Avenue. The new traffic signal will better organize traffic and reduce conflicts between the various road users

(motorists and pedestrians), improving the quality of traffic flow at this location. The scope of work of this project also includes the construction of an Americans with Disabilities Act compliant access ramp and repair of existing roadway. This intersection is within the Old Towne Historic District and the project will be constructed to comply with the City's Standard Plans and Specifications for Old Towne.

The City Council previously approved an advertisement for bids on July 14, 2020. The bid solicitation was advertised on July 23, 2020 for a period of two weeks and bids were opened on August 6, 2020. Seven bids were received as follows:

Rank	Company	Bid
1	DBX, Inc.	\$343,418
2	MSL Electric, Inc.	\$362,100
3	Crosstown Electrical & Data, Inc.	\$388,573
4	Elecnor Belcor Electric, Inc.	\$389,169
5	Alfaro Communications Construction, Inc.	\$392,940
6	California Professional Engineering, Inc.	\$396,885
7	Calpromax Engineering, Inc.	\$463,000

Staff checked the references and qualifications for DBX, Inc. and found them to be acceptable, with adequate years of experience in completing contracts of similar nature to this project. Therefore, staff recommends that DBX, Inc. be awarded the contract in the total amount of \$377,760, representing an original amount of \$343,418, plus a 10% contingency of \$34,342, for Lemon Street at Palm Avenue Traffic Signal Installation.

Traditionally, the procurement of poles for a traffic signal project such as this would be included as a component of the construction bid. However, because of the long lead time involved, the City decided to purchase the poles in advance to ensure the project can be expedited in accordance with Chapman's goals. In June 2020, the City Council authorized the procurement of the project's decorative traffic signal poles. The poles were purchased at a cost of \$91,910. The total project cost, including both poles and construction, is \$469,670 and all costs will be reimbursed by Chapman University.

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Construction is scheduled to begin in December 2020 and is expected to be completed within 45 calendar days.

7. ATTACHMENTS

- Bid Abstract for Bid No. 190-61
- Contract Agreement with DBX, Inc.
- Location Map

City of Orange: Summary of Bid Abstracts for:

SP-4133 Lemon Street at Palm Avenue Traffic Signal Installation

Bid No. 190-61; Project No. SP-4133

Date of Bid Opening: 8/6/2020

ENGINEER'S ESTIMATE	1	2
	DBX, Inc. Temecula, CA Tel. No. (951) 296-9909	MSL Electric, Inc. Anaheim, CA Tel. No. (714) 693-4837

NO.	DESCRIPTION OF WORK	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT
1	Temporary Traffic Control	1	LS	\$ 8,000.00	\$8,000.00	\$10,000.00	\$10,000.00	\$4,000.00	\$4,000.00
2	Traffic Signal Installation	1	LS	\$ 280,800.00	\$280,800.00	\$235,838.00	\$235,838.00	\$237,000.00	\$237,000.00
3	Signing and Striping	1	LS	\$ 17,400.00	\$17,400.00	\$10,580.00	\$10,580.00	\$11,650.00	\$11,650.00
4	ADA Compliant Access Ramp	1	LS	\$ 14,500.00	\$14,500.00	\$41,000.00	\$41,000.00	\$33,550.00	\$33,550.00
5	Street Repair	1	LS	\$ 14,300.00	\$14,300.00	\$46,000.00	\$46,000.00	\$75,900.00	\$75,900.00
Grand Total					\$335,000.00		\$343,418.00		\$362,100.00

City of Orange: Summary of Bid Abstracts for:

SP-4133 Lemon Street at Palm Avenue Traffic Signal Installation

Bid No. 190-61; Project No. SP-4133

Date of Bid Opening: 8/6/2020

3	4	5
Crosstown Electrical & Data, Inc. Irwindale, CA Tel. No. (626) 813-6693	Elecnor Belco Electric, Inc. Chino, CA Tel. No. (909) 993-5470	Alfaro Communications Construction, Inc. Tel. No. (310) 669-8949

NO.	DESCRIPTION OF WORK	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT
1	Temporary Traffic Control	1	LS	\$15,000.00	\$15,000.00	\$46,000.00	\$46,000.00	\$5,000.00	\$5,000.00
2	Traffic Signal Installation	1	LS	\$249,288.00	\$249,288.00	\$247,508.00	\$247,508.00	\$290,000.00	\$290,000.00
3	Signing and Striping	1	LS	\$12,000.00	\$12,000.00	\$12,023.00	\$12,023.00	\$11,940.00	\$11,940.00
4	ADA Compliant Access Ramp	1	LS	\$16,685.00	\$16,685.00	\$34,707.00	\$34,707.00	\$16,000.00	\$16,000.00
5	Street Repair	1	LS	\$95,600.00	\$95,600.00	\$48,931.00	\$48,931.00	\$70,000.00	\$70,000.00
Grand Total					\$388,573.00		\$389,169.00		\$392,940.00

City of Orange: Summary of Bid Abstracts for:

SP-4133 Lemon Street at Palm Avenue Traffic Signal Installation

Bid No. 190-61; Project No. SP-4133

Date of Bid Opening: 8/6/2020

6	7
California Professional Engineering, Inc. Tel. No. (626) 810-1338	Calpromax Engineering, Inc. Tustin, CA Tel. No. (714) 573-4599

NO.	DESCRIPTION OF WORK	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT
1	Temporary Traffic Control	1	LS	\$38,000.00	\$38,000.00	\$6,000.00	\$6,000.00
2	Traffic Signal Installation	1	LS	\$262,685.00	\$262,685.00	\$285,000.00	\$285,000.00
3	Signing and Striping	1	LS	\$12,500.00	\$12,500.00	\$12,000.00	\$12,000.00
4	ADA Compliant Access Ramp	1	LS	\$34,700.00	\$34,700.00	\$16,000.00	\$16,000.00
5	Street Repair	1	LS	\$49,000.00	\$49,000.00	\$144,000.00	\$144,000.00
Grand Total					\$396,885.00		\$463,000.00

CONTRACT
[Lemon Street at Palm Avenue Traffic Signal Installation;
SP-4133 (Bid No. 190-61)]

THIS CONTRACT (the “Contract”) is made and entered into as of _____, 2020 (“Effective Date”) by and between the CITY OF ORANGE, a municipal corporation (“City”), and DBX, INC. a California corporation (“Contractor”), who agree as follows.

ARTICLE 1
Work Performed

a. For and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by City, and under the conditions expressed in the two (2) bonds presented to City with this Contract and incorporated herein by this reference, Contractor hereby agrees to and shall do all the work and furnish all the labor, materials, tools and equipment, except such as are mentioned in the specifications to be furnished by City to Contractor, necessary to complete in good workmanship and substantial manner the work (the “Work”) described in:

(1) The Construction Plans for Lemon Street at Palm Avenue Traffic Signal Installation; (Drawing SP-4133) prepared for City by AGA Engineers, Inc., approved by the “Engineer” (as defined herein below) on July 20, 2020, and consisting of sheets numbered 1 through 4, inclusive (the “Plans”);

(2) The latest edition of the "City of Orange Standard Plans and Specifications" (the “Orange Book”) with the term "Engineer," as used in the Orange Book and in this Contract, to specifically include the City Engineer (or his/her designee);

(3) The "Standard Specifications for Public Works Construction” (the “Green Book”), and all amendments thereto;

(4) The “City of Orange Standard Special Provisions;”

(5) The Standard Plans; and

(6) Contractor’s Bid Proposal, which is on file with City’s Department of Public Works.

b. Contractor acknowledges that it has received the Plans from City and that a complete copy of the Plans are in its possession and are hereby specifically referred to and by such reference made a part hereof. The Orange Book, Green Book and City of Orange Standard Special Provisions and Standard Plans are on file with City’s Public Works Director and are hereby specifically referred to and by such reference made a part hereof. A copy of the Special Provisions and Standard Plans will also be kept on file with the City Clerk. Contractor hereby acknowledges that it has read, reviewed and understands the Plans, the Orange Book, the Green Book, the Special Provisions, the Standard Plans, and the Encroachment Permit as they relate to the Work, all of which documents shall be referred to herein collectively as the “Plans and Specifications.”

c. Contractor acknowledges the provisions of Chapter 8.28 of the Orange Municipal Code which requires, among other things, that Contractor utilize City's exclusive solid waste hauler for the rental of bins for trash and debris removal and imposes mandatory recycling requirements for self-hauled construction and demolition waste. The terms and conditions set forth in this Contract shall control over any terms and conditions in the Plans and Specifications to the contrary.

d. The Work shall be performed in conformity with the Plans and Specifications and the Bid Proposal and all applicable laws, including any and all applicable federal and state labor laws and standards and applicable prevailing wage requirements and any and all state, federal and local statutes, regulations and ordinances relating to the protection of human health or the environment.

e. Unless and until otherwise notified in writing by City's Public Works Director, City's Traffic Engineer, Larry Tay ("Authorized City Representative"), shall be the person to whom Contractor will report for the performance of the Work hereunder. It is understood that Contractor's performance hereunder shall be under the direction and supervision of the Authorized City Representative or such other person as City's Public Works Director may designate from time to time, that Contractor shall coordinate the Work hereunder with the Authorized City Representative to the extent required by the Authorized City Representative, and that all performances required hereunder by Contractor shall be performed to the satisfaction of the Authorized City Representative or City's Public Works Director.

f. It is expressly agreed by and between the parties hereto that should there be any conflict between the terms of this instrument and Contractor's Bid Proposal, then this instrument shall control and nothing herein shall be considered as an acceptance of the said terms of said Bid Proposal conflicting herewith.

ARTICLE 2 Commencement of Work

Contractor shall commence the Work provided for in this Contract within ten (10) days of the date of the issuance by City of a Notice to Proceed and diligently prosecute completion of the Work within forty-five (45) calendar days from such date, unless legal extension is granted in accordance with the terms set forth in the Green Book. Time is of the essence in this Contract. Contractor shall do all things necessary and incidental to the prosecution of Contractor's Work.

ARTICLE 3 Compensation

a. Contractor agrees to receive and accept an amount not to exceed THREE HUNDRED FORTY-THREE THOUSAND FOUR HUNDRED EIGHTEEN DOLLARS and 00/100 (\$343,418.00) as compensation for furnishing all materials and doing all the Work contemplated and embraced in this Contract. Said compensation covers (1) all loss or damage arising out of the nature of the Work, from the acts of the elements; (2) any unforeseen difficulties or obstructions which may arise or be encountered in the prosecution of the Work until its

acceptance by City, other than as provided below; (3) all risks of every description connected with the Work; (4) all expenses incurred by or in consequence of the suspension or discontinuance of the Work; and (5) well and faithfully completing the Work, and for the whole thereof, in the manner and according to the Plans and Specifications, and requirements of the Authorized City Representative under them. Retention amounts shall be withheld from progress payments as required by law unless Contractor provides securities in lieu of retention.

b. In addition to the scheduled Work to be performed by the Contractor, the parties recognize that additional, unforeseen work and services may be required by the Authorized City Representative. In anticipation of such contingencies, the sum of THIRTY-FOUR THOUSAND THREE HUNDRED FORTY-TWO DOLLARS and 00/100 (\$34,342.00) has been added to the total compensation of this Contract. The Authorized City Representative may approve the additional work and the actual costs incurred by the Contractor in performance of additional work or services in accordance with such amount as the Authorized City Representative and the Contractor may agree upon in advance. Said additional work or services and the amount of compensation therefor, up to the amount of the authorized contingency, shall be memorialized in the form of a Contract Amendment approved by the City Manager on a form acceptable to the City Attorney. The Contractor agrees to perform only that work or those services that are specifically requested by the Authorized City Representative. Any and all additional work and services performed under this Contract shall be completed in such sequence as to assure their completion as expeditiously as is consistent with professional skill and care in accordance with a cost estimate or proposal submitted to and approved by the Authorized City Representative prior to the commencement of such Work or services.

c. The total amount of compensation under this Contract, including contingencies, shall not exceed THREE HUNDRED SEVENTY-SEVEN THOUSAND SEVEN HUNDRED SIXTY DOLLARS and 00/100 (\$377,760.00).

ARTICLE 4

Licenses

Contractor represents that it and any subcontractors it may engage, possess any and all licenses which are required under state or federal law to perform the Work contemplated by this Contract and that Contractor and subcontractors shall maintain all appropriate licenses, including a City of Orange business license, at its cost, during the performance of this Contract.

ARTICLE 5

Guarantees

a. Contractor guarantees the construction and installation of all Work included in the Plans and Specifications for which Contractor has been awarded this Contract.

b. Should any of the materials or equipment installed pursuant to this Contract prove defective or should the Work as a whole prove defective, due to faulty equipment, workmanship, materials furnished or methods of installations, or should said Work or any part thereof fail to function properly, as designed, due to any of the above causes within twelve (12) months after the date on which said Work is accepted by City, Contractor shall make repairs and furnish such

materials and equipment as are necessary to be furnished and installed within fifteen (15) calendar days after the receipt of a demand from City.

c. Said Work will be deemed defective within the meaning of this guarantee in the event that it fails to function as originally intended either by the Plans and Specifications of this Contract or by the manufacturer(s) of the equipment incorporated into the Work.

d. In the event repairs are not made within fifteen (15) calendar days after Contractor's receipt of a demand from City, City shall have the unqualified option to make any needed repairs or replacements itself or by any other contractor. Contractor shall reimburse City, upon demand, for all expenses incurred in restoring said Work to the condition contemplated in this Contract, including the cost of any equipment or materials replaced.

e. It is understood that emergency repairs may, by necessity, be made by City. Therefore, when defective equipment, materials or workmanship result in emergency repairs by City, Contractor shall reimburse City, upon demand, for all expenses incurred. Emergency repairs will be deemed as those repairs determined by City's Director of Public Works to be necessary due to an immediate detriment to the health, safety, welfare or convenience of the residents of City.

ARTICLE 6 Water Quality

a. The Santa Ana Regional Water Quality Control Board ("RWQCB") has issued National Pollutant Discharge Elimination System ("NPDES") Permit No. R8-2009-0030 (the "Permit"), which governs storm water and non-storm water discharges resulting from municipal activities performed by City or its contractors. In order to comply with the Permit requirements, the County of Orange has prepared a Drainage Area Management Plan ("DAMP"), containing Model Maintenance Procedures with Best Management Practices ("BMPs") that City and its contractors must adhere to. The Model Maintenance Procedures contain pollution prevention and source control techniques to minimize the impact of those activities upon dry-weather urban runoff, storm water runoff, and receiving water quality. Examples include: wash water from cleaning of sidewalks or parking lots must be collected and disposed of in the sewer or landscaped areas.

b. The Permit, the DAMP and the Model Maintenance Procedures are on file in the office of City's Director of Public Works. Contractor hereby acknowledges that it has read, reviewed and understands the Permit, the DAMP and the Model Maintenance Procedures, as they relate to the Work and hereby shall perform the Work in conformance therewith.

ARTICLE 7 Independent Contractor; Contractor not Agent

a. At all times during the term of this Contract, Contractor shall be an independent contractor and not an employee of City. City shall have the right to control Contractor only insofar as the result of Contractor's services rendered pursuant to this Contract. City shall not have the right to control the means by which Contractor accomplishes services rendered pursuant to this

Contract. Contractor shall, at its sole cost and expense, furnish all facilities, materials and equipment which may be required for furnishing services pursuant to this Contract. Contractor shall be solely responsible for, and shall indemnify, defend and save City harmless from all matters relating to the payment of its subcontractors, agents and employees, including compliance with social security, withholding and all other wages, salaries, benefits, taxes, exactions, and regulations of any nature whatsoever. Contractor acknowledges that Contractor and any subcontractors, agents or employees employed by Contractor shall not, under any circumstances, be considered employees of City, and that they shall not be entitled to any of the benefits or rights afforded employees of City, including, but not limited to, sick leave, vacation leave, holiday pay, Public Employees Retirement System benefits, or health, life, dental, long-term disability or workers' compensation insurance benefits.

b. Except as City may specify in writing, Contractor shall have no authority, express or implied, to act on behalf of City in any capacity whatsoever as an agent. Contractor shall have no authority, express or implied, to bind City to any obligation whatsoever.

ARTICLE 8

Public Work; Prevailing Wage

a. The Work which is the subject of this Contract is a “public work,” as that term is defined in Section 1720 of the California Labor Code, for which prevailing wages must be paid. To the extent Contractor’s employees will perform any work that falls within any of the classifications for which the Department of Labor Relations of the State of California promulgates prevailing wage determinations, Contractor hereby agrees that Contractor, and any subcontractor under it, shall pay not less than the specified prevailing rates of wages to all such workers. The general prevailing wage determinations for crafts can be located on the website of the Department of Industrial Relations (www.dir.ca.gov/DLSR). Additionally, to perform work under this Contract, Contractor must meet all State registration requirements and criteria, including project compliance monitoring.

b. Attached hereto as Attachment No. 1 and incorporated herein by this reference is a copy of the provisions of Sections 1725.5, 1771, 1771.1, 1771.4, 1775, 1776, 1777.5, 1813 and 1815 of the California Labor Code. Contractor hereby acknowledges that it has read, reviewed and understands those provisions of the Labor Code and shall prosecute and complete the Work under this Contract in strict compliance with all of those terms and provisions.

c. Contractor shall secure the payment of compensation to its employees in accordance with the provisions of Section 3700 of the California Labor Code. Accordingly, and as required by Section 1861 of the California Labor Code, Contractor hereby certifies as follows:

“I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract.”

d. Contractor shall indemnify, protect, defend and hold harmless City and its officers, employees, contractors and agents, with counsel reasonably acceptable to City, from and against any and all loss, liability, damage, claim, cost, expense, and/or “increased costs” (including reasonable attorney’s fees, court and litigation costs, and fees of expert witnesses) which result or arise in any way from the noncompliance by Contractor of any applicable local, state and/or federal law, including, without limitation, any applicable federal and/or state labor laws (including, without limitation, the requirement to pay state prevailing wages). It is agreed by the parties that, in connection with the construction of the Work which is the subject of this Contract, Contractor shall bear all risks of payment or non-payment of state prevailing wages. “Increased costs” as used in this paragraph shall have the meaning ascribed to it in Labor Code Section 1781, as the same may be enacted, adopted or amended from time to time. The foregoing indemnity shall survive termination of this Contract.

ARTICLE 9 Equal Employment Opportunity

During the performance of this Contract, Contractor agrees as follows:

a. Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law. Contractor shall ensure that applicants are employed and that employees are treated during employment, without regard to their race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law. Such actions shall include, but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation and selection for training, including apprenticeship. Contractor shall post in conspicuous places, available to employees and applicants for employment, a notice setting forth provisions of this non-discrimination clause.

b. Contractor shall, in all solicitations and advertisements for employees placed by, or on behalf of Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law.

c. Contractor shall cause the foregoing paragraphs (a) and (b) to be inserted in all subcontracts for any Work covered by this Contract, provided that the foregoing provisions shall not apply to subcontracts for standard commercial supplies or raw materials.

ARTICLE 10 Conflicts of Interest

Contractor agrees that it shall not make, participate in the making, or in any way attempt to use its position as a contractor to influence any decision of City in which Contractor knows or has reason to know that Contractor, its officers, partners, or employees have a financial interest as defined in Section 87103 of the Government Code. Contractor further agrees that it shall not be eligible to work as the builder for any project for which the design work is part of this Contract.

ARTICLE 11
Indemnity

Contractor shall defend, indemnify and hold harmless City and its officers, officials, agents, and employees from and against:

a. Any and all claims, liabilities, losses, damages, penalties, costs or expenses (including reasonable attorneys' fees and court costs) which City may directly or indirectly sustain or suffer arising from or as a result of the death of any person or any accident, injury, loss or damage whatsoever caused to any person or the property of any person which shall occur on or adjacent to the real property which is the subject of this Contract, or in connection with performance of this Contract which may be directly or indirectly caused by the acts or omissions of Contractor or its officers, employees, contractors or agents, or as a consequence of any use, generation, manufacture, storage, disposal, release or threatened release of a hazardous waste or substance. Contractor shall not be responsible for (and such indemnity shall not apply to) any willful misconduct, negligence or breach of this Contract by City or its officers, officials, agents, and employees. The foregoing indemnity shall survive termination of this Contract.

b. Any and all claims under workers' compensation acts and other employee benefit acts with respect to Contractor's employees or Contractor's subcontractor's employees arising out of Contractor's Work under this Contract, including any and all claims under any law pertaining to Contractor's status as an independent contractor.

ARTICLE 12
Insurance

a. Contractor shall procure and maintain for the duration of this Contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Work hereunder and the results of that Work by Contractor, its agents, representatives, employees or subcontractors.

b. Contractor shall maintain the following minimum amount of insurance: the greater of either the limits set forth in (1) through (4), below; or all of the insurance coverage and/or limits carried by or available to Contractor.

- | | | |
|--------------------------|-------------|--|
| (1) General Liability | \$2,000,000 | per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit. |
| (2) Automobile Liability | \$1,000,000 | per accident for bodily injury and property damage. |

(3) Workers' Compensation as required by the State of California.

(4) Employer's Liability \$1,000,000 per accident for bodily injury or disease.

c. Any insurance proceeds in excess of or broader than the minimum required coverage and/or minimum required limits which are applicable to a given loss shall be available to City. No representation is made that the minimum insurance requirements of this Contract are sufficient to cover the obligations of Contractor under this Contract.

d. Any deductibles or self-insured retentions must be declared to and approved by City. At the option of City, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions with respect to City, its officers, officials, agents and employees; or Contractor shall provide a financial guarantee satisfactory to City guaranteeing payment of losses and related investigations, claim administration, and defense expenses.

e. Each policy of general liability and automotive liability insurance shall contain, or be endorsed to contain, the following provisions:

(1) City, its officers, officials, agents, and employees are declared to be additional insureds under the terms of the policy, with respect to liability arising out of automobiles owned, leased, hired or borrowed by or on behalf of Contractor (any auto), and with respect to liability arising out of Work or operations performed by or on behalf of Contractor, including materials, parts or equipment furnished in connection with such Work or operations. A policy endorsement to that effect shall be provided to City along with the certificate of insurance. In lieu of an endorsement, City will accept a copy of the policy(ies) which evidences that City is an additional insured as a contracting party. The minimum coverage required by Subsection 12.b, above, shall apply to City as an additional insured.

(2) For any claims related to this Contract, Contractor's insurance coverage shall be primary insurance with respect to City, its officers, officials, agents and employees. Any insurance or self-insurance maintained by City, its officers, officials, agents and employees shall be excess of Contractor's insurance and shall not contribute with it.

(3) Coverage shall not be canceled, except after thirty (30) days' prior written notice has been provided to City.

f. Contractor shall furnish City with original certificates of insurance and endorsements effecting coverage required by this Article 12. The endorsements shall be on forms acceptable to City. All certificates and endorsements are to be received and approved by City before the Work commences. However, failure to do so shall not operate as a waiver of these insurance requirements. City reserves the right to require complete, certified copies of all required insurance policies, including endorsements effecting the coverage required by these specifications at any time.

g. All insurance procured and maintained by Contractor shall be issued by insurers admitted to conduct the pertinent line of insurance business in California and having a rating of Grade A or better and Class VII or better by the latest edition of Best Key Rating Guide.

h. Contractor shall immediately notify City if any required insurance lapses or is otherwise modified and cease performance of this Contract unless otherwise directed by City. In such a case, City may procure insurance or self-insure the risk and charge Contractor for such costs and any and all damages resulting therefrom by way of set-off from any sums owed Contractor.

i. Contractor agrees that in the event of loss due to any of the perils for which it has agreed to provide insurance, Contractor shall look solely to its insurance for recovery. Contractor hereby grants to City, on behalf of any insurer providing insurance to either Contractor or City with respect to the services of Contractor herein, a waiver of any right to subrogation which any such insurer may acquire against City by virtue of the payment of any loss under such insurance. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of City for all Work performed by Contractor, its employees, agents and subcontractors. Contractor shall obtain any other endorsement that may be necessary to effect this waiver of subrogation.

j. Contractor shall require and verify that all subcontractors maintain insurance meeting all of the requirements stated herein.

ARTICLE 13 Termination

City, acting through its City Manager or his/her designee, reserves the right to terminate this Contract for any reason by giving five (5) days' written notice of intent to terminate to Contractor. Upon receipt of notice, Contractor shall immediately cease work, unless the notice provides otherwise. Should City terminate this Contract, City shall pay Contractor for services satisfactorily provided and all allowable reimbursements incurred to the date of termination in compliance with this Contract, unless such termination shall be for cause, in which event City may withhold any disputed compensation. City shall not be liable for any claim of lost profits.

ARTICLE 14 Maintenance and Inspection of Records

In accordance with generally accepted accounting principles, Contractor and its subcontractors shall maintain reasonably full and complete books, documents, papers, accounting records and other information (collectively, the "records") pertaining to the costs of and completion of services performed under this Contract. During the term of this Contract and for a period of three (3) years after termination or completion of this Contract, City shall have the right to inspect and/or audit Contractor's records pertaining to the performance of this Contract at Contractor's office. Contractor shall make available all such records for inspection or audit at its offices during normal business hours and upon three (3) days' notice from City, and copies thereof shall be furnished if requested.

ARTICLE 15
Compliance with Laws

a. Contractor shall be knowledgeable of and comply with all local, state and federal laws pertaining to the subject matter hereof or in any way regulating the activities undertaken by Contractor or any subcontractor hereunder.

b. Contractor represents and warrants that it:

(1) Has complied and shall at all times during the term of this Contract comply, in all respects, with all immigration laws, regulations, statutes, rules, codes, and orders, including, without limitation, the Immigration Reform and Control Act of 1986 (IRCA); and

(2) Has not and will not knowingly employ any individual to perform services under this Contract who is ineligible to work in the United States or under the terms of this Contract; and

(3) Has properly maintained, and shall at all times during the term of this Contract properly maintain, all related employment documentation records including, without limitation, the completion and maintenance of the Form I-9 for each of Contractor's employees; and

(4) Has responded, and shall at all times during the term of this Contract respond, in a timely fashion to any government inspection requests relating to immigration law compliance and/or Form I-9 compliance and/or worksite enforcement by the Department of Homeland Security, the Department of Labor, or the Social Security Administration.

c. Contractor shall require all subcontractors and/or subconsultants to make the same representations and warranties required by this Article 15 when hired to perform services under this Contract.

d. Contractor shall, upon request of City, provide a list of all employees working under this Contract and shall provide, to the reasonable satisfaction of City, verification that all such employees are eligible to work in the United States. All costs associated with such verification shall be borne by Contractor. Once such request has been made, Contractor may not change employees working under this Contract without written notice to City, accompanied by the verification required herein for such employees. Contractor shall require all subcontractors and/or sub-consultants to make the same verification when hired to perform services under this Contract.

e. If Contractor, or a subcontractor or subconsultant, knowingly employs an employee providing Work under this Contract who is not authorized to work in the United States, and/or fails to follow federal laws to determine the status of such employee, such shall constitute a material breach of this Contract and may be cause for immediate termination of this Contract by City.

f. Contractor shall indemnify and hold City, its officials and employees harmless for, of and from any loss, including but not limited to fines, penalties and corrective measures, City may sustain by reason of Contractor's failure to comply with said laws, rules and regulations in connection with the performance of this Contract.

ARTICLE 16
Governing Law and Venue

This Contract shall be construed in accordance with and governed by the laws of the State of California and Contractor shall submit to the jurisdiction of California courts. Venue for any dispute arising under this Contract shall be in Orange County, California.

ARTICLE 17
Integration and Amendment

a. This Contract constitutes the entire agreement of the parties. No other agreement, oral or written, pertaining to the Work to be performed under this Contract shall be of any force or effect unless it is in writing and signed by both parties. Any Work performed which is inconsistent with or in violation of the provisions of this Contract shall not be compensated.

b. Amendments to this Contract must be in writing and signed by both parties. The City Manager is authorized to execute amendments to this Contract up to the amounts specified in Chapter 3.08 of the Orange Municipal Code.

ARTICLE 18
Notice

Except as otherwise provided herein, all notices required under this Contract shall be in writing and delivered personally, by e-mail, or by first class mail, postage prepaid, to each party at the address listed below. Either party may change the notice address by notifying the other party in writing. Notices shall be deemed received upon receipt of same or within three (3) days of deposit in the U.S. Mail, whichever is earlier. Notices sent by e-mail shall be deemed received on the date of the e-mail transmission.

“CONTRACTOR”

“CITY”

DBX, Inc.
42024 Avenida Alvarado, Suite A
Temecula, CA 92590
Attn: James C. Perry

City of Orange
300 E. Chapman Avenue
Orange, CA 92866-1591
Attn: Gabrielle Hayes

Telephone: 951-296-9909
E-Mail: charlesdbx@hotmail.com

Telephone: 714-744-5561
E-Mail: ghayes@cityoforange.org

ARTICLE 19
Claim Resolution

City and Contractor agree that the claim resolution process applicable to any claim by Contractor in connection with the Work provided herein shall be subject to the procedures set forth in California Public Contract Code Section 9204, attached hereto as Attachment No. 2, and incorporated herein by this reference.

**ARTICLE 20
Counterparts**

This Contract may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Signatures transmitted via facsimile and electronic mail shall have the same effect as original signatures.

“CITY”

CITY OF ORANGE, a municipal corporation

By: _____
Mark A. Murphy
Mayor of the City of Orange

CONTRACT, BONDS AND INSURANCE
APPROVED BY:

ATTEST:

Mary E. Binning
Senior Assistant City Attorney

Pamela Coleman, City Clerk

“CONTRACTOR”

DBX, Inc., a California corporation

[Note: Signature of Chairman of the Board, President or Vice President is required]

By: _____
Printed Name: _____
Title: _____

[Note: Signature of Secretary, Assistant Secretary, Chief Financial Officer or Assistant Treasurer is also required]

By: _____
Printed Name: _____
Title: _____

ATTACHMENT NO. 1

CALIFORNIA LABOR CODE SECTIONS 1725.5, 1771, 1771.1, 1771.4, 1775, 1776, 1777.5, 1813 and 1815

Section 1725.5. Registration of contractors; mandatory registration; qualifications and application; fees; exempt contractors

A contractor shall be registered pursuant to this section to be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any public work contract that is subject to the requirements of this chapter. For the purposes of this section, "contractor" includes a subcontractor as defined by Section 1722.1.

(a) To qualify for registration under this section, a contractor shall do all of the following:

(1)(A) Register with the Department of Industrial Relations in the manner prescribed by the department and pay an initial nonrefundable application fee of four hundred dollars (\$400) to qualify for registration under this section and an annual renewal fee on or before July 1 of each year thereafter. The annual renewal fee shall be in a uniform amount set by the Director of Industrial Relations, and the initial registration and renewal fees may be adjusted no more than annually by the director to support the costs specified in Section 1771.3.

(B) Beginning June 1, 2019, a contractor may register or renew according to this subdivision in annual increments up to three years from the date of registration. Contractors who wish to do so will be required to prepay the applicable nonrefundable application or renewal fees to qualify for the number of years for which they wish to preregister.

(2) Provide evidence, disclosures, or releases as are necessary to establish all of the following:

(A) Workers' compensation coverage that meets the requirements of Division 4 (commencing with Section 3200) and includes sufficient coverage for any worker whom the contractor employs to perform work that is subject to prevailing wage requirements other than a contractor who is separately registered under this section. Coverage may be evidenced by a current and valid certificate of workers' compensation insurance or certification of self-insurance required under Section 7125 of the Business and Professions Code.

(B) If applicable, the contractor is licensed in accordance with Chapter 9 (commencing with Section 7000) of the Business and Professions Code.

(C) The contractor does not have any delinquent liability to an employee or the state for any assessment of back wages or related damages, interest, fines, or penalties pursuant to any final judgment, order, or determination by a court or any federal, state, or local administrative agency, including a confirmed arbitration award. However, for purposes of this paragraph, the contractor shall not be disqualified for any judgment, order, or determination that is under appeal, provided that the contractor has secured the payment of any amount eventually found due through a bond or other appropriate means.

(D) The contractor is not currently debarred under Section 1777.1 or under any other federal or state law providing for the debarment of contractors from public works.

(E) The contractor has not bid on a public works contract, been listed in a bid proposal, or engaged in the performance of a contract for public works without being lawfully registered in accordance with this section, within the preceding 12 months or since the effective date of the requirements set forth in subdivision (e), whichever is earlier. If a contractor is found to be in violation of the requirements of this paragraph, the period of disqualification shall be waived if both of the following are true:

- (i) The contractor has not previously been found to be in violation of the requirements of this paragraph within the preceding 12 months.
- (ii) The contractor pays an additional nonrefundable penalty registration fee of two thousand dollars (\$2,000).
- (b) Fees received pursuant to this section shall be deposited in the State Public Works Enforcement Fund established by Section 1771.3 and shall be used only for the purposes specified in that section.
- (c) A contractor who fails to pay the renewal fee required under paragraph (1) of subdivision (a) on or before the expiration of any prior period of registration shall be prohibited from bidding on or engaging in the performance of any contract for public work until once again registered pursuant to this section. If the failure to pay the renewal fee was inadvertent, the contractor may renew its registration retroactively by paying an additional nonrefundable penalty renewal fee equal to the amount of the renewal fee within 90 days of the due date of the renewal fee.
- (d) If, after a body awarding a contract accepts the contractor's bid or awards the contract, the work covered by the bid or contract is determined to be a public work to which Section 1771 applies, either as the result of a determination by the director pursuant to Section 1773.5 or a court decision, the requirements of this section shall not apply, subject to the following requirements:
- (1) The body that awarded the contract failed, in the bid specification or in the contract documents, to identify as a public work that portion of the work that the determination or decision subsequently classifies as a public work.
- (2) Within 20 days following service of notice on the awarding body of a determination by the Director of Industrial Relations pursuant to Section 1773.5 or a decision by a court that the contract was for public work as defined in this chapter, the contractor and any subcontractors are registered under this section or are replaced by a contractor or subcontractors who are registered under this section.
- (3) The requirements of this section shall apply prospectively only to any subsequent bid, bid proposal, contract, or work performed after the awarding body is served with notice of the determination or decision referred to in paragraph (2).
- (e) The requirements of this section shall apply to any bid proposal submitted on or after March 1, 2015, to any contract for public work, as defined in this chapter, executed on or after April 1, 2015, and to any work performed under a contract for public work on or after January 1, 2018, regardless of when the contract for public work was executed.
- (f) This section does not apply to work performed on a public works project of twenty-five thousand dollars (\$25,000) or less when the project is for construction, alteration, demolition, installation, or repair work or to work performed on a public works project of fifteen thousand dollars (\$15,000) or less when the project is for maintenance work.

Section 1771. Payment of general prevailing rate

Except for public works projects of one thousand dollars (\$1,000) or less, not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the public work is performed, and not less than the general prevailing rate of per diem wages for holiday and overtime work fixed as provided in this chapter, shall be paid to all workers employed on public works.

This section is applicable only to work performed under contract, and is not applicable to work carried out by a public agency with its own forces. This section is applicable to contracts let for maintenance work.

Section 1771.1. Registration as a contractor or subcontractor required prior to bid submission; exceptions; violations; penalties

(a) A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

(b) Notice of the requirement described in subdivision (a) shall be included in all bid invitations and public works contracts, and a bid shall not be accepted nor any contract or subcontract entered into without proof of the contractor or subcontractor's current registration to perform public work pursuant to Section 1725.5.

(c) An inadvertent error in listing a subcontractor who is not registered pursuant to Section 1725.5 in a bid proposal shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive, provided that any of the following apply:

(1) The subcontractor is registered prior to the bid opening.

(2) Within 24 hours after the bid opening, the subcontractor is registered and has paid the penalty registration fee specified in subparagraph (E) of paragraph (2) of subdivision (a) of Section 1725.5.

(3) The subcontractor is replaced by another registered subcontractor pursuant to Section 4107 of the Public Contract Code.

(d) Failure by a subcontractor to be registered to perform public work as required by subdivision (a) shall be grounds under Section 4107 of the Public Contract Code for the contractor, with the consent of the awarding authority, to substitute a subcontractor who is registered to perform public work pursuant to Section 1725.5 in place of the unregistered subcontractor.

(e) The department shall maintain on its Internet Web site a list of contractors who are currently registered to perform public work pursuant to Section 1725.5.

(f) A contract entered into with any contractor or subcontractor in violation of subdivision (a) shall be subject to cancellation, provided that a contract for public work shall not be unlawful, void, or voidable solely due to the failure of the awarding body, contractor, or any subcontractor to comply with the requirements of Section 1725.5 or this section.

(g) If the Labor Commissioner or his or her designee determines that a contractor or subcontractor engaged in the performance of any public work contract without having been registered in accordance with this section, the contractor or subcontractor shall forfeit, as a civil penalty to the state, one hundred dollars (\$100) for each day of work performed in violation of the registration requirement, not to exceed an aggregate penalty of eight thousand dollars (\$8,000) in addition to any penalty registration fee assessed pursuant to clause (ii) of subparagraph (E) of paragraph (2) of subdivision (a) of Section 1725.5.

(h)(1) In addition to, or in lieu of, any other penalty or sanction authorized pursuant to this chapter, a higher tiered public works contractor or subcontractor who is found to have entered into a subcontract with an unregistered lower tier subcontractor to perform any public work in violation of the requirements of Section 1725.5 or this section shall be subject to forfeiture, as a civil penalty to the state, of one hundred dollars (\$100)

for each day the unregistered lower tier subcontractor performs work in violation of the registration requirement, not to exceed an aggregate penalty of ten thousand dollars (\$10,000).

(2) The Labor Commissioner shall use the same standards specified in subparagraph (A) of paragraph (2) of subdivision (a) of Section 1775 when determining the severity of the violation and what penalty to assess, and may waive the penalty for a first time violation that was unintentional and did not hinder the Labor Commissioner's ability to monitor and enforce compliance with the requirements of this chapter.

(3) A higher tiered public works contractor or subcontractor shall not be liable for penalties assessed pursuant to paragraph (1) if the lower tier subcontractor's performance is in violation of the requirements of Section 1725.5 due to the revocation of a previously approved registration.

(4) A subcontractor shall not be liable for any penalties assessed against a higher tiered public works contractor or subcontractor pursuant to paragraph (1). A higher tiered public works contractor or subcontractor may not require a lower tiered subcontractor to indemnify or otherwise be liable for any penalties pursuant to paragraph (1).

(i) The Labor Commissioner or his or her designee shall issue a civil wage and penalty assessment, in accordance with the provisions of Section 1741, upon determination of penalties pursuant to subdivision (g) and subparagraph (B) of paragraph (1) of subdivision (h). Review of a civil wage and penalty assessment issued under this subdivision may be requested in accordance with the provisions of Section 1742. The regulations of the Director of Industrial Relations, which govern proceedings for review of civil wage and penalty assessments and the withholding of contract payments under Article 1 (commencing with Section 1720) and Article 2 (commencing with Section 1770), shall apply.

(j)(1) Where a contractor or subcontractor engages in the performance of any public work contract without having been registered in violation of the requirements of Section 1725.5 or this section, the Labor Commissioner shall issue and serve a stop order prohibiting the use of the unregistered contractor or the unregistered subcontractor on all public works until the unregistered contractor or unregistered subcontractor is registered. The stop order shall not apply to work by registered contractors or subcontractors on the public work.

(2) A stop order may be personally served upon the contractor or subcontractor by either of the following methods:

(A) Manual delivery of the order to the contractor or subcontractor personally.

(B) Leaving signed copies of the order with the person who is apparently in charge at the site of the public work and by thereafter mailing copies of the order by first class mail, postage prepaid to the contractor or subcontractor at one of the following:

(i) The address of the contractor or subcontractor on file with either the Secretary of State or the Contractors' State License Board.

(ii) If the contractor or subcontractor has no address on file with the Secretary of State or the Contractors' State License Board, the address of the site of the public work.

(3) The stop order shall be effective immediately upon service and shall be subject to appeal by the party contracting with the unregistered contractor or subcontractor, by the unregistered contractor or subcontractor, or both. The appeal, hearing, and any further review of the hearing decision shall be governed by the procedures, time limits, and other requirements specified in subdivision (a) of Section 238.1.

(4) Any employee of an unregistered contractor or subcontractor who is affected by a work stoppage ordered by the commissioner pursuant to this subdivision shall be paid at his or her regular hourly prevailing wage rate by that employer for any hours the employee would have worked but for the work stoppage, not to exceed 10 days.

(k) Failure of a contractor or subcontractor, owner, director, officer, or managing agent of the contractor or subcontractor to observe a stop order issued and served upon him or her pursuant to subdivision (j) is guilty of a misdemeanor punishable by imprisonment in county jail not exceeding 60 days or by a fine not exceeding ten thousand dollars (\$10,000), or both.

(l) This section shall apply to any bid proposal submitted on or after March 1, 2015, and any contract for public work entered into on or after April 1, 2015. This section shall also apply to the performance of any public work, as defined in this chapter, on or after January 1, 2018, regardless of when the contract for public work was entered.

(m) Penalties received pursuant to this section shall be deposited in the State Public Works Enforcement Fund established by Section 1771.3 and shall be used only for the purposes specified in that section.

(n) This section shall not apply to work performed on a public works project of twenty-five thousand dollars (\$25,000) or less when the project is for construction, alteration, demolition, installation, or repair work or to work performed on a public works project of fifteen thousand dollars (\$15,000) or less when the project is for maintenance work.

Section 1771.4. Additional requirements when bidding and awarding public works contracts

(a) All of the following are applicable to all public works projects that are otherwise subject to the requirements of this chapter:

(1) The call for bids and contract documents shall specify that the project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

(2) The awarding body shall post or require the prime contractor to post job site notices, as prescribed by regulation.

(3) Each contractor and subcontractor shall furnish the records specified in Section 1776 directly to the Labor Commissioner, in the following manner:

(A) At least monthly or more frequently if specified in the contract with the awarding body.

(B) In a format prescribed by the Labor Commissioner.

(4) If the contractor or subcontractor is not registered pursuant to Section 1725.5 and is performing work on a project for which registration is not required because of subdivision (f) of Section 1725.5, the unregistered contractor or subcontractor is not required to furnish the records specified in Section 1776 directly to the Labor Commissioner but shall retain the records specified in Section 1776 for at least three years after completion of the work.

(5) The department shall undertake those activities it deems necessary to monitor and enforce compliance with prevailing wage requirements.

(b) The Labor Commissioner may exempt a public works project from compliance with all or part of the requirements of subdivision (a) if either of the following occurs:

(1) The awarding body has enforced an approved labor compliance program, as defined in Section 1771.5, on all public works projects under its authority, except those deemed exempt pursuant to subdivision (a) of Section 1771.5, continuously since December 31, 2011.

(2) The awarding body has entered into a collective bargaining agreement that binds all contractors performing work on the project and that includes a mechanism for resolving disputes about the payment of wages.

(c) The requirements of paragraph (1) of subdivision (a) shall only apply to contracts for public works projects awarded on or after January 1, 2015.

(d) The requirements of paragraph (3) of subdivision (a) shall apply to all contracts for public work, whether new or ongoing, on or after January 1, 2016.

Section 1775. Penalties for violations

(a)(1) The contractor and any subcontractor under the contractor shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit not more than two hundred dollars (\$200) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rates as determined by the director for the work or craft in which the worker is employed for any public work done under the contract by the contractor or, except as provided in subdivision (b), by any subcontractor under the contractor.

(2)(A) The amount of the penalty shall be determined by the Labor Commissioner based on consideration of both of the following:

(i) Whether the failure of the contractor or subcontractor to pay the correct rate of per diem wages was a good faith mistake and, if so, the error was promptly and voluntarily corrected when brought to the attention of the contractor or subcontractor.

(ii) Whether the contractor or subcontractor has a prior record of failing to meet its prevailing wage obligations.

(B)(i) The penalty may not be less than forty dollars (\$40) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, unless the failure of the contractor or subcontractor to pay the correct rate of per diem wages was a good faith mistake and, if so, the error was promptly and voluntarily corrected when brought to the attention of the contractor or subcontractor.

(ii) The penalty may not be less than eighty dollars (\$80) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, if the contractor or subcontractor has been assessed penalties within the previous three years for failing to meet its prevailing wage obligations on a separate contract, unless those penalties were subsequently withdrawn or overturned.

(iii) The penalty may not be less than one hundred twenty dollars (\$120) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, if the Labor Commissioner determines that the violation was willful, as defined in subdivision (c) of Section 1777.1.

(C) If the amount due under this section is collected from the contractor or subcontractor, any outstanding wage claim under Chapter 1 (commencing with Section 1720) of Part 7 of Division 2 against that contractor

or subcontractor shall be satisfied before applying that amount to the penalty imposed on that contractor or subcontractor pursuant to this section.

(D) The determination of the Labor Commissioner as to the amount of the penalty shall be reviewable only for abuse of discretion.

(E) The difference between the prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing wage rate shall be paid to each worker by the contractor or subcontractor, and the body awarding the contract shall cause to be inserted in the contract a stipulation that this section will be complied with.

(b) If a worker employed by a subcontractor on a public works project is not paid the general prevailing rate of per diem wages by the subcontractor, the prime contractor of the project is not liable for any penalties under subdivision (a) unless the prime contractor had knowledge of that failure of the subcontractor to pay the specified prevailing rate of wages to those workers or unless the prime contractor fails to comply with all of the following requirements:

(1) The contract executed between the contractor and the subcontractor for the performance of work on the public works project shall include a copy of the provisions of this section and Sections 1771, 1776, 1777.5, 1813, and 1815.

(2) The contractor shall monitor the payment of the specified general prevailing rate of per diem wages by the subcontractor to the employees, by periodic review of the certified payroll records of the subcontractor.

(3) Upon becoming aware of the failure of the subcontractor to pay his or her workers the specified prevailing rate of wages, the contractor shall diligently take corrective action to halt or rectify the failure, including, but not limited to, retaining sufficient funds due the subcontractor for work performed on the public works project.

(4) Prior to making final payment to the subcontractor for work performed on the public works project, the contractor shall obtain an affidavit signed under penalty of perjury from the subcontractor that the subcontractor has paid the specified general prevailing rate of per diem wages to his or her employees on the public works project and any amounts due pursuant to Section 1813.

(c) The Division of Labor Standards Enforcement shall notify the contractor on a public works project within 15 days of the receipt by the Division of Labor Standards Enforcement of a complaint of the failure of a subcontractor on that public works project to pay workers the general prevailing rate of per diem wages.

Section 1776. Payroll records; retention; inspection; redacted information; agencies entitled to receive nonredacted copies of certified records; noncompliance penalties; rules

(a) Each contractor and subcontractor shall keep accurate payroll records, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the public work. Each payroll record shall contain or be verified by a written declaration that it is made under penalty of perjury, stating both of the following:

(1) The information contained in the payroll record is true and correct.

(2) The employer has complied with the requirements of Sections 1771, 1811, and 1815 for any work performed by his or her employees on the public works project.

(b) The payroll records enumerated under subdivision (a) shall be certified and shall be available for inspection at all reasonable hours at the principal office of the contractor on the following basis:

(1) A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request.

(2) A certified copy of all payroll records enumerated in subdivision (a) shall be made available for inspection or furnished upon request to a representative of the body awarding the contract and the Division of Labor Standards Enforcement of the Department of Industrial Relations.

(3) A certified copy of all payroll records enumerated in subdivision (a) shall be made available upon request by the public for inspection or for copies thereof. However, a request by the public shall be made through either the body awarding the contract or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to paragraph (2), the requesting party shall, prior to being provided the records, reimburse the costs of preparation by the contractor, subcontractors, and the entity through which the request was made. The public may not be given access to the records at the principal office of the contractor.

(c) Unless required to be furnished directly to the Labor Commissioner in accordance with paragraph (3) of subdivision (a) of Section 1771.4, the certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the division. The payroll records may consist of printouts of payroll data that are maintained as computer records, if the printouts contain the same information as the forms provided by the division and the printouts are verified in the manner specified in subdivision (a).

(d) A contractor or subcontractor shall file a certified copy of the records enumerated in subdivision (a) with the entity that requested the records within 10 days after receipt of a written request.

(e) Except as provided in subdivision (f), any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the awarding body or the Division of Labor Standards Enforcement shall be marked or obliterated to prevent disclosure of an individual's name, address, and social security number. The name and address of the contractor awarded the contract or the subcontractor performing the contract shall not be marked or obliterated. Any copy of records made available for inspection by, or furnished to, a multiemployer Taft-Hartley trust fund (29 U.S.C. Sec. 186(c)(5)) that requests the records for the purposes of allocating contributions to participants shall be marked or obliterated only to prevent disclosure of an individual's full social security number, but shall provide the last four digits of the social security number. Any copy of records made available for inspection by, or furnished to, a joint labor-management committee established pursuant to the federal Labor Management Cooperation Act of 1978 (29 U.S.C. Sec. 175a) shall be marked or obliterated only to prevent disclosure of an individual's social security number.

(f)(1) Notwithstanding any other provision of law, agencies that are included in the Joint Enforcement Strike Force on the Underground Economy established pursuant to Section 329 of the Unemployment Insurance Code and other law enforcement agencies investigating violations of law shall, upon request, be provided nonredacted copies of certified payroll records. Any copies of records or certified payroll made available for inspection and furnished upon request to the public by an agency included in the Joint Enforcement Strike Force on the Underground Economy or to a law enforcement agency investigating a violation of law shall be marked or redacted to prevent disclosure of an individual's name, address, and social security number.

(2) An employer shall not be liable for damages in a civil action for any reasonable act or omission taken in good faith in compliance with this subdivision.

(g) The contractor shall inform the body awarding the contract of the location of the records enumerated under subdivision (a), including the street address, city, and county, and shall, within five working days, provide a notice of a change of location and address.

(h) The contractor or subcontractor has 10 days in which to comply subsequent to receipt of a written notice requesting the records enumerated in subdivision (a). In the event that the contractor or subcontractor fails to comply within the 10-day period, he or she shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit one hundred dollars (\$100) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due. A contractor is not subject to a penalty assessment pursuant to this section due to the failure of a subcontractor to comply with this section.

(i) The body awarding the contract shall cause to be inserted in the contract stipulations to effectuate this section.

(j) The director shall adopt rules consistent with the California Public Records Act (Chapter 3.5 (commencing with Section 6250) of Division 7 of Title 1 of the Government Code) and the Information Practices Act of 1977 (Title 1.8 (commencing with Section 1798) of Part 4 of Division 3 of the Civil Code) governing the release of these records, including the establishment of reasonable fees to be charged for reproducing copies of records required by this section.

Section 1777.5. Employment of registered apprentices; wages; standards; number; apprenticeable craft or trade; exemptions; contributions; compliance program

(a)(1) This chapter does not prevent the employment upon public works of properly registered apprentices who are active participants in an approved apprenticeship program.

(2) For purposes of this chapter, “apprenticeship program” means a program under the jurisdiction of the California Apprenticeship Council established pursuant to Section 3070.

(b)(1) Every apprentice employed upon public works shall be paid the prevailing rate of per diem wages for apprentices in the trade to which he or she is registered and shall be employed only at the work of the craft or trade to which he or she is registered.

(2) Unless otherwise provided by a collective bargaining agreement, when a contractor requests the dispatch of an apprentice pursuant to this section to perform work on a public works project and requires the apprentice to fill out an application or undergo testing, training, an examination, or other preemployment process as a condition of employment, the apprentice shall be paid for the time spent on the required preemployment activity, including travel time to and from the required activity, if any, at the prevailing rate of per diem wages for apprentices in the trade to which he or she is registered. Unless otherwise provided by a collective bargaining agreement, a contractor is not required to compensate an apprentice for the time spent on preemployment activities if the apprentice is required to take a preemployment drug or alcohol test and he or she fails to pass that test.

(c) Only apprentices, as defined in Section 3077, who are in training under apprenticeship standards that have been approved by the Chief of the Division of Apprenticeship Standards and who are parties to written

apprentice agreements under Chapter 4 (commencing with Section 3070) of Division 3 are eligible to be employed at the apprentice wage rate on public works. The employment and training of each apprentice shall be in accordance with either of the following:

- (1) The apprenticeship standards and apprentice agreements under which he or she is training.
- (2) The rules and regulations of the California Apprenticeship Council.

(d) If the contractor to whom the contract is awarded by the state or any political subdivision, in performing any of the work under the contract, employs workers in any apprenticeable craft or trade, the contractor shall employ apprentices in at least the ratio set forth in this section and may apply to any apprenticeship program in the craft or trade that can provide apprentices to the site of the public work for a certificate approving the contractor under the apprenticeship standards for the employment and training of apprentices in the area or industry affected. However, the decision of the apprenticeship program to approve or deny a certificate shall be subject to review by the Administrator of Apprenticeship. The apprenticeship program or programs, upon approving the contractor, shall arrange for the dispatch of apprentices to the contractor. A contractor covered by an apprenticeship program's standards shall not be required to submit any additional application in order to include additional public works contracts under that program. "Apprenticeable craft or trade," as used in this section, means a craft or trade determined as an apprenticeable occupation in accordance with rules and regulations prescribed by the California Apprenticeship Council. As used in this section, "contractor" includes any subcontractor under a contractor who performs any public works not excluded by subdivision (o).

(e) Before commencing work on a contract for public works, every contractor shall submit contract award information to an applicable apprenticeship program that can supply apprentices to the site of the public work. The information submitted shall include an estimate of journeyman hours to be performed under the contract, the number of apprentices proposed to be employed, and the approximate dates the apprentices would be employed. A copy of this information shall also be submitted to the awarding body, if requested by the awarding body. Within 60 days after concluding work on the contract, each contractor and subcontractor shall submit to the awarding body, if requested, and to the apprenticeship program a verified statement of the journeyman and apprentice hours performed on the contract. The information under this subdivision shall be public. The apprenticeship programs shall retain this information for 12 months.

(f) The apprenticeship program supplying apprentices to the area of the site of the public work shall ensure equal employment and affirmative action in apprenticeship for women and minorities.

(g) The ratio of work performed by apprentices to journeymen employed in a particular craft or trade on the public work may be no higher than the ratio stipulated in the apprenticeship standards under which the apprenticeship program operates if the contractor agrees to be bound by those standards. However, except as otherwise provided in this section, in no case shall the ratio be less than one hour of apprentice work for every five hours of journeyman work.

(h) This ratio of apprentice work to journeyman work shall apply during any day or portion of a day when any journeyman is employed at the jobsite and shall be computed on the basis of the hours worked during the day by journeymen so employed. Any work performed by a journeyman in excess of eight hours per day or 40 hours per week shall not be used to calculate the ratio. The contractor shall employ apprentices for the number of hours computed as above before the end of the contract or, in the case of a subcontractor, before the end of the subcontract. However, the contractor shall endeavor, to the greatest extent possible, to employ apprentices during the same time period that the journeymen in the same craft or trade are employed at the jobsite. When an hourly apprenticeship ratio is not feasible for a particular craft or trade, the Administrator

of Apprenticeship, upon application of an apprenticeship program, may order a minimum ratio of not less than one apprentice for each five journeymen in a craft or trade classification.

(i) A contractor covered by this section who has agreed to be covered by an apprenticeship program's standards upon the issuance of the approval certificate, or who has been previously approved for an apprenticeship program in the craft or trade, shall employ the number of apprentices or the ratio of apprentices to journeymen stipulated in the applicable apprenticeship standards, but in no event less than the 1-to-5 ratio required by subdivision (g).

(j) Upon proper showing by a contractor that he or she employs apprentices in a particular craft or trade in the state on all of his or her contracts on an annual average of not less than one hour of apprentice work for every five hours of labor performed by journeymen, the Administrator of Apprenticeship may grant a certificate exempting the contractor from the 1-to-5 hourly ratio, as set forth in this section for that craft or trade.

(k) An apprenticeship program has the discretion to grant to a participating contractor or contractor association a certificate, which shall be subject to the approval of the Administrator of Apprenticeship, exempting the contractor from the 1-to-5 ratio set forth in this section when it finds that any one of the following conditions is met:

(1) Unemployment for the previous three-month period in the area exceeds an average of 15 percent.

(2) The number of apprentices in training in the area exceeds a ratio of 1 to 5.

(3) There is a showing that the apprenticeable craft or trade is replacing at least one-thirtieth of its journeymen annually through apprenticeship training, either on a statewide basis or on a local basis.

(4) Assignment of an apprentice to any work performed under a public works contract would create a condition that would jeopardize his or her life or the life, safety, or property of fellow employees or the public at large, or the specific task to which the apprentice is to be assigned is of a nature that training cannot be provided by a journeyman.

(l) If an exemption is granted pursuant to subdivision (k) to an organization that represents contractors in a specific trade from the 1-to-5 ratio on a local or statewide basis, the member contractors shall not be required to submit individual applications for approval to local joint apprenticeship committees, if they are already covered by the local apprenticeship standards.

(m)(1) A contractor to whom a contract is awarded, who, in performing any of the work under the contract, employs journeymen or apprentices in any apprenticeable craft or trade shall contribute to the California Apprenticeship Council the same amount that the director determines is the prevailing amount of apprenticeship training contributions in the area of the public works site. A contractor may take as a credit for payments to the council any amounts paid by the contractor to an approved apprenticeship program that can supply apprentices to the site of the public works project. The contractor may add the amount of the contributions in computing his or her bid for the contract.

(2)(A) At the conclusion of the 2002-03 fiscal year and each fiscal year thereafter, the California Apprenticeship Council shall distribute training contributions received by the council under this subdivision, less the expenses of the Department of Industrial Relations for administering this subdivision, by making grants to approved apprenticeship programs for the purpose of training apprentices. The grant funds shall be distributed as follows:

(i) If there is an approved multiemployer apprenticeship program serving the same craft or trade and geographic area for which the training contributions were made to the council, a grant to that program shall be made.

(ii) If there are two or more approved multiemployer apprenticeship programs serving the same craft or trade and county for which the training contributions were made to the council, the grant shall be divided among those programs based on the number of apprentices from that county registered in each program.

(iii) All training contributions not distributed under clauses (i) and (ii) shall be used to defray the future expenses of the Department of Industrial Relations for the administration and enforcement of apprenticeship and preapprenticeship standards and requirements under this code.

(B) An apprenticeship program shall only be eligible to receive grant funds pursuant to this subdivision if the apprenticeship program agrees, prior to the receipt of any grant funds, to keep adequate records that document the expenditure of grant funds and to make all records available to the Department of Industrial Relations so that the Department of Industrial Relations is able to verify that grant funds were used solely for training apprentices. For purposes of this subparagraph, adequate records include, but are not limited to, invoices, receipts, and canceled checks that account for the expenditure of grant funds. This subparagraph shall not be deemed to require an apprenticeship program to provide the Department of Industrial Relations with more documentation than is necessary to verify the appropriate expenditure of grant funds made pursuant to this subdivision.

(C) The Department of Industrial Relations shall verify that grants made pursuant to this subdivision are used solely to fund training apprentices. If an apprenticeship program is unable to demonstrate how grant funds are expended or if an apprenticeship program is found to be using grant funds for purposes other than training apprentices, then the apprenticeship program shall not be eligible to receive any future grant pursuant to this subdivision and the Department of Industrial Relations may initiate the process to rescind the registration of the apprenticeship program.

(3) All training contributions received pursuant to this subdivision shall be deposited in the Apprenticeship Training Contribution Fund, which is hereby created in the State Treasury. Upon appropriation by the Legislature, all moneys in the Apprenticeship Training Contribution Fund shall be used for the purpose of carrying out this subdivision and to pay the expenses of the Department of Industrial Relations.

(n) The body awarding the contract shall cause to be inserted in the contract stipulations to effectuate this section. The stipulations shall fix the responsibility of compliance with this section for all apprenticeable occupations with the prime contractor.

(o) This section does not apply to contracts of general contractors or to contracts of specialty contractors not bidding for work through a general or prime contractor when the contracts of general contractors or those specialty contractors involve less than thirty thousand dollars (\$30,000).

(p) An awarding body that implements an approved labor compliance program in accordance with subdivision (b) of Section 1771.5 may, with the approval of the director, assist in the enforcement of this section under the terms and conditions prescribed by the director.

Section 1813. Forfeiture for violations; contract stipulation; report of violations

The contractor or subcontractor shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit twenty- five dollars (\$25) for each worker employed in the execution of

the contract by the respective contractor or subcontractor for each calendar day during which the worker is required or permitted to work more than 8 hours in any one calendar day and 40 hours in any one calendar week in violation of the provisions of this article. In awarding any contract for public work, the awarding body shall cause to be inserted in the contract a stipulation to this effect. The awarding body shall take cognizance of all violations of this article committed in the course of the execution of the contract, and shall report them to the Division of Labor Standards Enforcement.

Section 1815. Overtime

Notwithstanding the provisions of Sections 1810 to 1814, inclusive, of this code, and notwithstanding any stipulation inserted in any contract pursuant to the requirements of said sections, work performed by employees of contractors in excess of 8 hours per day, and 40 hours during any one week, shall be permitted upon public work upon compensation for all hours worked in excess of 8 hours per day at not less than 1 ½ times the basic rate of pay.

ATTACHMENT NO. 2

CALIFORNIA PUBLIC CONTRACT CODE SECTION 9204

Section 9204. Legislative findings and declarations regarding timely and complete payment of contractors for public works projects; claims process (Eff: January 1, 2017)

(a) The Legislature finds and declares that it is in the best interests of the state and its citizens to ensure that all construction business performed on a public works project in the state that is complete and not in dispute is paid in full and in a timely manner.

(b) Notwithstanding any other law, including, but not limited to, Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2, Chapter 10 (commencing with Section 19100) of Part 2, and Article 1.5 (commencing with Section 20104) of Chapter 1 of Part 3, this section shall apply to any claim by a contractor in connection with a public works project.

(c) For purposes of this section:

(1) "Claim" means a separate demand by a contractor sent by registered mail or certified mail with return receipt requested, for one or more of the following:

(A) A time extension, including, without limitation, for relief from damages or penalties for delay assessed by a public entity under a contract for a public works project.

(B) Payment by the public entity of money or damages arising from work done by, or on behalf of, the contractor pursuant to the contract for a public works project and payment for which is not otherwise expressly provided or to which the claimant is not otherwise entitled.

(C) Payment of an amount that is disputed by the public entity.

(2) "Contractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who has entered into a direct contract with a public entity for a public works project.

(3)(A) "Public entity" means, without limitation, except as provided in subparagraph (B), a state agency, department, office, division, bureau, board, or commission, the California State University, the University of California, a city, including a charter city, county, including a charter county, city and county, including a charter city and county, district, special district, public authority, political subdivision, public corporation, or nonprofit transit corporation wholly owned by a public agency and formed to carry out the purposes of the public agency.

(B) "Public entity" shall not include the following:

(i) The Department of Water Resources as to any project under the jurisdiction of that department.

(ii) The Department of Transportation as to any project under the jurisdiction of that department.

(iii) The Department of Parks and Recreation as to any project under the jurisdiction of that department.

(iv) The Department of Corrections and Rehabilitation with respect to any project under its jurisdiction pursuant to Chapter 11 (commencing with Section 7000) of Title 7 of Part 3 of the Penal Code.

(v) The Military Department as to any project under the jurisdiction of that department.

(vi) The Department of General Services as to all other projects.

(vii) The High-Speed Rail Authority.

(4) "Public works project" means the erection, construction, alteration, repair, or improvement of any public structure, building, road, or other public improvement of any kind.

(5) "Subcontractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who either is in direct contract with a contractor or is a lower tier subcontractor.

(d)(1)(A) Upon receipt of a claim pursuant to this section, the public entity to which the claim applies shall conduct a reasonable review of the claim and, within a period not to exceed 45 days, shall provide the claimant a written statement identifying what portion of the claim is disputed and what portion is undisputed. Upon receipt of a claim, a public entity and a contractor may, by mutual agreement, extend the time period provided in this subdivision.

(B) The claimant shall furnish reasonable documentation to support the claim.

(C) If the public entity needs approval from its governing body to provide the claimant a written statement identifying the disputed portion and the undisputed portion of the claim, and the governing body does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified mail, return receipt requested, the public entity shall have up to three days following the next duly publicly noticed meeting of the governing body after the 45-day period, or extension, expires to provide the claimant a written statement identifying the disputed portion and the undisputed portion.

(D) Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. If the public entity fails to issue a written statement, paragraph (3) shall apply.

(2)(A) If the claimant disputes the public entity's written response, or if the public entity fails to respond to a claim issued pursuant to this section within the time prescribed, the claimant may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the public entity shall schedule a meet and confer conference within 30 days for settlement of the dispute.

(B) Within 10 business days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, the public entity shall provide the claimant a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. Any disputed portion of the claim, as identified by the contractor in writing, shall be submitted to nonbinding mediation, with the public entity and the claimant sharing the associated costs equally. The public entity and claimant shall mutually agree to a mediator within 10 business days after the disputed portion of the claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator. If mediation is unsuccessful, the parts of the claim remaining in dispute shall be subject to applicable procedures outside this section.

(C) For purposes of this section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.

(D) Unless otherwise agreed to by the public entity and the contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.

(E) This section does not preclude a public entity from requiring arbitration of disputes under private arbitration or the Public Works Contract Arbitration Program, if mediation under this section does not resolve the parties' dispute.

(3) Failure by the public entity to respond to a claim from a contractor within the time periods described in this subdivision or to otherwise meet the time requirements of this section shall result in the claim being deemed rejected in its entirety. A claim that is denied by reason of the public entity's failure to have responded to a claim, or its failure to otherwise meet the time requirements of this section, shall not constitute an adverse finding with regard to the merits of the claim or the responsibility or qualifications of the claimant.

(4) Amounts not paid in a timely manner as required by this section shall bear interest at 7 percent per annum.

(5) If a subcontractor or a lower tier subcontractor lacks legal standing to assert a claim against a public entity because privity of contract does not exist, the contractor may present to the public entity a claim on behalf of a subcontractor or lower tier subcontractor. A subcontractor may request in writing, either on their own behalf or on behalf of a lower tier subcontractor, that the contractor present a claim for work which was performed by the subcontractor or by a lower tier subcontractor on behalf of the subcontractor. The subcontractor requesting that the claim be presented to the public entity shall furnish reasonable documentation to support the claim. Within 45 days of receipt of this written request, the contractor shall notify the subcontractor in writing as to whether the contractor presented the claim to the public entity and, if the original contractor did not present the claim, provide the subcontractor with a statement of the reasons for not having done so.

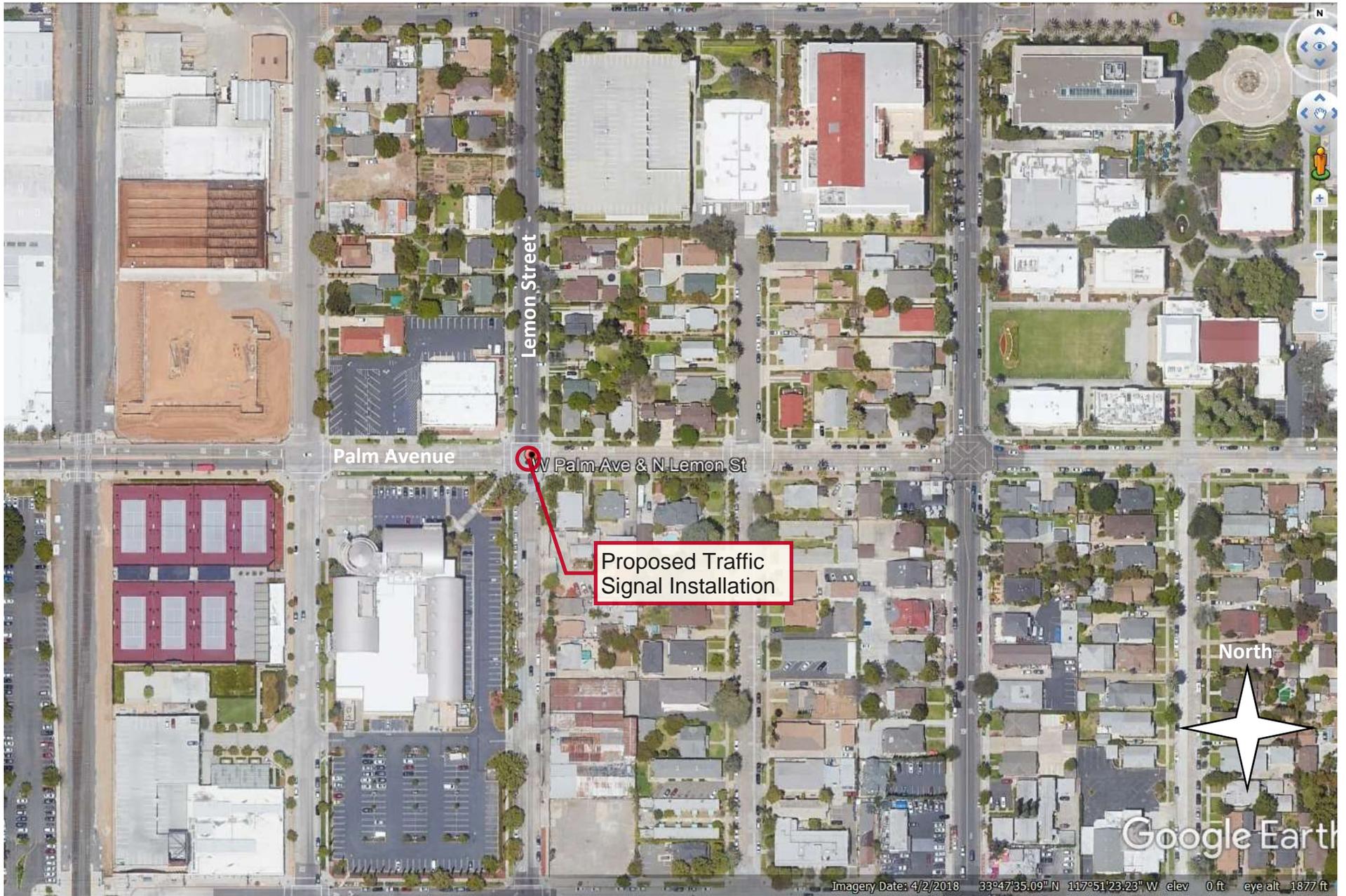
(e) The text of this section or a summary of it shall be set forth in the plans or specifications for any public works project that may give rise to a claim under this section.

(f) A waiver of the rights granted by this section is void and contrary to public policy, provided, however, that (1) upon receipt of a claim, the parties may mutually agree to waive, in writing, mediation and proceed directly to the commencement of a civil action or binding arbitration, as applicable; and (2) a public entity may prescribe reasonable change order, claim, and dispute resolution procedures and requirements in addition to the provisions of this section, so long as the contractual provisions do not conflict with or otherwise impair the timeframes and procedures set forth in this section.

(g) This section applies to contracts entered into on or after January 1, 2017.

(h) Nothing in this section shall impose liability upon a public entity that makes loans or grants available through a competitive application process, for the failure of an awardee to meet its contractual obligations.

(i) This section shall remain in effect only until January 1, 2027, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2027, deletes or extends that date.



Location Map

Lemon Street at Palm Avenue Traffic Signal Installation; SP-4133; Bid No. 190-61



Agenda Item

City Council

Item #: 3.27.

9/8/2020

File #: 20-096

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Cash, Public Works Director

1. SUBJECT

Award of Contract to California Professional Engineering, Inc. for Glassell Street and Meats Avenue Left Turn Signal Improvements - HSIPL-5073(083); Bid No. 20-21.04.

2. SUMMARY

Bids for Glassell Street and Meats Avenue Left Turn Signal Improvements - HSIPL-5073(083) were received and opened on August 6, 2020. Five bidders responded to the Notice Inviting Bids. The apparent low bidder is California Professional Engineering, Inc. of La Puente, CA for \$237,730.50.

3. RECOMMENDED ACTION

Award the contract to California Professional Engineering, Inc. of La Puente, CA in the total amount of \$261,503.55, representing an original amount of \$237,730.50, plus a 10% contingency of \$23,773.05, for Glassell Street and Meats Avenue Left Turn Signal Improvements - HSIPL-5073 (083); and authorize the Mayor and the City Clerk to execute the agreement on behalf of the City.

4. FISCAL IMPACT

The total expenditure for this contract, including the 10% contingency, is \$261,503.55 and will be funded through:

Glassell Meats Left Signal Installation (30080)	
Reimbursable Capital Projects (550)	\$189,365.00
Minor Traffic Control Devices (16302)	
Capital Projects (500)	<u>72,138.55</u>
Total:	\$261,503.55

5. STRATEGIC PLAN GOALS

Goal 1: Provide for a safe community

b: Provide and maintain infrastructure necessary to ensure the safety of the public.

Goal 4: Provide outstanding public service

b: Provide facilities and services to meet customer expectations.

6. DISCUSSION AND BACKGROUND

This project will provide traffic signal and intersection improvements at Glassell Street and Meats Avenue. The improvements include new video detection, protected left turn signal improvements, a new ADA compliant curb ramp, new traffic signal poles, abandoning existing traffic loops and various traffic signal-related improvements.

Project improvements will be installed per the American with Disabilities Act Accessibility Guidelines (ADAAG) requirements.

The City has pursued and obtained funding from Caltrans Local Assistance under the Highway Safety Improvement Program (HSIP) Cycle 7 in order to fund the various improvements provided by the project. The HSIP is a federal aid program with the goal of achieving a significant reduction in fatalities and serious injuries on all public roads. The City received authorization from Caltrans Local Assistance to begin the construction phase of this project on June 9, 2020. The City has entered into an agreement with Caltrans for 100% reimbursement for the construction of this project up to the amount of \$209,300.

The City Council previously approved an advertisement for bids on July 14, 2020. The bid solicitation was advertised on July 16, 2020 for a period of three weeks and bids were opened on August 6, 2020. Five bids were received as follows:

1. California Professional Engineering, Inc., La Puente	\$237,730.50
2. Crosstown Electrical & Data, Inc., Irwindale	\$247,983.00
3. Alfaro Communications Construction, Inc., Compton	\$261,115.00
4. DBX, Inc., Temecula	\$283,045.00
5. Calpromax Engineering, Inc., Tustin	\$300,790.50

The low bid is about 38% higher than the Engineer's Estimate. This may be due to the long manufacturing lead times for traffic signal equipment and poles, in addition to the loss of economy of scale related to the concrete and paving work required by the contract to meet ADA compliance and abandoning the existing traffic loops. Staff checked the references and qualifications for California Professional Engineering, Inc. and found them to be acceptable, with adequate years of experience in completing contracts of similar nature to this project. Therefore, staff recommends that California Professional Engineering, Inc. be awarded the contract in the total amount of \$261,503.55, representing an original amount of \$237,730.50, plus a 10% contingency of \$23,773.05, for the Glassell Street and Meats Avenue Left Turn Signal Improvements - HSIPL-5073(083) project.

The proposed project is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) under CEQA guidelines Section 15301 "Existing Facilities" Class 1 (c). The CEQA Notice of Exemption has been recorded with the County Recorder's Office.

Construction is scheduled to begin in January 2021 due to long manufacturing lead times and is expected to be completed within 45 calendar days.

7. ATTACHMENTS

- Bid Abstract
- Contract Agreement



Agenda Item

City Council

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- Contract Agreement

City of Orange: Summary of Bid Abstracts for:

SP-4000 Glassell Street and Meats Avenue Left Turn Signal Improvements - HSIPL-5073(083)

Bid No. 20-21.04; Project No. SP-4000

Date of Bid Opening: 8/6/2020

				ENGINEER'S ESTIMATE		1 California Professional Engineering, Inc., La Puente Tel. No. (626) 810-1338		2 Crosstown Electrical & Data, Inc., Irwindale Tel. No. (626) 813-6693		3 Alfaro Communications Construction, Inc., Compton Tel. No. (310) 669-8949		4 DBX, Inc., Temecula Tel. No. (951) 296-9909		5 Calpromax Engineering, Inc., Tustin Tel. No. (714) 573-4599	
NO.	DESCRIPTION OF WORK	QUANTITY	UNIT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT
1	Traffic Control	1	LS	\$ 15,000.00	\$15,000.00	\$3,000.00	\$3,000.00	\$3,500.00	\$3,500.00	\$5,000.00	\$5,000.00	\$4,700.00	\$4,700.00	\$6,000.00	\$6,000.00
2	Traffic Signal Modifications per Specifications	1	LS	\$ 136,500.00	\$136,500.00	\$180,540.00	\$180,540.00	\$182,744.97	\$182,744.97	\$205,000.00	\$205,000.00	\$198,030.00	\$198,030.00	\$245,000.00	\$245,000.00
3	Construct Type 1 Access Ramp Per City of Orange Std 121, Inclusive of Removals	1	LS	\$ 8,000.00	\$8,000.00	\$17,250.00	\$17,250.00	\$29,750.00	\$29,750.00	\$8,500.00	\$8,500.00	\$29,000.00	\$29,000.00	\$10,000.00	\$10,000.00
4	Cold Plane 2" Existing A.C. per Specifications	3,383	SF	\$ 1.84	\$6,224.72	\$3.50	\$11,840.50	\$2.41	\$8,153.03	\$5.00	\$16,915.00	\$5.00	\$16,915.00	\$3.50	\$11,840.50
5	Asphalt Rubberized Hot Mix (ARHM) per Specifications	45	TON	\$ 85.00	\$3,825.00	\$380.00	\$17,100.00	\$453.00	\$20,385.00	\$500.00	\$22,500.00	\$700.00	\$31,500.00	\$550.00	\$24,750.00
6	Signing and Striping	1	LS	\$ 2,500.00	\$2,500.00	\$8,000.00	\$8,000.00	\$3,450.00	\$3,450.00	\$3,200.00	\$3,200.00	\$2,900.00	\$2,900.00	\$3,200.00	\$3,200.00
Grand Total						\$172,049.72		\$237,730.50		\$247,983.00		\$261,115.00		\$283,045.00	\$300,790.50

City of Orange: Summary of Bid Abstracts for:

SP-4000 Glassell Street and Meats Avenue Left Turn Signal
Improvements - HSIPL-5073(083)

Bid No. 20-21.04; Project No. SP-4000

Date of Bid Opening: 8/6/2020

NO.	DESCRIPTION OF WORK	QUANTITY	UNIT
1	Traffic Control	1	LS
2	Traffic Signal Modifications per Specifications	1	LS
3	Construct Type 1 Access Ramp Per City of Orange Std 121, Inclusive of Removals	1	LS
4	Cold Plane 2" Existing A.C. per Specifications	3,383	SF
5	Asphalt Rubberized Hot Mix (ARHM) per Specifications	45	TON
6	Signing and Striping	1	LS
Grand Total			

CONTRACT
[Glassell Street and Meats Avenue Left Turn Signal Improvements
(Bid No. 190-44, SP-4000)]

THIS CONTRACT (the “Contract”) is made and entered into as of _____, 2020 (“Effective Date”) by and between the CITY OF ORANGE, a municipal corporation (“City”), and CALIFORNIA PROFESSIONAL ENGINEERING INC., a California corporation (“Contractor”), who agree as follows.

ARTICLE 1
Work Performed

a. For and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by City, and under the conditions expressed in the two (2) bonds presented to City with this Contract and incorporated herein by this reference, Contractor hereby agrees to and shall do all the work and furnish all the labor, materials, tools and equipment, except such as are mentioned in the specifications to be furnished by City to Contractor, necessary to complete in good workmanship and substantial manner the work (the “Work”) described in:

(1) The Construction Plans for Glassell Street and Meats Avenue Left Turn Signal Improvements (Drawing SP-4000) prepared for City by Jason Melchor, approved by the “Engineer” (as defined herein below) on April 04, 2020, and consisting of sheets numbered 1 through 4, inclusive (the “Plans”);

(2) The latest edition of the "City of Orange Standard Plans and Specifications" (the “Orange Book”) with the term "Engineer," as used in the Orange Book and in this Contract, to specifically include the City Engineer (or his/her designee);

(3) The "Standard Specifications for Public Works Construction” (the “Green Book”), and all amendments thereto;

(4) The Compliance Documents attached hereto as Attachment No. 3 and incorporated herein by this reference;

(5) The Labor Relations Forms attached hereto as Attachment No. 4 and incorporated here by this reference;

(6) The “City of Orange Standard Special Provisions”;

(7) The Standard Plans;

(8) The Federal Special Provision attached hereto as Attachment No. 5 and incorporated here by this reference;

(9) The Federal Prevailing Wage Rates attached hereto as Attachment No. 6 and incorporated herein by this reference; and

(10) Contractor's Bid Proposal, which is on file with City's Department of Public Works.

b. Contractor acknowledges that it has received the Plans from City and that a complete copy of the Plans are in its possession and are hereby specifically referred to and by such reference made a part hereof. The Orange Book, Green Book and City of Orange Standard Special Provisions and Standard Plans are on file with City's Public Works Director and are hereby specifically referred to and by such reference made a part hereof. Contractor hereby acknowledges that it has read, reviewed and understands the Plans, the Orange Book, the Green Book, the Special Provisions, the Standard Plans, and the Encroachment Permit as they relate to the Work, all of which documents shall be referred to herein collectively as the "Plans and Specifications."

c. Contractor acknowledges the provisions of Chapter 8.28 of the Orange Municipal Code which requires, among other things, that Contractor utilize City's exclusive solid waste hauler for the rental of bins for trash and debris removal and imposes mandatory recycling requirements for self-hauled construction and demolition waste. The terms and conditions set forth in this Contract shall control over any terms and conditions in the Plans and Specifications to the contrary.

d. The Work shall be performed in conformity with the Plans and Specifications and the Bid Proposal and all applicable laws, including any and all applicable federal and state labor laws and standards and applicable prevailing wage requirements and any and all state, federal and local statutes, regulations and ordinances relating to the protection of human health or the environment.

e. Unless and until otherwise notified in writing by City's Public Works Director, City's Principal Engineer, Randy Nguyen, ("Authorized City Representative"), shall be the person to whom Contractor will report for the performance of the Work hereunder. It is understood that Contractor's performance hereunder shall be under the direction and supervision of the Authorized City Representative or such other person as City's Public Works Director may designate from time to time, that Contractor shall coordinate the Work hereunder with the Authorized City Representative to the extent required by the Authorized City Representative, and that all performances required hereunder by Contractor shall be performed to the satisfaction of the Authorized City Representative or City's Public Works Director.

f. It is expressly agreed by and between the parties hereto that should there be any conflict between the terms of this instrument and Contractor's Bid Proposal, then this instrument shall control and nothing herein shall be considered as an acceptance of the said terms of said Bid Proposal conflicting herewith.

ARTICLE 2

Commencement of Work

Contractor shall commence the Work provided for in this Contract within fifteen (15) days of the date of the issuance by City of a Notice to Proceed and diligently prosecute completion of the Work within forty-five (45) calendar days from such date, unless legal extension is granted in

accordance with the terms set forth in the Green Book. Time is of the essence in this Contract. Contractor shall do all things necessary and incidental to the prosecution of Contractor's Work.

ARTICLE 3 Compensation

a. Contractor agrees to receive and accept an amount not to exceed TWO HUNDRED THIRTY-SEVEN THOUSAND SEVEN HUNDRED THIRTY and 50/100 (\$237,730.50) unless said amount is amended by Contract Change Order approved by the City, as compensation for furnishing all materials and doing all the Work contemplated and embraced in this Contract. Said compensation covers (1) all loss or damage arising out of the nature of the Work, from the acts of the elements; (2) any unforeseen difficulties or obstructions which may arise or be encountered in the prosecution of the Work until its acceptance by City, other than as provided below; (3) all risks of every description connected with the Work; (4) all expenses incurred by or in consequence of the suspension or discontinuance of the Work; and (5) well and faithfully completing the Work, and for the whole thereof, in the manner and according to the Plans and Specifications, and requirements of the Authorized City Representative under them. Retention amounts shall be withheld from progress payments as required by law unless Contractor provides securities in lieu of retention.

b. In addition to the scheduled Work to be performed by the Contractor, the parties recognize that additional, unforeseen work and services may be required by the Authorized City Representative. In anticipation of such contingencies, the sum of TWENTY-THREE THOUSAND SEVEN HUNDRED SEVENTY-THREE DOLLARS and 05/100 (\$23,773.05) has been added to the total compensation of this Contract. The Authorized City Representative may approve the additional work and the actual costs incurred by the Contractor in performance of additional work or services in accordance with such amount as the Authorized City Representative and the Contractor may agree upon in advance. Said additional work or services and the amount of compensation therefor, up to the amount of the authorized contingency, shall be memorialized in the form of a Contract Amendment approved by the City Manager on a form acceptable to the City Attorney. The Contractor agrees to perform only that work or those services that are specifically requested by the Authorized City Representative. Any and all additional work and services performed under this Contract shall be completed in such sequence as to assure their completion as expeditiously as is consistent with professional skill and care in accordance with a cost estimate or proposal submitted to and approved by the Authorized City Representative prior to the commencement of such Work or services.

c. The total amount of compensation under this Contract, including contingencies, shall not exceed TWO HUNDRED SIXTY-ONE THOUSAND FIVE HUNDRED THREE DOLLARS and 55/100 (\$261,503.55).

ARTICLE 4 Licenses

Contractor represents that it and any subcontractors it may engage, possess any and all licenses which are required under state or federal law to perform the Work contemplated by this

Contract and that Contractor and subcontractors shall maintain all appropriate licenses, including a City of Orange business license, at its cost, during the performance of this Contract.

ARTICLE 5

Guarantees

a. Contractor guarantees the construction and installation of all Work included in the Plans and Specifications for which Contractor has been awarded this Contract.

b. Should any of the materials or equipment installed pursuant to this Contract prove defective or should the Work as a whole prove defective, due to faulty equipment, workmanship, materials furnished or methods of installations, or should said Work or any part thereof fail to function properly, as designed, due to any of the above causes within twelve (12) months after the date on which said Work is accepted by City, Contractor shall make repairs and furnish such materials and equipment as are necessary to be furnished and installed within fifteen (15) calendar days after the receipt of a demand from City.

c. Said Work will be deemed defective within the meaning of this guarantee in the event that it fails to function as originally intended either by the Plans and Specifications of this Contract or by the manufacturer(s) of the equipment incorporated into the Work.

d. In the event repairs are not made within fifteen (15) calendar days after Contractor's receipt of a demand from City, City shall have the unqualified option to make any needed repairs or replacements itself or by any other contractor. Contractor shall reimburse City, upon demand, for all expenses incurred in restoring said Work to the condition contemplated in this Contract, including the cost of any equipment or materials replaced.

e. It is understood that emergency repairs may, by necessity, be made by City. Therefore, when defective equipment, materials or workmanship result in emergency repairs by City, Contractor shall reimburse City, upon demand, for all expenses incurred. Emergency repairs will be deemed as those repairs determined by City's Director of Public Works to be necessary due to an immediate detriment to the health, safety, welfare or convenience of the residents of City.

ARTICLE 6

Water Quality

a. The Santa Ana Regional Water Quality Control Board ("RWQCB") has issued National Pollutant Discharge Elimination System ("NPDES") Permit No. R8-2009-0030 (the "Permit"), which governs storm water and non-storm water discharges resulting from municipal activities performed by City or its contractors. In order to comply with the Permit requirements, the County of Orange has prepared a Drainage Area Management Plan ("DAMP"), containing Model Maintenance Procedures with Best Management Practices ("BMPs") that City and its contractors must adhere to. The Model Maintenance Procedures contain pollution prevention and source control techniques to minimize the impact of those activities upon dry-weather urban runoff, storm water runoff, and receiving water quality. Examples include: wash water from

cleaning of sidewalks or parking lots must be collected and disposed of in the sewer or landscaped areas.

b. The Permit, the DAMP and the Model Maintenance Procedures are on file in the office of City's Director of Public Works. Contractor hereby acknowledges that it has read, reviewed and understands the Permit, the DAMP and the Model Maintenance Procedures, as they relate to the Work and hereby shall perform the Work in conformance therewith.

ARTICLE 7

Independent Contractor; Contractor not Agent

a. At all times during the term of this Contract, Contractor shall be an independent contractor and not an employee of City. City shall have the right to control Contractor only insofar as the result of Contractor's services rendered pursuant to this Contract. City shall not have the right to control the means by which Contractor accomplishes services rendered pursuant to this Contract. Contractor shall, at its sole cost and expense, furnish all facilities, materials and equipment which may be required for furnishing services pursuant to this Contract. Contractor shall be solely responsible for, and shall indemnify, defend and save City harmless from all matters relating to the payment of its subcontractors, agents and employees, including compliance with social security, withholding and all other wages, salaries, benefits, taxes, exactions, and regulations of any nature whatsoever. Contractor acknowledges that Contractor and any subcontractors, agents or employees employed by Contractor shall not, under any circumstances, be considered employees of City, and that they shall not be entitled to any of the benefits or rights afforded employees of City, including, but not limited to, sick leave, vacation leave, holiday pay, Public Employees Retirement System benefits, or health, life, dental, long-term disability or workers' compensation insurance benefits.

b. Except as City may specify in writing, Contractor shall have no authority, express or implied, to act on behalf of City in any capacity whatsoever as an agent. Contractor shall have no authority, express or implied, to bind City to any obligation whatsoever.

ARTICLE 8

Public Work; Prevailing Wage

a. The Work which is the subject of this Contract is a "public work," as that term is defined in Section 1720 of the California Labor Code, for which prevailing wages must be paid. To the extent Contractor's employees will perform any work that falls within any of the classifications for which the Department of Labor Relations of the State of California promulgates prevailing wage determinations, Contractor hereby agrees that Contractor, and any subcontractor under it, shall pay not less than the specified prevailing rates of wages to all such workers. The general prevailing wage determinations for crafts can be located on the website of the Department of Industrial Relations (www.dir.ca.gov/DLSR). Additionally, to perform work under this Contract, Contractor must meet all State registration requirements and criteria, including project compliance monitoring.

b. Attached hereto as Attachment No. 1 and incorporated herein by this reference is a copy of the provisions of Sections 1725.5, 1771, 1771.1, 1771.4, 1775, 1776, 1777.5, 1813 and

1815 of the California Labor Code. Contractor hereby acknowledges that it has read, reviewed and understands those provisions of the Labor Code and shall prosecute and complete the Work under this Contract in strict compliance with all of those terms and provisions.

c. Contractor shall secure the payment of compensation to its employees in accordance with the provisions of Section 3700 of the California Labor Code. Accordingly, and as required by Section 1861 of the California Labor Code, Contractor hereby certifies as follows:

“I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract.”

d. Contractor shall indemnify, protect, defend and hold harmless City and its officers, employees, contractors and agents, with counsel reasonably acceptable to City, from and against any and all loss, liability, damage, claim, cost, expense, and/or “increased costs” (including reasonable attorney’s fees, court and litigation costs, and fees of expert witnesses) which result or arise in any way from the noncompliance by Contractor of any applicable local, state and/or federal law, including, without limitation, any applicable federal and/or state labor laws (including, without limitation, the requirement to pay state prevailing wages). It is agreed by the parties that, in connection with the construction of the Work which is the subject of this Contract, Contractor shall bear all risks of payment or non-payment of state prevailing wages. “Increased costs” as used in this paragraph shall have the meaning ascribed to it in Labor Code Section 1781, as the same may be enacted, adopted or amended from time to time. The foregoing indemnity shall survive termination of this Contract.

ARTICLE 9 Equal Employment Opportunity

During the performance of this Contract, Contractor agrees as follows:

a. Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law. Contractor shall ensure that applicants are employed and that employees are treated during employment, without regard to their race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law. Such actions shall include, but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation and selection for training, including apprenticeship. Contractor shall post in conspicuous places, available to employees and applicants for employment, a notice setting forth provisions of this non-discrimination clause.

b. Contractor shall, in all solicitations and advertisements for employees placed by, or on behalf of Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law.

c. Contractor shall cause the foregoing paragraphs (a) and (b) to be inserted in all subcontracts for any Work covered by this Contract, provided that the foregoing provisions shall not apply to subcontracts for standard commercial supplies or raw materials.

ARTICLE 10 Conflicts of Interest

Contractor agrees that it shall not make, participate in the making, or in any way attempt to use its position as a contractor to influence any decision of City in which Contractor knows or has reason to know that Contractor, its officers, partners, or employees have a financial interest as defined in Section 87103 of the Government Code.

ARTICLE 11 Indemnity

Contractor shall defend, indemnify and hold harmless City and its officers, officials, agents, and employees from and against:

a. Any and all claims, liabilities, losses, damages, penalties, costs or expenses (including reasonable attorneys' fees and court costs) which City may directly or indirectly sustain or suffer arising from or as a result of the death of any person or any accident, injury, loss or damage whatsoever caused to any person or the property of any person which shall occur on or adjacent to the real property which is the subject of this Contract, or in connection with performance of this Contract which may be directly or indirectly caused by the acts or omissions of Contractor or its officers, employees, contractors or agents, or as a consequence of any use, generation, manufacture, storage, disposal, release or threatened release of a hazardous waste or substance. Contractor shall not be responsible for (and such indemnity shall not apply to) any willful misconduct, negligence or breach of this Contract by City or its officers, officials, agents, and employees. The foregoing indemnity shall survive termination of this Contract.

b. Any and all claims under workers' compensation acts and other employee benefit acts with respect to Contractor's employees or Contractor's subcontractor's employees arising out of Contractor's Work under this Contract, including any and all claims under any law pertaining to Contractor's status as an independent contractor.

ARTICLE 12 Insurance

a. Contractor shall procure and maintain for the duration of this Contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Work hereunder and the results of that Work by Contractor, its agents, representatives, employees or subcontractors.

b. Contractor shall maintain the following minimum amount of insurance: the greater of either the limits set forth in (1) through (4), below; or all of the insurance coverage and/or limits carried by or available to Contractor.

- | | | |
|---------------------------|-------------|--|
| (1) General Liability | \$2,000,000 | per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit. |
| (2) Automobile Liability | \$1,000,000 | per accident for bodily injury and property damage. |
| (3) Workers' Compensation | | as required by the State of California. |
| (4) Employer's Liability | \$1,000,000 | per accident for bodily injury or disease. |

c. Any insurance proceeds in excess of or broader than the minimum required coverage and/or minimum required limits which are applicable to a given loss shall be available to City. No representation is made that the minimum insurance requirements of this Contract are sufficient to cover the obligations of Contractor under this Contract.

d. Any deductibles or self-insured retentions must be declared to and approved by City. At the option of City, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions with respect to City, its officers, officials, agents and employees; or Contractor shall provide a financial guarantee satisfactory to City guaranteeing payment of losses and related investigations, claim administration, and defense expenses.

e. Each policy of general liability and automotive liability insurance shall contain, or be endorsed to contain, the following provisions:

(1) City, its officers, officials, agents, and employees are declared to be additional insureds under the terms of the policy, with respect to liability arising out of automobiles owned, leased, hired or borrowed by or on behalf of Contractor (any auto), and with respect to liability arising out of Work or operations performed by or on behalf of Contractor, including materials, parts or equipment furnished in connection with such Work or operations. A policy endorsement to that effect shall be provided to City along with the certificate of insurance. In lieu of an endorsement, City will accept a copy of the policy(ies) which evidences that City is an additional insured as a contracting party. The minimum coverage required by Subsection 12.b, above, shall apply to City as an additional insured.

(2) For any claims related to this Contract, Contractor's insurance coverage shall be primary insurance with respect to City, its officers, officials, agents and employees. Any insurance or self-insurance maintained by City, its officers, officials, agents and employees shall be excess of Contractor's insurance and shall not contribute with it.

(3) Coverage shall not be canceled, except after thirty (30) days' prior written notice has been provided to City.

f. Contractor shall furnish City with original certificates of insurance and endorsements effecting coverage required by this Article 12. The endorsements shall be on forms acceptable to City. All certificates and endorsements are to be received and approved by City before the Work commences. However, failure to do so shall not operate as a waiver of these insurance requirements. City reserves the right to require complete, certified copies of all required insurance policies, including endorsements effecting the coverage required by these specifications at any time.

g. All insurance procured and maintained by Contractor shall be issued by insurers admitted to conduct the pertinent line of insurance business in California and having a rating of Grade A or better and Class VII or better by the latest edition of Best Key Rating Guide.

h. Contractor shall immediately notify City if any required insurance lapses or is otherwise modified and cease performance of this Contract unless otherwise directed by City. In such a case, City may procure insurance or self-insure the risk and charge Contractor for such costs and any and all damages resulting therefrom by way of set-off from any sums owed Contractor.

i. Contractor agrees that in the event of loss due to any of the perils for which it has agreed to provide insurance, Contractor shall look solely to its insurance for recovery. Contractor hereby grants to City, on behalf of any insurer providing insurance to either Contractor or City with respect to the services of Contractor herein, a waiver of any right to subrogation which any such insurer may acquire against City by virtue of the payment of any loss under such insurance. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of City for all Work performed by Contractor, its employees, agents and subcontractors. Contractor shall obtain any other endorsement that may be necessary to effect this waiver of subrogation.

j. Contractor shall require and verify that all subcontractors maintain insurance meeting all of the requirements stated herein.

ARTICLE 13 Termination

City, acting through its City Manager or his/her designee, reserves the right to terminate this Contract for any reason by giving five (5) days' written notice of intent to terminate to Contractor. Upon receipt of notice, Contractor shall immediately cease work, unless the notice provides otherwise. Should City terminate this Contract, City shall pay Contractor for services satisfactorily provided and all allowable reimbursements incurred to the date of termination in compliance with this Contract, unless such termination shall be for cause, in which event City may withhold any disputed compensation. City shall not be liable for any claim of lost profits.

ARTICLE 14 Maintenance and Inspection of Records

In accordance with generally accepted accounting principles, Contractor and its subcontractors shall maintain reasonably full and complete books, documents, papers, accounting

records and other information (collectively, the “records”) pertaining to the costs of and completion of services performed under this Contract. During the term of this Contract and for a period of three (3) years after termination or completion of this Contract, City shall have the right to inspect and/or audit Contractor's records pertaining to the performance of this Contract at Contractor's office. Contractor shall make available all such records for inspection or audit at its offices during normal business hours and upon three (3) days’ notice from City, and copies thereof shall be furnished if requested.

ARTICLE 15

Compliance with Laws

a. Contractor shall be knowledgeable of and comply with all local, state and federal laws pertaining to the subject matter hereof or in any way regulating the activities undertaken by Contractor or any subcontractor hereunder.

b. Contractor represents and warrants that it:

(1) Has complied and shall at all times during the term of this Contract comply, in all respects, with all immigration laws, regulations, statutes, rules, codes, and orders, including, without limitation, the Immigration Reform and Control Act of 1986 (IRCA); and

(2) Has not and will not knowingly employ any individual to perform services under this Contract who is ineligible to work in the United States or under the terms of this Contract; and

(3) Has properly maintained, and shall at all times during the term of this Contract properly maintain, all related employment documentation records including, without limitation, the completion and maintenance of the Form I-9 for each of Contractor’s employees; and

(4) Has responded, and shall at all times during the term of this Contract respond, in a timely fashion to any government inspection requests relating to immigration law compliance and/or Form I-9 compliance and/or worksite enforcement by the Department of Homeland Security, the Department of Labor, or the Social Security Administration.

c. Contractor shall require all subcontractors and/or subconsultants to make the same representations and warranties required by this Article 15 when hired to perform services under this Contract.

d. Contractor shall, upon request of City, provide a list of all employees working under this Contract and shall provide, to the reasonable satisfaction of City, verification that all such employees are eligible to work in the United States. All costs associated with such verification shall be borne by Contractor. Once such request has been made, Contractor may not change employees working under this Contract without written notice to City, accompanied by the verification required herein for such employees. Contractor shall require all subcontractors and/or sub-consultants to make the same verification when hired to perform services under this Contract.

e. If Contractor, or a subcontractor or subconsultant, knowingly employs an employee providing Work under this Contract who is not authorized to work in the United States, and/or

fails to follow federal laws to determine the status of such employee, such shall constitute a material breach of this Contract and may be cause for immediate termination of this Contract by City.

f. Contractor shall indemnify and hold City, its officials and employees harmless for, of and from any loss, including but not limited to fines, penalties and corrective measures, City may sustain by reason of Contractor’s failure to comply with said laws, rules and regulations in connection with the performance of this Contract.

ARTICLE 16
Governing Law and Venue

This Contract shall be construed in accordance with and governed by the laws of the State of California and Contractor shall submit to the jurisdiction of California courts. Venue for any dispute arising under this Contract shall be in Orange County, California.

ARTICLE 17
Integration and Amendment

a. This Contract constitutes the entire agreement of the parties. No other agreement, oral or written, pertaining to the Work to be performed under this Contract shall be of any force or effect unless it is in writing and signed by both parties. Any Work performed which is inconsistent with or in violation of the provisions of this Contract shall not be compensated.

b. Amendments to this Contract must be in writing and signed by both parties. The City Manager is authorized to execute amendments to this Contract up to the amounts specified in Chapter 3.08 of the Orange Municipal Code.]

ARTICLE 18
Notice

Except as otherwise provided herein, all notices required under this Contract shall be in writing and delivered personally, by e-mail, or by first class mail, postage prepaid, to each party at the address listed below. Either party may change the notice address by notifying the other party in writing. Notices shall be deemed received upon receipt of same or within three (3) days of deposit in the U.S. Mail, whichever is earlier. Notices sent by e-mail shall be deemed received on the date of the e-mail transmission.

“CONTRACTOR”

“CITY”

California Professional Engineering Inc.
19062 San Jose Avenue
La Puente, CA 91748
Attn: Van Nguyen

City of Orange
300 E. Chapman Avenue
Orange, CA 92866-1591
Attn: Randy Nguyen

Telephone: 626-810-1338
E-Mail: admin@cpengineering.com

Telephone: 714-744-5531
E-Mail: rnguyen@cityoforange.org

**ARTICLE 19
Claim Resolution**

City and Contractor agree that the claim resolution process applicable to any claim by Contractor in connection with the Work provided herein shall be subject to the procedures set forth in California Public Contract Code Section 9204, attached hereto as Attachment No. 2, and incorporated herein by this reference.

**ARTICLE 20
Counterparts**

This Contract may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Signatures transmitted via facsimile and electronic mail shall have the same effect as original signatures.

“CITY”

CITY OF ORANGE, a municipal corporation

By: _____
Mark A. Murphy
Mayor of the City of Orange

CONTRACT, BONDS AND INSURANCE
APPROVED BY:

ATTEST:

Mary E. Binning
Senior Assistant City Attorney

Pamela Coleman, City Clerk

“CONTRACTOR”

CALIFORNIA PROFESSIONAL
ENGINEERING INC., a California corporation

[Note: Signature of Chairman of the Board, President or Vice President is required]

By: _____
Printed Name: _____
Title: _____

[Note: Signature of Secretary, Assistant Secretary, Chief Financial Officer or Assistant Treasurer is also required]

By: _____
Printed Name: _____
Title: _____

ATTACHMENT NO. 1

CALIFORNIA LABOR CODE SECTIONS 1725.5, 1771, 1771.1, 1771.4, 1775, 1776, 1777.5, 1813 and 1815

Section 1725.5. Registration of contractors; mandatory registration; qualifications and application; fees; exempt contractors

A contractor shall be registered pursuant to this section to be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any public work contract that is subject to the requirements of this chapter. For the purposes of this section, "contractor" includes a subcontractor as defined by Section 1722.1.

(a) To qualify for registration under this section, a contractor shall do all of the following:

(1)(A) Register with the Department of Industrial Relations in the manner prescribed by the department and pay an initial nonrefundable application fee of four hundred dollars (\$400) to qualify for registration under this section and an annual renewal fee on or before July 1 of each year thereafter. The annual renewal fee shall be in a uniform amount set by the Director of Industrial Relations, and the initial registration and renewal fees may be adjusted no more than annually by the director to support the costs specified in Section 1771.3.

(B) Beginning June 1, 2019, a contractor may register or renew according to this subdivision in annual increments up to three years from the date of registration. Contractors who wish to do so will be required to prepay the applicable nonrefundable application or renewal fees to qualify for the number of years for which they wish to preregister.

(2) Provide evidence, disclosures, or releases as are necessary to establish all of the following:

(A) Workers' compensation coverage that meets the requirements of Division 4 (commencing with Section 3200) and includes sufficient coverage for any worker whom the contractor employs to perform work that is subject to prevailing wage requirements other than a contractor who is separately registered under this section. Coverage may be evidenced by a current and valid certificate of workers' compensation insurance or certification of self-insurance required under Section 7125 of the Business and Professions Code.

(B) If applicable, the contractor is licensed in accordance with Chapter 9 (commencing with Section 7000) of the Business and Professions Code.

(C) The contractor does not have any delinquent liability to an employee or the state for any assessment of back wages or related damages, interest, fines, or penalties pursuant to any final judgment, order, or determination by a court or any federal, state, or local administrative agency, including a confirmed arbitration award. However, for purposes of this paragraph, the contractor shall not be disqualified for any judgment, order, or determination that is under appeal, provided that the contractor has secured the payment of any amount eventually found due through a bond or other appropriate means.

(D) The contractor is not currently debarred under Section 1777.1 or under any other federal or state law providing for the debarment of contractors from public works.

(E) The contractor has not bid on a public works contract, been listed in a bid proposal, or engaged in the performance of a contract for public works without being lawfully registered in accordance with this section, within the preceding 12 months or since the effective date of the requirements set forth in subdivision (e), whichever is earlier. If a contractor is found to be in violation of the requirements of this paragraph, the period of disqualification shall be waived if both of the following are true:

- (i) The contractor has not previously been found to be in violation of the requirements of this paragraph within the preceding 12 months.
- (ii) The contractor pays an additional nonrefundable penalty registration fee of two thousand dollars (\$2,000).
- (b) Fees received pursuant to this section shall be deposited in the State Public Works Enforcement Fund established by Section 1771.3 and shall be used only for the purposes specified in that section.
- (c) A contractor who fails to pay the renewal fee required under paragraph (1) of subdivision (a) on or before the expiration of any prior period of registration shall be prohibited from bidding on or engaging in the performance of any contract for public work until once again registered pursuant to this section. If the failure to pay the renewal fee was inadvertent, the contractor may renew its registration retroactively by paying an additional nonrefundable penalty renewal fee equal to the amount of the renewal fee within 90 days of the due date of the renewal fee.
- (d) If, after a body awarding a contract accepts the contractor's bid or awards the contract, the work covered by the bid or contract is determined to be a public work to which Section 1771 applies, either as the result of a determination by the director pursuant to Section 1773.5 or a court decision, the requirements of this section shall not apply, subject to the following requirements:
- (1) The body that awarded the contract failed, in the bid specification or in the contract documents, to identify as a public work that portion of the work that the determination or decision subsequently classifies as a public work.
- (2) Within 20 days following service of notice on the awarding body of a determination by the Director of Industrial Relations pursuant to Section 1773.5 or a decision by a court that the contract was for public work as defined in this chapter, the contractor and any subcontractors are registered under this section or are replaced by a contractor or subcontractors who are registered under this section.
- (3) The requirements of this section shall apply prospectively only to any subsequent bid, bid proposal, contract, or work performed after the awarding body is served with notice of the determination or decision referred to in paragraph (2).
- (e) The requirements of this section shall apply to any bid proposal submitted on or after March 1, 2015, to any contract for public work, as defined in this chapter, executed on or after April 1, 2015, and to any work performed under a contract for public work on or after January 1, 2018, regardless of when the contract for public work was executed.
- (f) This section does not apply to work performed on a public works project of twenty-five thousand dollars (\$25,000) or less when the project is for construction, alteration, demolition, installation, or repair work or to work performed on a public works project of fifteen thousand dollars (\$15,000) or less when the project is for maintenance work.

Section 1771. Payment of general prevailing rate

Except for public works projects of one thousand dollars (\$1,000) or less, not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the public work is performed, and not less than the general prevailing rate of per diem wages for holiday and overtime work fixed as provided in this chapter, shall be paid to all workers employed on public works.

This section is applicable only to work performed under contract, and is not applicable to work carried out by a public agency with its own forces. This section is applicable to contracts let for maintenance work.

Section 1771.1. Registration as a contractor or subcontractor required prior to bid submission; exceptions; violations; penalties

(a) A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

(b) Notice of the requirement described in subdivision (a) shall be included in all bid invitations and public works contracts, and a bid shall not be accepted nor any contract or subcontract entered into without proof of the contractor or subcontractor's current registration to perform public work pursuant to Section 1725.5.

(c) An inadvertent error in listing a subcontractor who is not registered pursuant to Section 1725.5 in a bid proposal shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive, provided that any of the following apply:

(1) The subcontractor is registered prior to the bid opening.

(2) Within 24 hours after the bid opening, the subcontractor is registered and has paid the penalty registration fee specified in subparagraph (E) of paragraph (2) of subdivision (a) of Section 1725.5.

(3) The subcontractor is replaced by another registered subcontractor pursuant to Section 4107 of the Public Contract Code.

(d) Failure by a subcontractor to be registered to perform public work as required by subdivision (a) shall be grounds under Section 4107 of the Public Contract Code for the contractor, with the consent of the awarding authority, to substitute a subcontractor who is registered to perform public work pursuant to Section 1725.5 in place of the unregistered subcontractor.

(e) The department shall maintain on its Internet Web site a list of contractors who are currently registered to perform public work pursuant to Section 1725.5.

(f) A contract entered into with any contractor or subcontractor in violation of subdivision (a) shall be subject to cancellation, provided that a contract for public work shall not be unlawful, void, or voidable solely due to the failure of the awarding body, contractor, or any subcontractor to comply with the requirements of Section 1725.5 or this section.

(g) If the Labor Commissioner or his or her designee determines that a contractor or subcontractor engaged in the performance of any public work contract without having been registered in accordance with this section, the contractor or subcontractor shall forfeit, as a civil penalty to the state, one hundred dollars (\$100) for each day of work performed in violation of the registration requirement, not to exceed an aggregate penalty of eight thousand dollars (\$8,000) in addition to any penalty registration fee assessed pursuant to clause (ii) of subparagraph (E) of paragraph (2) of subdivision (a) of Section 1725.5.

(h)(1) In addition to, or in lieu of, any other penalty or sanction authorized pursuant to this chapter, a higher tiered public works contractor or subcontractor who is found to have entered into a subcontract with an unregistered lower tier subcontractor to perform any public work in violation of the requirements of Section 1725.5 or this section shall be subject to forfeiture, as a civil penalty to the state, of one hundred dollars (\$100)

for each day the unregistered lower tier subcontractor performs work in violation of the registration requirement, not to exceed an aggregate penalty of ten thousand dollars (\$10,000).

(2) The Labor Commissioner shall use the same standards specified in subparagraph (A) of paragraph (2) of subdivision (a) of Section 1775 when determining the severity of the violation and what penalty to assess, and may waive the penalty for a first time violation that was unintentional and did not hinder the Labor Commissioner's ability to monitor and enforce compliance with the requirements of this chapter.

(3) A higher tiered public works contractor or subcontractor shall not be liable for penalties assessed pursuant to paragraph (1) if the lower tier subcontractor's performance is in violation of the requirements of Section 1725.5 due to the revocation of a previously approved registration.

(4) A subcontractor shall not be liable for any penalties assessed against a higher tiered public works contractor or subcontractor pursuant to paragraph (1). A higher tiered public works contractor or subcontractor may not require a lower tiered subcontractor to indemnify or otherwise be liable for any penalties pursuant to paragraph (1).

(i) The Labor Commissioner or his or her designee shall issue a civil wage and penalty assessment, in accordance with the provisions of Section 1741, upon determination of penalties pursuant to subdivision (g) and subparagraph (B) of paragraph (1) of subdivision (h). Review of a civil wage and penalty assessment issued under this subdivision may be requested in accordance with the provisions of Section 1742. The regulations of the Director of Industrial Relations, which govern proceedings for review of civil wage and penalty assessments and the withholding of contract payments under Article 1 (commencing with Section 1720) and Article 2 (commencing with Section 1770), shall apply.

(j)(1) Where a contractor or subcontractor engages in the performance of any public work contract without having been registered in violation of the requirements of Section 1725.5 or this section, the Labor Commissioner shall issue and serve a stop order prohibiting the use of the unregistered contractor or the unregistered subcontractor on all public works until the unregistered contractor or unregistered subcontractor is registered. The stop order shall not apply to work by registered contractors or subcontractors on the public work.

(2) A stop order may be personally served upon the contractor or subcontractor by either of the following methods:

(A) Manual delivery of the order to the contractor or subcontractor personally.

(B) Leaving signed copies of the order with the person who is apparently in charge at the site of the public work and by thereafter mailing copies of the order by first class mail, postage prepaid to the contractor or subcontractor at one of the following:

(i) The address of the contractor or subcontractor on file with either the Secretary of State or the Contractors' State License Board.

(ii) If the contractor or subcontractor has no address on file with the Secretary of State or the Contractors' State License Board, the address of the site of the public work.

(3) The stop order shall be effective immediately upon service and shall be subject to appeal by the party contracting with the unregistered contractor or subcontractor, by the unregistered contractor or subcontractor, or both. The appeal, hearing, and any further review of the hearing decision shall be governed by the procedures, time limits, and other requirements specified in subdivision (a) of Section 238.1.

(4) Any employee of an unregistered contractor or subcontractor who is affected by a work stoppage ordered by the commissioner pursuant to this subdivision shall be paid at his or her regular hourly prevailing wage rate by that employer for any hours the employee would have worked but for the work stoppage, not to exceed 10 days.

(k) Failure of a contractor or subcontractor, owner, director, officer, or managing agent of the contractor or subcontractor to observe a stop order issued and served upon him or her pursuant to subdivision (j) is guilty of a misdemeanor punishable by imprisonment in county jail not exceeding 60 days or by a fine not exceeding ten thousand dollars (\$10,000), or both.

(l) This section shall apply to any bid proposal submitted on or after March 1, 2015, and any contract for public work entered into on or after April 1, 2015. This section shall also apply to the performance of any public work, as defined in this chapter, on or after January 1, 2018, regardless of when the contract for public work was entered.

(m) Penalties received pursuant to this section shall be deposited in the State Public Works Enforcement Fund established by Section 1771.3 and shall be used only for the purposes specified in that section.

(n) This section shall not apply to work performed on a public works project of twenty-five thousand dollars (\$25,000) or less when the project is for construction, alteration, demolition, installation, or repair work or to work performed on a public works project of fifteen thousand dollars (\$15,000) or less when the project is for maintenance work.

Section 1771.4. Additional requirements when bidding and awarding public works contracts

(a) All of the following are applicable to all public works projects that are otherwise subject to the requirements of this chapter:

(1) The call for bids and contract documents shall specify that the project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

(2) The awarding body shall post or require the prime contractor to post job site notices, as prescribed by regulation.

(3) Each contractor and subcontractor shall furnish the records specified in Section 1776 directly to the Labor Commissioner, in the following manner:

(A) At least monthly or more frequently if specified in the contract with the awarding body.

(B) In a format prescribed by the Labor Commissioner.

(4) If the contractor or subcontractor is not registered pursuant to Section 1725.5 and is performing work on a project for which registration is not required because of subdivision (f) of Section 1725.5, the unregistered contractor or subcontractor is not required to furnish the records specified in Section 1776 directly to the Labor Commissioner but shall retain the records specified in Section 1776 for at least three years after completion of the work.

(5) The department shall undertake those activities it deems necessary to monitor and enforce compliance with prevailing wage requirements.

(b) The Labor Commissioner may exempt a public works project from compliance with all or part of the requirements of subdivision (a) if either of the following occurs:

(1) The awarding body has enforced an approved labor compliance program, as defined in Section 1771.5, on all public works projects under its authority, except those deemed exempt pursuant to subdivision (a) of Section 1771.5, continuously since December 31, 2011.

(2) The awarding body has entered into a collective bargaining agreement that binds all contractors performing work on the project and that includes a mechanism for resolving disputes about the payment of wages.

(c) The requirements of paragraph (1) of subdivision (a) shall only apply to contracts for public works projects awarded on or after January 1, 2015.

(d) The requirements of paragraph (3) of subdivision (a) shall apply to all contracts for public work, whether new or ongoing, on or after January 1, 2016.

Section 1775. Penalties for violations

(a)(1) The contractor and any subcontractor under the contractor shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit not more than two hundred dollars (\$200) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rates as determined by the director for the work or craft in which the worker is employed for any public work done under the contract by the contractor or, except as provided in subdivision (b), by any subcontractor under the contractor.

(2)(A) The amount of the penalty shall be determined by the Labor Commissioner based on consideration of both of the following:

(i) Whether the failure of the contractor or subcontractor to pay the correct rate of per diem wages was a good faith mistake and, if so, the error was promptly and voluntarily corrected when brought to the attention of the contractor or subcontractor.

(ii) Whether the contractor or subcontractor has a prior record of failing to meet its prevailing wage obligations.

(B)(i) The penalty may not be less than forty dollars (\$40) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, unless the failure of the contractor or subcontractor to pay the correct rate of per diem wages was a good faith mistake and, if so, the error was promptly and voluntarily corrected when brought to the attention of the contractor or subcontractor.

(ii) The penalty may not be less than eighty dollars (\$80) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, if the contractor or subcontractor has been assessed penalties within the previous three years for failing to meet its prevailing wage obligations on a separate contract, unless those penalties were subsequently withdrawn or overturned.

(iii) The penalty may not be less than one hundred twenty dollars (\$120) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, if the Labor Commissioner determines that the violation was willful, as defined in subdivision (c) of Section 1777.1.

(C) If the amount due under this section is collected from the contractor or subcontractor, any outstanding wage claim under Chapter 1 (commencing with Section 1720) of Part 7 of Division 2 against that contractor

or subcontractor shall be satisfied before applying that amount to the penalty imposed on that contractor or subcontractor pursuant to this section.

(D) The determination of the Labor Commissioner as to the amount of the penalty shall be reviewable only for abuse of discretion.

(E) The difference between the prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing wage rate shall be paid to each worker by the contractor or subcontractor, and the body awarding the contract shall cause to be inserted in the contract a stipulation that this section will be complied with.

(b) If a worker employed by a subcontractor on a public works project is not paid the general prevailing rate of per diem wages by the subcontractor, the prime contractor of the project is not liable for any penalties under subdivision (a) unless the prime contractor had knowledge of that failure of the subcontractor to pay the specified prevailing rate of wages to those workers or unless the prime contractor fails to comply with all of the following requirements:

(1) The contract executed between the contractor and the subcontractor for the performance of work on the public works project shall include a copy of the provisions of this section and Sections 1771, 1776, 1777.5, 1813, and 1815.

(2) The contractor shall monitor the payment of the specified general prevailing rate of per diem wages by the subcontractor to the employees, by periodic review of the certified payroll records of the subcontractor.

(3) Upon becoming aware of the failure of the subcontractor to pay his or her workers the specified prevailing rate of wages, the contractor shall diligently take corrective action to halt or rectify the failure, including, but not limited to, retaining sufficient funds due the subcontractor for work performed on the public works project.

(4) Prior to making final payment to the subcontractor for work performed on the public works project, the contractor shall obtain an affidavit signed under penalty of perjury from the subcontractor that the subcontractor has paid the specified general prevailing rate of per diem wages to his or her employees on the public works project and any amounts due pursuant to Section 1813.

(c) The Division of Labor Standards Enforcement shall notify the contractor on a public works project within 15 days of the receipt by the Division of Labor Standards Enforcement of a complaint of the failure of a subcontractor on that public works project to pay workers the general prevailing rate of per diem wages.

Section 1776. Payroll records; retention; inspection; redacted information; agencies entitled to receive nonredacted copies of certified records; noncompliance penalties; rules

(a) Each contractor and subcontractor shall keep accurate payroll records, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the public work. Each payroll record shall contain or be verified by a written declaration that it is made under penalty of perjury, stating both of the following:

(1) The information contained in the payroll record is true and correct.

(2) The employer has complied with the requirements of Sections 1771, 1811, and 1815 for any work performed by his or her employees on the public works project.

(b) The payroll records enumerated under subdivision (a) shall be certified and shall be available for inspection at all reasonable hours at the principal office of the contractor on the following basis:

(1) A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request.

(2) A certified copy of all payroll records enumerated in subdivision (a) shall be made available for inspection or furnished upon request to a representative of the body awarding the contract and the Division of Labor Standards Enforcement of the Department of Industrial Relations.

(3) A certified copy of all payroll records enumerated in subdivision (a) shall be made available upon request by the public for inspection or for copies thereof. However, a request by the public shall be made through either the body awarding the contract or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to paragraph (2), the requesting party shall, prior to being provided the records, reimburse the costs of preparation by the contractor, subcontractors, and the entity through which the request was made. The public may not be given access to the records at the principal office of the contractor.

(c) Unless required to be furnished directly to the Labor Commissioner in accordance with paragraph (3) of subdivision (a) of Section 1771.4, the certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the division. The payroll records may consist of printouts of payroll data that are maintained as computer records, if the printouts contain the same information as the forms provided by the division and the printouts are verified in the manner specified in subdivision (a).

(d) A contractor or subcontractor shall file a certified copy of the records enumerated in subdivision (a) with the entity that requested the records within 10 days after receipt of a written request.

(e) Except as provided in subdivision (f), any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the awarding body or the Division of Labor Standards Enforcement shall be marked or obliterated to prevent disclosure of an individual's name, address, and social security number. The name and address of the contractor awarded the contract or the subcontractor performing the contract shall not be marked or obliterated. Any copy of records made available for inspection by, or furnished to, a multiemployer Taft-Hartley trust fund (29 U.S.C. Sec. 186(c)(5)) that requests the records for the purposes of allocating contributions to participants shall be marked or obliterated only to prevent disclosure of an individual's full social security number, but shall provide the last four digits of the social security number. Any copy of records made available for inspection by, or furnished to, a joint labor-management committee established pursuant to the federal Labor Management Cooperation Act of 1978 (29 U.S.C. Sec. 175a) shall be marked or obliterated only to prevent disclosure of an individual's social security number.

(f)(1) Notwithstanding any other provision of law, agencies that are included in the Joint Enforcement Strike Force on the Underground Economy established pursuant to Section 329 of the Unemployment Insurance Code and other law enforcement agencies investigating violations of law shall, upon request, be provided nonredacted copies of certified payroll records. Any copies of records or certified payroll made available for inspection and furnished upon request to the public by an agency included in the Joint Enforcement Strike Force on the Underground Economy or to a law enforcement agency investigating a violation of law shall be marked or redacted to prevent disclosure of an individual's name, address, and social security number.

(2) An employer shall not be liable for damages in a civil action for any reasonable act or omission taken in good faith in compliance with this subdivision.

(g) The contractor shall inform the body awarding the contract of the location of the records enumerated under subdivision (a), including the street address, city, and county, and shall, within five working days, provide a notice of a change of location and address.

(h) The contractor or subcontractor has 10 days in which to comply subsequent to receipt of a written notice requesting the records enumerated in subdivision (a). In the event that the contractor or subcontractor fails to comply within the 10-day period, he or she shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit one hundred dollars (\$100) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due. A contractor is not subject to a penalty assessment pursuant to this section due to the failure of a subcontractor to comply with this section.

(i) The body awarding the contract shall cause to be inserted in the contract stipulations to effectuate this section.

(j) The director shall adopt rules consistent with the California Public Records Act (Chapter 3.5 (commencing with Section 6250) of Division 7 of Title 1 of the Government Code) and the Information Practices Act of 1977 (Title 1.8 (commencing with Section 1798) of Part 4 of Division 3 of the Civil Code) governing the release of these records, including the establishment of reasonable fees to be charged for reproducing copies of records required by this section.

Section 1777.5. Employment of registered apprentices; wages; standards; number; apprenticeable craft or trade; exemptions; contributions; compliance program

(a)(1) This chapter does not prevent the employment upon public works of properly registered apprentices who are active participants in an approved apprenticeship program.

(2) For purposes of this chapter, “apprenticeship program” means a program under the jurisdiction of the California Apprenticeship Council established pursuant to Section 3070.

(b)(1) Every apprentice employed upon public works shall be paid the prevailing rate of per diem wages for apprentices in the trade to which he or she is registered and shall be employed only at the work of the craft or trade to which he or she is registered.

(2) Unless otherwise provided by a collective bargaining agreement, when a contractor requests the dispatch of an apprentice pursuant to this section to perform work on a public works project and requires the apprentice to fill out an application or undergo testing, training, an examination, or other preemployment process as a condition of employment, the apprentice shall be paid for the time spent on the required preemployment activity, including travel time to and from the required activity, if any, at the prevailing rate of per diem wages for apprentices in the trade to which he or she is registered. Unless otherwise provided by a collective bargaining agreement, a contractor is not required to compensate an apprentice for the time spent on preemployment activities if the apprentice is required to take a preemployment drug or alcohol test and he or she fails to pass that test.

(c) Only apprentices, as defined in Section 3077, who are in training under apprenticeship standards that have been approved by the Chief of the Division of Apprenticeship Standards and who are parties to written

apprentice agreements under Chapter 4 (commencing with Section 3070) of Division 3 are eligible to be employed at the apprentice wage rate on public works. The employment and training of each apprentice shall be in accordance with either of the following:

- (1) The apprenticeship standards and apprentice agreements under which he or she is training.
- (2) The rules and regulations of the California Apprenticeship Council.

(d) If the contractor to whom the contract is awarded by the state or any political subdivision, in performing any of the work under the contract, employs workers in any apprenticeable craft or trade, the contractor shall employ apprentices in at least the ratio set forth in this section and may apply to any apprenticeship program in the craft or trade that can provide apprentices to the site of the public work for a certificate approving the contractor under the apprenticeship standards for the employment and training of apprentices in the area or industry affected. However, the decision of the apprenticeship program to approve or deny a certificate shall be subject to review by the Administrator of Apprenticeship. The apprenticeship program or programs, upon approving the contractor, shall arrange for the dispatch of apprentices to the contractor. A contractor covered by an apprenticeship program's standards shall not be required to submit any additional application in order to include additional public works contracts under that program. "Apprenticeable craft or trade," as used in this section, means a craft or trade determined as an apprenticeable occupation in accordance with rules and regulations prescribed by the California Apprenticeship Council. As used in this section, "contractor" includes any subcontractor under a contractor who performs any public works not excluded by subdivision (o).

(e) Before commencing work on a contract for public works, every contractor shall submit contract award information to an applicable apprenticeship program that can supply apprentices to the site of the public work. The information submitted shall include an estimate of journeyman hours to be performed under the contract, the number of apprentices proposed to be employed, and the approximate dates the apprentices would be employed. A copy of this information shall also be submitted to the awarding body, if requested by the awarding body. Within 60 days after concluding work on the contract, each contractor and subcontractor shall submit to the awarding body, if requested, and to the apprenticeship program a verified statement of the journeyman and apprentice hours performed on the contract. The information under this subdivision shall be public. The apprenticeship programs shall retain this information for 12 months.

(f) The apprenticeship program supplying apprentices to the area of the site of the public work shall ensure equal employment and affirmative action in apprenticeship for women and minorities.

(g) The ratio of work performed by apprentices to journeymen employed in a particular craft or trade on the public work may be no higher than the ratio stipulated in the apprenticeship standards under which the apprenticeship program operates if the contractor agrees to be bound by those standards. However, except as otherwise provided in this section, in no case shall the ratio be less than one hour of apprentice work for every five hours of journeyman work.

(h) This ratio of apprentice work to journeyman work shall apply during any day or portion of a day when any journeyman is employed at the jobsite and shall be computed on the basis of the hours worked during the day by journeymen so employed. Any work performed by a journeyman in excess of eight hours per day or 40 hours per week shall not be used to calculate the ratio. The contractor shall employ apprentices for the number of hours computed as above before the end of the contract or, in the case of a subcontractor, before the end of the subcontract. However, the contractor shall endeavor, to the greatest extent possible, to employ apprentices during the same time period that the journeymen in the same craft or trade are employed at the jobsite. When an hourly apprenticeship ratio is not feasible for a particular craft or trade, the Administrator

of Apprenticeship, upon application of an apprenticeship program, may order a minimum ratio of not less than one apprentice for each five journeymen in a craft or trade classification.

(i) A contractor covered by this section who has agreed to be covered by an apprenticeship program's standards upon the issuance of the approval certificate, or who has been previously approved for an apprenticeship program in the craft or trade, shall employ the number of apprentices or the ratio of apprentices to journeymen stipulated in the applicable apprenticeship standards, but in no event less than the 1-to-5 ratio required by subdivision (g).

(j) Upon proper showing by a contractor that he or she employs apprentices in a particular craft or trade in the state on all of his or her contracts on an annual average of not less than one hour of apprentice work for every five hours of labor performed by journeymen, the Administrator of Apprenticeship may grant a certificate exempting the contractor from the 1-to-5 hourly ratio, as set forth in this section for that craft or trade.

(k) An apprenticeship program has the discretion to grant to a participating contractor or contractor association a certificate, which shall be subject to the approval of the Administrator of Apprenticeship, exempting the contractor from the 1-to-5 ratio set forth in this section when it finds that any one of the following conditions is met:

(1) Unemployment for the previous three-month period in the area exceeds an average of 15 percent.

(2) The number of apprentices in training in the area exceeds a ratio of 1 to 5.

(3) There is a showing that the apprenticeable craft or trade is replacing at least one-thirtieth of its journeymen annually through apprenticeship training, either on a statewide basis or on a local basis.

(4) Assignment of an apprentice to any work performed under a public works contract would create a condition that would jeopardize his or her life or the life, safety, or property of fellow employees or the public at large, or the specific task to which the apprentice is to be assigned is of a nature that training cannot be provided by a journeyman.

(l) If an exemption is granted pursuant to subdivision (k) to an organization that represents contractors in a specific trade from the 1-to-5 ratio on a local or statewide basis, the member contractors shall not be required to submit individual applications for approval to local joint apprenticeship committees, if they are already covered by the local apprenticeship standards.

(m)(1) A contractor to whom a contract is awarded, who, in performing any of the work under the contract, employs journeymen or apprentices in any apprenticeable craft or trade shall contribute to the California Apprenticeship Council the same amount that the director determines is the prevailing amount of apprenticeship training contributions in the area of the public works site. A contractor may take as a credit for payments to the council any amounts paid by the contractor to an approved apprenticeship program that can supply apprentices to the site of the public works project. The contractor may add the amount of the contributions in computing his or her bid for the contract.

(2)(A) At the conclusion of the 2002-03 fiscal year and each fiscal year thereafter, the California Apprenticeship Council shall distribute training contributions received by the council under this subdivision, less the expenses of the Department of Industrial Relations for administering this subdivision, by making grants to approved apprenticeship programs for the purpose of training apprentices. The grant funds shall be distributed as follows:

(i) If there is an approved multiemployer apprenticeship program serving the same craft or trade and geographic area for which the training contributions were made to the council, a grant to that program shall be made.

(ii) If there are two or more approved multiemployer apprenticeship programs serving the same craft or trade and county for which the training contributions were made to the council, the grant shall be divided among those programs based on the number of apprentices from that county registered in each program.

(iii) All training contributions not distributed under clauses (i) and (ii) shall be used to defray the future expenses of the Department of Industrial Relations for the administration and enforcement of apprenticeship and preapprenticeship standards and requirements under this code.

(B) An apprenticeship program shall only be eligible to receive grant funds pursuant to this subdivision if the apprenticeship program agrees, prior to the receipt of any grant funds, to keep adequate records that document the expenditure of grant funds and to make all records available to the Department of Industrial Relations so that the Department of Industrial Relations is able to verify that grant funds were used solely for training apprentices. For purposes of this subparagraph, adequate records include, but are not limited to, invoices, receipts, and canceled checks that account for the expenditure of grant funds. This subparagraph shall not be deemed to require an apprenticeship program to provide the Department of Industrial Relations with more documentation than is necessary to verify the appropriate expenditure of grant funds made pursuant to this subdivision.

(C) The Department of Industrial Relations shall verify that grants made pursuant to this subdivision are used solely to fund training apprentices. If an apprenticeship program is unable to demonstrate how grant funds are expended or if an apprenticeship program is found to be using grant funds for purposes other than training apprentices, then the apprenticeship program shall not be eligible to receive any future grant pursuant to this subdivision and the Department of Industrial Relations may initiate the process to rescind the registration of the apprenticeship program.

(3) All training contributions received pursuant to this subdivision shall be deposited in the Apprenticeship Training Contribution Fund, which is hereby created in the State Treasury. Upon appropriation by the Legislature, all moneys in the Apprenticeship Training Contribution Fund shall be used for the purpose of carrying out this subdivision and to pay the expenses of the Department of Industrial Relations.

(n) The body awarding the contract shall cause to be inserted in the contract stipulations to effectuate this section. The stipulations shall fix the responsibility of compliance with this section for all apprenticeable occupations with the prime contractor.

(o) This section does not apply to contracts of general contractors or to contracts of specialty contractors not bidding for work through a general or prime contractor when the contracts of general contractors or those specialty contractors involve less than thirty thousand dollars (\$30,000).

(p) An awarding body that implements an approved labor compliance program in accordance with subdivision (b) of Section 1771.5 may, with the approval of the director, assist in the enforcement of this section under the terms and conditions prescribed by the director.

Section 1813. Forfeiture for violations; contract stipulation; report of violations

The contractor or subcontractor shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit twenty- five dollars (\$25) for each worker employed in the execution of

the contract by the respective contractor or subcontractor for each calendar day during which the worker is required or permitted to work more than 8 hours in any one calendar day and 40 hours in any one calendar week in violation of the provisions of this article. In awarding any contract for public work, the awarding body shall cause to be inserted in the contract a stipulation to this effect. The awarding body shall take cognizance of all violations of this article committed in the course of the execution of the contract, and shall report them to the Division of Labor Standards Enforcement.

Section 1815. Overtime

Notwithstanding the provisions of Sections 1810 to 1814, inclusive, of this code, and notwithstanding any stipulation inserted in any contract pursuant to the requirements of said sections, work performed by employees of contractors in excess of 8 hours per day, and 40 hours during any one week, shall be permitted upon public work upon compensation for all hours worked in excess of 8 hours per day at not less than 1 ½ times the basic rate of pay.

ATTACHMENT NO. 2

CALIFORNIA PUBLIC CONTRACT CODE SECTION 9204

Section 9204. Legislative findings and declarations regarding timely and complete payment of contractors for public works projects; claims process (Eff: January 1, 2017)

(a) The Legislature finds and declares that it is in the best interests of the state and its citizens to ensure that all construction business performed on a public works project in the state that is complete and not in dispute is paid in full and in a timely manner.

(b) Notwithstanding any other law, including, but not limited to, Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2, Chapter 10 (commencing with Section 19100) of Part 2, and Article 1.5 (commencing with Section 20104) of Chapter 1 of Part 3, this section shall apply to any claim by a contractor in connection with a public works project.

(c) For purposes of this section:

(1) "Claim" means a separate demand by a contractor sent by registered mail or certified mail with return receipt requested, for one or more of the following:

(A) A time extension, including, without limitation, for relief from damages or penalties for delay assessed by a public entity under a contract for a public works project.

(B) Payment by the public entity of money or damages arising from work done by, or on behalf of, the contractor pursuant to the contract for a public works project and payment for which is not otherwise expressly provided or to which the claimant is not otherwise entitled.

(C) Payment of an amount that is disputed by the public entity.

(2) "Contractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who has entered into a direct contract with a public entity for a public works project.

(3)(A) "Public entity" means, without limitation, except as provided in subparagraph (B), a state agency, department, office, division, bureau, board, or commission, the California State University, the University of California, a city, including a charter city, county, including a charter county, city and county, including a charter city and county, district, special district, public authority, political subdivision, public corporation, or nonprofit transit corporation wholly owned by a public agency and formed to carry out the purposes of the public agency.

(B) "Public entity" shall not include the following:

(i) The Department of Water Resources as to any project under the jurisdiction of that department.

(ii) The Department of Transportation as to any project under the jurisdiction of that department.

(iii) The Department of Parks and Recreation as to any project under the jurisdiction of that department.

(iv) The Department of Corrections and Rehabilitation with respect to any project under its jurisdiction pursuant to Chapter 11 (commencing with Section 7000) of Title 7 of Part 3 of the Penal Code.

(v) The Military Department as to any project under the jurisdiction of that department.

(vi) The Department of General Services as to all other projects.

(vii) The High-Speed Rail Authority.

(4) "Public works project" means the erection, construction, alteration, repair, or improvement of any public structure, building, road, or other public improvement of any kind.

(5) "Subcontractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who either is in direct contract with a contractor or is a lower tier subcontractor.

(d)(1)(A) Upon receipt of a claim pursuant to this section, the public entity to which the claim applies shall conduct a reasonable review of the claim and, within a period not to exceed 45 days, shall provide the claimant a written statement identifying what portion of the claim is disputed and what portion is undisputed. Upon receipt of a claim, a public entity and a contractor may, by mutual agreement, extend the time period provided in this subdivision.

(B) The claimant shall furnish reasonable documentation to support the claim.

(C) If the public entity needs approval from its governing body to provide the claimant a written statement identifying the disputed portion and the undisputed portion of the claim, and the governing body does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified mail, return receipt requested, the public entity shall have up to three days following the next duly publicly noticed meeting of the governing body after the 45-day period, or extension, expires to provide the claimant a written statement identifying the disputed portion and the undisputed portion.

(D) Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. If the public entity fails to issue a written statement, paragraph (3) shall apply.

(2)(A) If the claimant disputes the public entity's written response, or if the public entity fails to respond to a claim issued pursuant to this section within the time prescribed, the claimant may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the public entity shall schedule a meet and confer conference within 30 days for settlement of the dispute.

(B) Within 10 business days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, the public entity shall provide the claimant a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. Any disputed portion of the claim, as identified by the contractor in writing, shall be submitted to nonbinding mediation, with the public entity and the claimant sharing the associated costs equally. The public entity and claimant shall mutually agree to a mediator within 10 business days after the disputed portion of the claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator. If mediation is unsuccessful, the parts of the claim remaining in dispute shall be subject to applicable procedures outside this section.

(C) For purposes of this section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.

(D) Unless otherwise agreed to by the public entity and the contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.

(E) This section does not preclude a public entity from requiring arbitration of disputes under private arbitration or the Public Works Contract Arbitration Program, if mediation under this section does not resolve the parties' dispute.

(3) Failure by the public entity to respond to a claim from a contractor within the time periods described in this subdivision or to otherwise meet the time requirements of this section shall result in the claim being deemed rejected in its entirety. A claim that is denied by reason of the public entity's failure to have responded to a claim, or its failure to otherwise meet the time requirements of this section, shall not constitute an adverse finding with regard to the merits of the claim or the responsibility or qualifications of the claimant.

(4) Amounts not paid in a timely manner as required by this section shall bear interest at 7 percent per annum.

(5) If a subcontractor or a lower tier subcontractor lacks legal standing to assert a claim against a public entity because privity of contract does not exist, the contractor may present to the public entity a claim on behalf of a subcontractor or lower tier subcontractor. A subcontractor may request in writing, either on their own behalf or on behalf of a lower tier subcontractor, that the contractor present a claim for work which was performed by the subcontractor or by a lower tier subcontractor on behalf of the subcontractor. The subcontractor requesting that the claim be presented to the public entity shall furnish reasonable documentation to support the claim. Within 45 days of receipt of this written request, the contractor shall notify the subcontractor in writing as to whether the contractor presented the claim to the public entity and, if the original contractor did not present the claim, provide the subcontractor with a statement of the reasons for not having done so.

(e) The text of this section or a summary of it shall be set forth in the plans or specifications for any public works project that may give rise to a claim under this section.

(f) A waiver of the rights granted by this section is void and contrary to public policy, provided, however, that (1) upon receipt of a claim, the parties may mutually agree to waive, in writing, mediation and proceed directly to the commencement of a civil action or binding arbitration, as applicable; and (2) a public entity may prescribe reasonable change order, claim, and dispute resolution procedures and requirements in addition to the provisions of this section, so long as the contractual provisions do not conflict with or otherwise impair the timeframes and procedures set forth in this section.

(g) This section applies to contracts entered into on or after January 1, 2017.

(h) Nothing in this section shall impose liability upon a public entity that makes loans or grants available through a competitive application process, for the failure of an awardee to meet its contractual obligations.

(i) This section shall remain in effect only until January 1, 2027, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2027, deletes or extends that date.

ATTACHMENT NO. 3

COMPLIANCE DOCUMENTS

[Behind this sheet]

Local Assistance Procedures Manual (LAPM) Forms:

- Exhibit 12-G
- Exhibit 12-B
- Exhibit 15-G
- Exhibit 15-H
- Exhibit 16-B
- Exhibit 16-O
- Exhibit 16-Z1
- Exhibit 17-O

ATTACHMENT NO. 4
LABOR RELATION FORMS

[Behind this sheet]

The following list of forms shall be completed and submitted by the contractor during the performance of the contract

LR-1 – 2: Weekly certified payroll statements & Weekly statement of compliance. (WH-347)

LR-3 – 4: Weekly certified Owner Operator listing & Weekly Owner Operator statement of compliance. (CEM-2505)

LR-5: Fringe Benefit statement (submit with First WH-347). (CEM-2501)

LR-6 – 7: Monthly Employment Utilization Report (CC-257) and Instructions for Form CC-257.

LR-8: Contractor’s List of Federal and Non-Federal Work in Bid Condition area. (Submit with First CC257)

LR-9 – 10: Final Minority Business Enterprises Utilization Report (HC-43/CEM-2402F) and Instructions

The following forms shall be posted by the contractor in conspicuous places on the work site where they can be easily read and accessed by workers at any point during the workday. For a project with multiple locations, a portable poster board is acceptable to meet this requirement.

LR-11: Notice of Equal Employment Opportunity

LR-12 – 13: Notice of Labor Compliance Program - English & Spanish

LR-14: Payday Notice: State of California

LR-15 – 20: Department of Fair Employment and Housing: California Law Prohibits Workplace Discrimination and Harassment-English & Spanish

LR-21 – 25: Equal Employment Opportunity is the Law - English & Spanish

LR-26 – 27: “EEO is the Law” Poster Supplement – English & Spanish

LR-28: Employee Rights under the Davis-Bacon Act

LR-29: USDOT Notice of Federal Aid Project

LR-30 – 31: OSHA Job Safety and Health- English & Spanish

ATTACHMENT NO. 5

Project Special Provisions

[Behind this sheet]

ATTACHMENT NO. 6

Federal Prevailing Wage Rates

[Behind this sheet]



Agenda Item

City Council

Item #: 3.28.

9/8/2020

File #: 20-100

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Cash, Public Works Director

1. SUBJECT

Award of Contract to Greencal Construction, Inc. for Roof Improvements of Fire Station 3; Bid No. 20-21.06; SP-4141.

2. SUMMARY

Bids for Roof Improvements of Fire Station 3 project were received and opened on August 20, 2020. Four bidders responded to the Notice Inviting Bids. The apparent low bidder is Greencal Construction, Inc. of Carson, CA for \$109,750.

3. RECOMMENDED ACTION

Approve the contract with Greencal Construction, Inc. in the total amount of \$120,725, representing an original amount of \$109,750, plus a 10% contingency of \$10,975, for Roof Improvements of Fire Station 3; and authorize the Mayor and the City Clerk to execute the agreement on behalf of the City.

4. FISCAL IMPACT

The total expenditure for this contract is \$120,725, including 10% contingency, and will be funded in Fire Station 3 Facility Improvements (20464) through Capital Projects (500).

5. STRATEGIC PLAN GOALS

Goal 1: Provide for a safe community

b: Provide and maintain infrastructure necessary to ensure the safety of the public.

Goal 4: Provide outstanding public service

b: Provide facilities and services to meet customer expectations.

6. DISCUSSION AND BACKGROUND

The 2016 Facilities Condition Assessment Report identified the need to reroof Fire Stations No. 3 (FS 3) located at 1910 Shaffer Street. In addition, the report recommended repair of the existing hose tower at FS 3. FS 3 has an existing hose tower that was originally constructed to allow the drying out of fire hoses after their use; however, due to a change in hose materials, this is no longer practiced. The aging tower is no longer needed and will be demolished.

The informal bid solicitation was advertised on July 30, 2020 for a period of three weeks and bids

were opened on August 20, 2020. Four bids were received as follows:

Rank	Vendor	Bid
1	Greencal Construction, Inc., Carson	\$109,750
2	OCC Builders, Inc., Fountain Valley	\$110,000
3	Best Contracting Services, Inc., Gardena	\$121,849
4	Houck Construction, Inc., Los Angeles	\$179,108

The low bid is about 3% lower than the Engineer's Estimate. Staff checked the references and qualifications for Greencal Construction, Inc. and found them to be acceptable, with adequate years of experience in completing contracts of similar nature to this project. Therefore, staff recommends that Greencal Construction, Inc. be awarded the contract in the total amount of \$120,725, representing an original amount of \$109,750, plus a 10% contingency of \$10,975, for Roof Improvements of Fire Station 3 project.

The proposed project is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) under CEQA guidelines Section 15301 "Existing Facilities" Class 1 (c). The CEQA Notice of Exemption will be recorded with the County Recorder's Office.

Construction is scheduled to begin in October 2020 and is expected to be completed within 30 calendar days.

7. ATTACHMENTS

- Bid Abstract
- Contract Agreement



Agenda Item

City Council

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City of Orange: Summary of Bid Abstracts for:

Roof Improvements on Fire Station 3

Bid No. 20-21.06; Project No. SP-4141

Date of Bid Opening: 8/20/2020

Date of Bid Publication: 7/30/2020

				1		2		3		4			
ENGINEER'S ESTIMATE				Greencal Construction, Inc. Carson, CA Tel. No. (714) 790-1750		OCC Builders, Inc. Fountain Valley, CA Tel. No. (877) 936-2228		Best Contracting Services, Inc. Gardena, CA Tel. No. (310) 328-6969		Houck Construction, Inc. Los Angeles, CA Tel. No. (310) 235-2800			
NO.	DESCRIPTION OF WORK	QUANTITY		UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT	UNIT PRICE	AMOUNT
SEWER LINE REPLACEMENT / MAINTENANCE													
1	Remove Existing Built-Up Roofing and Install Asphalt Shingles. Inclusive of Flashings, Roof Penetrations, Gravel Removal, and Double Underlayment	1	LS	\$ 65,000.00	\$65,000.00	\$74,000.00	\$74,000.00	\$52,000.00	\$52,000.00	\$56,765.00	\$56,765.00	\$54,193.32	\$54,193.32
2	Remove and Install Plywood Sheathing as Required (D)	1,000	SF	\$ 5.50	\$5,500.00	\$6.00	\$6,000.00	\$12.00	\$12,000.00	\$6.00	\$6,000.00	\$16.00	\$16,000.00
3	Remove and Install 2X12 Fascia Trim, Including Painting (D)	100	LF	\$ 22.00	\$2,200.00	\$35.00	\$3,500.00	\$60.00	\$6,000.00	\$15.00	\$1,500.00	\$150.00	\$15,000.00
4	Remove and Install New Seamless Metal Rain Gutters (D)	60	LF	\$ 40.00	\$2,400.00	\$30.00	\$1,800.00	\$134.00	\$8,040.00	\$43.06	\$2,583.60	\$160.72	\$9,643.20
5	Partially Demolish Existing Hose Tower, Reframe Per Plans, Construct 4 Ply Built Up Roofing, Repair Stucco and Paint to Match Existing	1	LS	\$ 38,000.00	\$38,000.00	\$24,450.00	\$24,450.00	\$31,960.00	\$31,960.00	\$55,000.00	\$55,000.00	\$84,271.06	\$84,271.06
Grand Total					\$113,100.00		\$109,750.00		\$110,000.00		\$121,848.60		\$179,107.58

CONTRACT
[Roof Improvements on Fire Station 3 (Bid No. 20-21.06; SP-4141)]

THIS CONTRACT (the “Contract”) is made and entered into as of _____, 2020 (“Effective Date”) by and between the CITY OF ORANGE, a municipal corporation (“City”), and GREENCAL CONSTRUCTION INC, a California corporation (“Contractor”), who agrees as follows.

ARTICLE 1
Work Performed

a. For and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by City, and under the conditions expressed in the two (2) bonds presented to City with this Contract and incorporated herein by this reference, Contractor hereby agrees to and shall do all the work and furnish all the labor, materials, tools and equipment, except such as are mentioned in the specifications to be furnished by City to Contractor, necessary to complete in good workmanship and substantial manner the work (the “Work”) described in:

(1) The Roof Improvements on Fire Station 3 exhibits prepared for City by Eduardo Lopez, and consisting of sheets numbered 1 through 3, inclusive (the “Plans”);

(2) The latest edition of the "City of Orange Standard Plans and Specifications" (the “Orange Book”) with the term "Engineer," as used in the Orange Book and in this Contract, to specifically include the City Engineer (or his/her designee);

(3) The "Standard Specifications for Public Works Construction” (the “Green Book”), and all amendments thereto;

(4) The “City of Orange Standard Special Provisions”;

(5) The Standard Plans; and

(6) Contractor’s Bid Proposal, which is on file with City’s Department of Public Works.

b. Contractor acknowledges that it has received the Plans from City and that a complete copy of the Plans are in its possession and are hereby specifically referred to and by such reference made a part hereof. The Orange Book, Green Book and City of Orange Standard Special Provisions and Standard Plans are on file with City’s Public Works Director and are hereby specifically referred to and by such reference made a part hereof. Contractor hereby acknowledges that it has read, reviewed and understands the Plans, the Orange Book, the Green Book, the Special Provisions, the Standard Plans, and the Encroachment Permit as they relate to the Work, all of which documents shall be referred to herein collectively as the “Plans and Specifications.”

c. Contractor acknowledges the provisions of Chapter 8.28 of the Orange Municipal Code which requires, among other things, that Contractor utilize City's exclusive solid waste hauler for the rental of bins for trash and debris removal and imposes mandatory recycling requirements for self-hauled construction and demolition waste. The terms and conditions set forth in this Contract shall control over any terms and conditions in the Plans and Specifications to the contrary.

d. The Work shall be performed in conformity with the Plans and Specifications and the Bid Proposal and all applicable laws, including any and all applicable federal and state labor laws and standards and applicable prevailing wage requirements and any and all state, federal and local statutes, regulations and ordinances relating to the protection of human health or the environment.

e. Unless and until otherwise notified in writing by City's Public Works Director, City's Principal Civil Engineer, Randy Nguyen ("Authorized City Representative"), shall be the person to whom Contractor will report for the performance of the Work hereunder. It is understood that Contractor's performance hereunder shall be under the direction and supervision of the Authorized City Representative or such other person as City's Public Works Director may designate from time to time, that Contractor shall coordinate the Work hereunder with the Authorized City Representative to the extent required by the Authorized City Representative, and that all performances required hereunder by Contractor shall be performed to the satisfaction of the Authorized City Representative or City's Public Works Director.

f. It is expressly agreed by and between the parties hereto that should there be any conflict between the terms of this instrument and Contractor's Bid Proposal, then this instrument shall control and nothing herein shall be considered as an acceptance of the said terms of said Bid Proposal conflicting herewith.

ARTICLE 2 Commencement of Work

Contractor shall commence the Work provided for in this Contract within fifteen (15) days of the date of the issuance by City of a Notice to Proceed and diligently prosecute completion of the Work within thirty (30) calendar days from such date, unless legal extension is granted in accordance with the terms set forth in the Green Book. Time is of the essence in this Contract. Contractor shall do all things necessary and incidental to the prosecution of Contractor's Work.

ARTICLE 3 Compensation

a. Contractor agrees to receive and accept an amount not to exceed ONE HUNDRED NINE THOUSAND SEVEN HUNDRED FIFTY DOLLARS and 00/100 (\$109,750.00) as compensation for furnishing all materials and doing all the Work contemplated and embraced in this Contract. Said compensation covers (1) all loss or damage arising out of the nature of the Work, from the acts of the elements; (2) any unforeseen difficulties or obstructions which may arise or be encountered in the prosecution of the Work until its acceptance by City, other than as

provided below; (3) all risks of every description connected with the Work; (4) all expenses incurred by or in consequence of the suspension or discontinuance of the Work; and (5) well and faithfully completing the Work, and for the whole thereof, in the manner and according to the Plans and Specifications, and requirements of the Authorized City Representative under them. Retention amounts shall be withheld from progress payments as required by law unless Contractor provides securities in lieu of retention.

b. In addition to the scheduled Work to be performed by the Contractor, the parties recognize that additional, unforeseen work and services may be required by the Authorized City Representative. In anticipation of such contingencies, the sum of TEN THOUSAND NINE HUNDRED SEVENTY-FIVE DOLLARS and 00/100 (\$10,975.00) has been added to the total compensation of this Contract. The Authorized City Representative may approve the additional work and the actual costs incurred by the Contractor in performance of additional work or services in accordance with such amount as the Authorized City Representative and the Contractor may agree upon in advance. Said additional work or services and the amount of compensation therefor, up to the amount of the authorized contingency, shall be memorialized in the form of a Contract Amendment approved by the City Manager on a form acceptable to the City Attorney. The Contractor agrees to perform only that work or those services that are specifically requested by the Authorized City Representative. Any and all additional work and services performed under this Contract shall be completed in such sequence as to assure their completion as expeditiously as is consistent with professional skill and care in accordance with a cost estimate or proposal submitted to and approved by the Authorized City Representative prior to the commencement of such Work or services.

c. The total amount of compensation under this Contract, including contingencies, shall not exceed ONE HUNDRED TWENTY THOUSAND SEVEN HUNDRED TWENTY-FIVE DOLLARS and 00/100 (\$120,725.00).

ARTICLE 4 **Licenses**

Contractor represents that it and any subcontractors it may engage, possess any and all licenses which are required under state or federal law to perform the Work contemplated by this Contract and that Contractor and subcontractors shall maintain all appropriate licenses, including a City of Orange business license, at its cost, during the performance of this Contract.

ARTICLE 5 **Guarantees**

a. Contractor guarantees the construction and installation of all Work included in the Plans and Specifications for which Contractor has been awarded this Contract.

b. Should any of the materials or equipment installed pursuant to this Contract prove defective or should the Work as a whole prove defective, due to faulty equipment, workmanship, materials furnished or methods of installations, or should said Work or any part thereof fail to function properly, as designed, due to any of the above causes within twelve (12) months after the

date on which said Work is accepted by City, Contractor shall make repairs and furnish such materials and equipment as are necessary to be furnished and installed within fifteen (15) calendar days after the receipt of a demand from City.

c. Said Work will be deemed defective within the meaning of this guarantee in the event that it fails to function as originally intended either by the Plans and Specifications of this Contract or by the manufacturer(s) of the equipment incorporated into the Work.

d. In the event repairs are not made within fifteen (15) calendar days after Contractor's receipt of a demand from City, City shall have the unqualified option to make any needed repairs or replacements itself or by any other contractor. Contractor shall reimburse City, upon demand, for all expenses incurred in restoring said Work to the condition contemplated in this Contract, including the cost of any equipment or materials replaced.

e. It is understood that emergency repairs may, by necessity, be made by City. Therefore, when defective equipment, materials or workmanship result in emergency repairs by City, Contractor shall reimburse City, upon demand, for all expenses incurred. Emergency repairs will be deemed as those repairs determined by City's Director of Public Works to be necessary due to an immediate detriment to the health, safety, welfare or convenience of the residents of City.

ARTICLE 6 Water Quality

a. The Santa Ana Regional Water Quality Control Board ("RWQCB") has issued National Pollutant Discharge Elimination System ("NPDES") Permit No. R8-2009-0030 (the "Permit"), which governs storm water and non-storm water discharges resulting from municipal activities performed by City or its contractors. In order to comply with the Permit requirements, the County of Orange has prepared a Drainage Area Management Plan ("DAMP"), containing Model Maintenance Procedures with Best Management Practices ("BMPs") that City and its contractors must adhere to. The Model Maintenance Procedures contain pollution prevention and source control techniques to minimize the impact of those activities upon dry-weather urban runoff, storm water runoff, and receiving water quality. Examples include: wash water from cleaning of sidewalks or parking lots must be collected and disposed of in the sewer or landscaped areas.

b. The Permit, the DAMP and the Model Maintenance Procedures are on file in the office of City's Director of Public Works. Contractor hereby acknowledges that it has read, reviewed and understands the Permit, the DAMP and the Model Maintenance Procedures, as they relate to the Work and hereby shall perform the Work in conformance therewith.

ARTICLE 7 Independent Contractor; Contractor not Agent

a. At all times during the term of this Contract, Contractor shall be an independent contractor and not an employee of City. City shall have the right to control Contractor only insofar

as the result of Contractor's services rendered pursuant to this Contract. City shall not have the right to control the means by which Contractor accomplishes services rendered pursuant to this Contract. Contractor shall, at its sole cost and expense, furnish all facilities, materials and equipment which may be required for furnishing services pursuant to this Contract. Contractor shall be solely responsible for, and shall indemnify, defend and save City harmless from all matters relating to the payment of its subcontractors, agents and employees, including compliance with social security, withholding and all other wages, salaries, benefits, taxes, exactions, and regulations of any nature whatsoever. Contractor acknowledges that Contractor and any subcontractors, agents or employees employed by Contractor shall not, under any circumstances, be considered employees of City, and that they shall not be entitled to any of the benefits or rights afforded employees of City, including, but not limited to, sick leave, vacation leave, holiday pay, Public Employees Retirement System benefits, or health, life, dental, long-term disability or workers' compensation insurance benefits.

b. Except as City may specify in writing, Contractor shall have no authority, express or implied, to act on behalf of City in any capacity whatsoever as an agent. Contractor shall have no authority, express or implied, to bind City to any obligation whatsoever.

ARTICLE 8

Public Work; Prevailing Wage

a. The Work which is the subject of this Contract is a "public work," as that term is defined in Section 1720 of the California Labor Code, for which prevailing wages must be paid. To the extent Contractor's employees will perform any work that falls within any of the classifications for which the Department of Labor Relations of the State of California promulgates prevailing wage determinations, Contractor hereby agrees that Contractor, and any subcontractor under it, shall pay not less than the specified prevailing rates of wages to all such workers. The general prevailing wage determinations for crafts can be located on the website of the Department of Industrial Relations (www.dir.ca.gov/DLSR). Additionally, to perform work under this Contract, Contractor must meet all State registration requirements and criteria, including project compliance monitoring.

b. Attached hereto as Attachment No. 1 and incorporated herein by this reference is a copy of the provisions of Sections 1725.5, 1771, 1771.1, 1771.4, 1775, 1776, 1777.5, 1813 and 1815 of the California Labor Code. Contractor hereby acknowledges that it has read, reviewed and understands those provisions of the Labor Code and shall prosecute and complete the Work under this Contract in strict compliance with all of those terms and provisions.

c. Contractor shall secure the payment of compensation to its employees in accordance with the provisions of Section 3700 of the California Labor Code. Accordingly, and as required by Section 1861 of the California Labor Code, Contractor hereby certifies as follows:

"I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract."

d. Contractor shall indemnify, protect, defend and hold harmless City and its officers, employees, contractors and agents, with counsel reasonably acceptable to City, from and against any and all loss, liability, damage, claim, cost, expense, and/or “increased costs” (including reasonable attorney’s fees, court and litigation costs, and fees of expert witnesses) which result or arise in any way from the noncompliance by Contractor of any applicable local, state and/or federal law, including, without limitation, any applicable federal and/or state labor laws (including, without limitation, the requirement to pay state prevailing wages). It is agreed by the parties that, in connection with the construction of the Work which is the subject of this Contract, Contractor shall bear all risks of payment or non-payment of state prevailing wages. “Increased costs” as used in this paragraph shall have the meaning ascribed to it in Labor Code Section 1781, as the same may be enacted, adopted or amended from time to time. The foregoing indemnity shall survive termination of this Contract.

ARTICLE 9 Equal Employment Opportunity

During the performance of this Contract, Contractor agrees as follows:

a. Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law. Contractor shall ensure that applicants are employed and that employees are treated during employment, without regard to their race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law. Such actions shall include, but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation and selection for training, including apprenticeship. Contractor shall post in conspicuous places, available to employees and applicants for employment, a notice setting forth provisions of this non-discrimination clause.

b. Contractor shall, in all solicitations and advertisements for employees placed by, or on behalf of Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, mental or physical disability, or any other basis prohibited by applicable law.

c. Contractor shall cause the foregoing paragraphs (a) and (b) to be inserted in all subcontracts for any Work covered by this Contract, provided that the foregoing provisions shall not apply to subcontracts for standard commercial supplies or raw materials.

ARTICLE 10 Conflicts of Interest

Contractor agrees that it shall not make, participate in the making, or in any way attempt to use its position as a contractor to influence any decision of City in which Contractor knows or has reason to know that Contractor, its officers, partners, or employees have a financial interest as defined in Section 87103 of the Government Code.

ARTICLE 11
Indemnity

Contractor shall defend, indemnify and hold harmless City and its officers, officials, agents, and employees from and against:

a. Any and all claims, liabilities, losses, damages, penalties, costs or expenses (including reasonable attorneys' fees and court costs) which City may directly or indirectly sustain or suffer arising from or as a result of the death of any person or any accident, injury, loss or damage whatsoever caused to any person or the property of any person which shall occur on or adjacent to the real property which is the subject of this Contract, or in connection with performance of this Contract which may be directly or indirectly caused by the acts or omissions of Contractor or its officers, employees, contractors or agents, or as a consequence of any use, generation, manufacture, storage, disposal, release or threatened release of a hazardous waste or substance. Contractor shall not be responsible for (and such indemnity shall not apply to) any willful misconduct, negligence or breach of this Contract by City or its officers, officials, agents, and employees. The foregoing indemnity shall survive termination of this Contract.

b. Any and all claims under workers' compensation acts and other employee benefit acts with respect to Contractor's employees or Contractor's subcontractor's employees arising out of Contractor's Work under this Contract, including any and all claims under any law pertaining to Contractor's status as an independent contractor.

ARTICLE 12
Insurance

a. Contractor shall procure and maintain for the duration of this Contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Work hereunder and the results of that Work by Contractor, its agents, representatives, employees or subcontractors.

b. Contractor shall maintain the following minimum amount of insurance: the greater of either the limits set forth in (1) through (4), below; or all of the insurance coverage and/or limits carried by or available to Contractor.

- | | | |
|-----------------------|-------------|--|
| (1) General Liability | \$2,000,000 | per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit. |
|-----------------------|-------------|--|

g. All insurance procured and maintained by Contractor shall be issued by insurers admitted to conduct the pertinent line of insurance business in California and having a rating of Grade A or better and Class VII or better by the latest edition of Best Key Rating Guide.

h. Contractor shall immediately notify City if any required insurance lapses or is otherwise modified and cease performance of this Contract unless otherwise directed by City. In such a case, City may procure insurance or self-insure the risk and charge Contractor for such costs and any and all damages resulting therefrom by way of set-off from any sums owed Contractor.

i. Contractor agrees that in the event of loss due to any of the perils for which it has agreed to provide insurance, Contractor shall look solely to its insurance for recovery. Contractor hereby grants to City, on behalf of any insurer providing insurance to either Contractor or City with respect to the services of Contractor herein, a waiver of any right to subrogation which any such insurer may acquire against City by virtue of the payment of any loss under such insurance. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of City for all Work performed by Contractor, its employees, agents and subcontractors. Contractor shall obtain any other endorsement that may be necessary to effect this waiver of subrogation.

j. Contractor shall require and verify that all subcontractors maintain insurance meeting all of the requirements stated herein.

ARTICLE 13 Termination

City, acting through its City Manager or his/her designee, reserves the right to terminate this Contract for any reason by giving five (5) days' written notice of intent to terminate to Contractor. Upon receipt of notice, Contractor shall immediately cease work, unless the notice provides otherwise. Should City terminate this Contract, City shall pay Contractor for services satisfactorily provided and all allowable reimbursements incurred to the date of termination in compliance with this Contract, unless such termination shall be for cause, in which event City may withhold any disputed compensation. City shall not be liable for any claim of lost profits.

ARTICLE 14 Maintenance and Inspection of Records

In accordance with generally accepted accounting principles, Contractor and its subcontractors shall maintain reasonably full and complete books, documents, papers, accounting records and other information (collectively, the "records") pertaining to the costs of and completion of services performed under this Contract. During the term of this Contract and for a period of three (3) years after termination or completion of this Contract, City shall have the right to inspect and/or audit Contractor's records pertaining to the performance of this Contract at Contractor's office. Contractor shall make available all such records for inspection or audit at its offices during normal business hours and upon three (3) days' notice from City, and copies thereof shall be furnished if requested.

ARTICLE 15
Compliance with Laws

a. Contractor shall be knowledgeable of and comply with all local, state and federal laws pertaining to the subject matter hereof or in any way regulating the activities undertaken by Contractor or any subcontractor hereunder.

b. Contractor represents and warrants that it:

(1) Has complied and shall at all times during the term of this Contract comply, in all respects, with all immigration laws, regulations, statutes, rules, codes, and orders, including, without limitation, the Immigration Reform and Control Act of 1986 (IRCA); and

(2) Has not and will not knowingly employ any individual to perform services under this Contract who is ineligible to work in the United States or under the terms of this Contract; and

(3) Has properly maintained, and shall at all times during the term of this Contract properly maintain, all related employment documentation records including, without limitation, the completion and maintenance of the Form I-9 for each of Contractor's employees; and

(4) Has responded, and shall at all times during the term of this Contract respond, in a timely fashion to any government inspection requests relating to immigration law compliance and/or Form I-9 compliance and/or worksite enforcement by the Department of Homeland Security, the Department of Labor, or the Social Security Administration.

c. Contractor shall require all subcontractors and/or subconsultants to make the same representations and warranties required by this Article 15 when hired to perform services under this Contract.

d. Contractor shall, upon request of City, provide a list of all employees working under this Contract and shall provide, to the reasonable satisfaction of City, verification that all such employees are eligible to work in the United States. All costs associated with such verification shall be borne by Contractor. Once such request has been made, Contractor may not change employees working under this Contract without written notice to City, accompanied by the verification required herein for such employees. Contractor shall require all subcontractors and/or sub-consultants to make the same verification when hired to perform services under this Contract.

e. If Contractor, or a subcontractor or subconsultant, knowingly employs an employee providing Work under this Contract who is not authorized to work in the United States, and/or fails to follow federal laws to determine the status of such employee, such shall constitute a material breach of this Contract and may be cause for immediate termination of this Contract by City.

f. Contractor shall indemnify and hold City, its officials and employees harmless for, of and from any loss, including but not limited to fines, penalties and corrective measures, City

may sustain by reason of Contractor's failure to comply with said laws, rules and regulations in connection with the performance of this Contract.

ARTICLE 16
Governing Law and Venue

This Contract shall be construed in accordance with and governed by the laws of the State of California and Contractor shall submit to the jurisdiction of California courts. Venue for any dispute arising under this Contract shall be in Orange County, California.

ARTICLE 17
Integration and Amendment

a. This Contract constitutes the entire agreement of the parties. No other agreement, oral or written, pertaining to the Work to be performed under this Contract shall be of any force or effect unless it is in writing and signed by both parties. Any Work performed which is inconsistent with or in violation of the provisions of this Contract shall not be compensated.

b. Amendments to this Contract must be in writing and signed by both parties. The City Manager is authorized to execute amendments to this Contract up to the amounts specified in Chapter 3.08 of the Orange Municipal Code.

ARTICLE 18
Notice

Except as otherwise provided herein, all notices required under this Contract shall be in writing and delivered personally, by e-mail, or by first class mail, postage prepaid, to each party at the address listed below. Either party may change the notice address by notifying the other party in writing. Notices shall be deemed received upon receipt of same or within three (3) days of deposit in the U.S. Mail, whichever is earlier. Notices sent by e-mail shall be deemed received on the date of the e-mail transmission.

“CONTRACTOR”

“CITY”

Greencal Construction Inc
20720 S Leapwood Ave, Ste. F
Carson, CA 90746

City of Orange
300 E. Chapman Avenue
Orange, CA 92866-1591

Attn: Daniel Khaan

Attn: Martin Varona

Telephone: 714-790-1750
E-Mail: hazel@greencalinc.com

Telephone: 714-744-5563
E-Mail: mvarona@cityoforange.org

ARTICLE 19
Claim Resolution

City and Contractor agree that the claim resolution process applicable to any claim by Contractor in connection with the Work provided herein shall be subject to the procedures set forth in California Public Contract Code Section 9204, attached hereto as Attachment No. 2, and incorporated herein by this reference.

ARTICLE 20
Counterparts

This Contract may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Signatures transmitted via facsimile and electronic mail shall have the same effect as original signatures.

[Remainder of page intentionally left blank; signatures on next page]

IN WITNESS of this Contract, the parties have entered into this Contract as of the year and day first above written.

“CITY”

CITY OF ORANGE, a municipal corporation

By: _____
Mark A. Murphy
Mayor of the City of Orange

CONTRACT, BONDS AND INSURANCE
APPROVED BY:

ATTEST:

Mary E. Binning
Senior Assistant City Attorney

Pamela Coleman, City Clerk

“CONTRACTOR”

GREENCAL CONSTRUCTION INC,
a California corporation

[Note: Signature of Chairman of the Board, President or Vice President is required]

By: _____
Printed Name: _____
Title: _____

[Note: Signature of Secretary, Assistant Secretary, Chief Financial Officer or Assistant Treasurer is also required]

By: _____
Printed Name: _____
Title: _____

Title: _____

ATTACHMENT NO. 1

CALIFORNIA LABOR CODE SECTIONS 1725.5, 1771, 1771.1, 1771.4, 1775, 1776, 1777.5, 1813 and 1815

Section 1725.5. Registration of contractors; mandatory registration; qualifications and application; fees; exempt contractors

A contractor shall be registered pursuant to this section to be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any public work contract that is subject to the requirements of this chapter. For the purposes of this section, "contractor" includes a subcontractor as defined by Section 1722.1.

(a) To qualify for registration under this section, a contractor shall do all of the following:

(1)(A) Register with the Department of Industrial Relations in the manner prescribed by the department and pay an initial nonrefundable application fee of four hundred dollars (\$400) to qualify for registration under this section and an annual renewal fee on or before July 1 of each year thereafter. The annual renewal fee shall be in a uniform amount set by the Director of Industrial Relations, and the initial registration and renewal fees may be adjusted no more than annually by the director to support the costs specified in Section 1771.3.

(B) Beginning June 1, 2019, a contractor may register or renew according to this subdivision in annual increments up to three years from the date of registration. Contractors who wish to do so will be required to prepay the applicable nonrefundable application or renewal fees to qualify for the number of years for which they wish to preregister.

(2) Provide evidence, disclosures, or releases as are necessary to establish all of the following:

(A) Workers' compensation coverage that meets the requirements of Division 4 (commencing with Section 3200) and includes sufficient coverage for any worker whom the contractor employs to perform work that is subject to prevailing wage requirements other than a contractor who is separately registered under this section. Coverage may be evidenced by a current and valid certificate of workers' compensation insurance or certification of self-insurance required under Section 7125 of the Business and Professions Code.

(B) If applicable, the contractor is licensed in accordance with Chapter 9 (commencing with Section 7000) of the Business and Professions Code.

(C) The contractor does not have any delinquent liability to an employee or the state for any assessment of back wages or related damages, interest, fines, or penalties pursuant to any final judgment, order, or determination by a court or any federal, state, or local administrative agency, including a confirmed arbitration award. However, for purposes of this paragraph, the contractor shall not be disqualified for any judgment, order, or determination that is under appeal, provided that the contractor has secured the payment of any amount eventually found due through a bond or other appropriate means.

(D) The contractor is not currently debarred under Section 1777.1 or under any other federal or state law providing for the debarment of contractors from public works.

(E) The contractor has not bid on a public works contract, been listed in a bid proposal, or engaged in the performance of a contract for public works without being lawfully registered in accordance with this section, within the preceding 12 months or since the effective date of the requirements set forth in subdivision (e), whichever is earlier. If a contractor is found to be in violation of the requirements of this paragraph, the period

of disqualification shall be waived if both of the following are true:

(i) The contractor has not previously been found to be in violation of the requirements of this paragraph within the preceding 12 months.

(ii) The contractor pays an additional nonrefundable penalty registration fee of two thousand dollars (\$2,000).

(b) Fees received pursuant to this section shall be deposited in the State Public Works Enforcement Fund established by Section 1771.3 and shall be used only for the purposes specified in that section.

(c) A contractor who fails to pay the renewal fee required under paragraph (1) of subdivision (a) on or before the expiration of any prior period of registration shall be prohibited from bidding on or engaging in the performance of any contract for public work until once again registered pursuant to this section. If the failure to pay the renewal fee was inadvertent, the contractor may renew its registration retroactively by paying an additional nonrefundable penalty renewal fee equal to the amount of the renewal fee within 90 days of the due date of the renewal fee.

(d) If, after a body awarding a contract accepts the contractor's bid or awards the contract, the work covered by the bid or contract is determined to be a public work to which Section 1771 applies, either as the result of a determination by the director pursuant to Section 1773.5 or a court decision, the requirements of this section shall not apply, subject to the following requirements:

(1) The body that awarded the contract failed, in the bid specification or in the contract documents, to identify as a public work that portion of the work that the determination or decision subsequently classifies as a public work.

(2) Within 20 days following service of notice on the awarding body of a determination by the Director of Industrial Relations pursuant to Section 1773.5 or a decision by a court that the contract was for public work as defined in this chapter, the contractor and any subcontractors are registered under this section or are replaced by a contractor or subcontractors who are registered under this section.

(3) The requirements of this section shall apply prospectively only to any subsequent bid, bid proposal, contract, or work performed after the awarding body is served with notice of the determination or decision referred to in paragraph (2).

(e) The requirements of this section shall apply to any bid proposal submitted on or after March 1, 2015, to any contract for public work, as defined in this chapter, executed on or after April 1, 2015, and to any work performed under a contract for public work on or after January 1, 2018, regardless of when the contract for public work was executed.

(f) This section does not apply to work performed on a public works project of twenty-five thousand dollars (\$25,000) or less when the project is for construction, alteration, demolition, installation, or repair work or to work performed on a public works project of fifteen thousand dollars (\$15,000) or less when the project is for maintenance work.

Section 1771. Payment of general prevailing rate

Except for public works projects of one thousand dollars (\$1,000) or less, not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the public work is performed, and not less than the general prevailing rate of per diem wages for holiday and overtime work fixed as provided in this chapter, shall be paid to all workers employed on public works.

This section is applicable only to work performed under contract, and is not applicable to work carried out by a public agency with its own forces. This section is applicable to contracts let for maintenance work.

Section 1771.1. Registration as a contractor or subcontractor required prior to bid submission; exceptions; violations; penalties

(a) A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

(b) Notice of the requirement described in subdivision (a) shall be included in all bid invitations and public works contracts, and a bid shall not be accepted nor any contract or subcontract entered into without proof of the contractor or subcontractor's current registration to perform public work pursuant to Section 1725.5.

(c) An inadvertent error in listing a subcontractor who is not registered pursuant to Section 1725.5 in a bid proposal shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive, provided that any of the following apply:

(1) The subcontractor is registered prior to the bid opening.

(2) Within 24 hours after the bid opening, the subcontractor is registered and has paid the penalty registration fee specified in subparagraph (E) of paragraph (2) of subdivision (a) of Section 1725.5.

(3) The subcontractor is replaced by another registered subcontractor pursuant to Section 4107 of the Public Contract Code.

(d) Failure by a subcontractor to be registered to perform public work as required by subdivision (a) shall be grounds under Section 4107 of the Public Contract Code for the contractor, with the consent of the awarding authority, to substitute a subcontractor who is registered to perform public work pursuant to Section 1725.5 in place of the unregistered subcontractor.

(e) The department shall maintain on its Internet Web site a list of contractors who are currently registered to perform public work pursuant to Section 1725.5.

(f) A contract entered into with any contractor or subcontractor in violation of subdivision (a) shall be subject to cancellation, provided that a contract for public work shall not be unlawful, void, or voidable solely due to the failure of the awarding body, contractor, or any subcontractor to comply with the requirements of Section 1725.5 or this section.

(g) If the Labor Commissioner or his or her designee determines that a contractor or subcontractor engaged in the performance of any public work contract without having been registered in accordance with this section, the contractor or subcontractor shall forfeit, as a civil penalty to the state, one hundred dollars (\$100) for each day of work performed in violation of the registration requirement, not to exceed an aggregate penalty of eight thousand dollars (\$8,000) in addition to any penalty registration fee assessed pursuant to clause (ii) of subparagraph (E) of paragraph (2) of subdivision (a) of Section 1725.5.

(h)(1) In addition to, or in lieu of, any other penalty or sanction authorized pursuant to this chapter, a higher

tiered public works contractor or subcontractor who is found to have entered into a subcontract with an unregistered lower tier subcontractor to perform any public work in violation of the requirements of Section 1725.5 or this section shall be subject to forfeiture, as a civil penalty to the state, of one hundred dollars (\$100) for each day the unregistered lower tier subcontractor performs work in violation of the registration requirement, not to exceed an aggregate penalty of ten thousand dollars (\$10,000).

(2) The Labor Commissioner shall use the same standards specified in subparagraph (A) of paragraph (2) of subdivision (a) of Section 1775 when determining the severity of the violation and what penalty to assess, and may waive the penalty for a first time violation that was unintentional and did not hinder the Labor Commissioner's ability to monitor and enforce compliance with the requirements of this chapter.

(3) A higher tiered public works contractor or subcontractor shall not be liable for penalties assessed pursuant to paragraph (1) if the lower tier subcontractor's performance is in violation of the requirements of Section 1725.5 due to the revocation of a previously approved registration.

(4) A subcontractor shall not be liable for any penalties assessed against a higher tiered public works contractor or subcontractor pursuant to paragraph (1). A higher tiered public works contractor or subcontractor may not require a lower tiered subcontractor to indemnify or otherwise be liable for any penalties pursuant to paragraph (1).

(i) The Labor Commissioner or his or her designee shall issue a civil wage and penalty assessment, in accordance with the provisions of Section 1741, upon determination of penalties pursuant to subdivision (g) and subparagraph (B) of paragraph (1) of subdivision (h). Review of a civil wage and penalty assessment issued under this subdivision may be requested in accordance with the provisions of Section 1742. The regulations of the Director of Industrial Relations, which govern proceedings for review of civil wage and penalty assessments and the withholding of contract payments under Article 1 (commencing with Section 1720) and Article 2 (commencing with Section 1770), shall apply.

(j)(1) Where a contractor or subcontractor engages in the performance of any public work contract without having been registered in violation of the requirements of Section 1725.5 or this section, the Labor Commissioner shall issue and serve a stop order prohibiting the use of the unregistered contractor or the unregistered subcontractor on all public works until the unregistered contractor or unregistered subcontractor is registered. The stop order shall not apply to work by registered contractors or subcontractors on the public work.

(2) A stop order may be personally served upon the contractor or subcontractor by either of the following methods:

(A) Manual delivery of the order to the contractor or subcontractor personally.

(B) Leaving signed copies of the order with the person who is apparently in charge at the site of the public work and by thereafter mailing copies of the order by first class mail, postage prepaid to the contractor or subcontractor at one of the following:

(i) The address of the contractor or subcontractor on file with either the Secretary of State or the Contractors' State License Board.

(ii) If the contractor or subcontractor has no address on file with the Secretary of State or the Contractors' State License Board, the address of the site of the public work.

(3) The stop order shall be effective immediately upon service and shall be subject to appeal by the party contracting with the unregistered contractor or subcontractor, by the unregistered contractor or subcontractor,

or both. The appeal, hearing, and any further review of the hearing decision shall be governed by the procedures, time limits, and other requirements specified in subdivision (a) of Section 238.1.

(4) Any employee of an unregistered contractor or subcontractor who is affected by a work stoppage ordered by the commissioner pursuant to this subdivision shall be paid at his or her regular hourly prevailing wage rate by that employer for any hours the employee would have worked but for the work stoppage, not to exceed 10 days.

(k) Failure of a contractor or subcontractor, owner, director, officer, or managing agent of the contractor or subcontractor to observe a stop order issued and served upon him or her pursuant to subdivision (j) is guilty of a misdemeanor punishable by imprisonment in county jail not exceeding 60 days or by a fine not exceeding ten thousand dollars (\$10,000), or both.

(l) This section shall apply to any bid proposal submitted on or after March 1, 2015, and any contract for public work entered into on or after April 1, 2015. This section shall also apply to the performance of any public work, as defined in this chapter, on or after January 1, 2018, regardless of when the contract for public work was entered.

(m) Penalties received pursuant to this section shall be deposited in the State Public Works Enforcement Fund established by Section 1771.3 and shall be used only for the purposes specified in that section.

(n) This section shall not apply to work performed on a public works project of twenty-five thousand dollars (\$25,000) or less when the project is for construction, alteration, demolition, installation, or repair work or to work performed on a public works project of fifteen thousand dollars (\$15,000) or less when the project is for maintenance work.

Section 1771.4. Additional requirements when bidding and awarding public works contracts

(a) All of the following are applicable to all public works projects that are otherwise subject to the requirements of this chapter:

(1) The call for bids and contract documents shall specify that the project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

(2) The awarding body shall post or require the prime contractor to post job site notices, as prescribed by regulation.

(3) Each contractor and subcontractor shall furnish the records specified in Section 1776 directly to the Labor Commissioner, in the following manner:

(A) At least monthly or more frequently if specified in the contract with the awarding body.

(B) In a format prescribed by the Labor Commissioner.

(4) If the contractor or subcontractor is not registered pursuant to Section 1725.5 and is performing work on a project for which registration is not required because of subdivision (f) of Section 1725.5, the unregistered contractor or subcontractor is not required to furnish the records specified in Section 1776 directly to the Labor Commissioner but shall retain the records specified in Section 1776 for at least three years after completion of the work.

(5) The department shall undertake those activities it deems necessary to monitor and enforce compliance with prevailing wage requirements.

(b) The Labor Commissioner may exempt a public works project from compliance with all or part of the requirements of subdivision (a) if either of the following occurs:

(1) The awarding body has enforced an approved labor compliance program, as defined in Section 1771.5, on all public works projects under its authority, except those deemed exempt pursuant to subdivision (a) of Section 1771.5, continuously since December 31, 2011.

(2) The awarding body has entered into a collective bargaining agreement that binds all contractors performing work on the project and that includes a mechanism for resolving disputes about the payment of wages.

(c) The requirements of paragraph (1) of subdivision (a) shall only apply to contracts for public works projects awarded on or after January 1, 2015.

(d) The requirements of paragraph (3) of subdivision (a) shall apply to all contracts for public work, whether new or ongoing, on or after January 1, 2016.

Section 1775. Penalties for violations

(a)(1) The contractor and any subcontractor under the contractor shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit not more than two hundred dollars (\$200) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rates as determined by the director for the work or craft in which the worker is employed for any public work done under the contract by the contractor or, except as provided in subdivision (b), by any subcontractor under the contractor.

(2)(A) The amount of the penalty shall be determined by the Labor Commissioner based on consideration of both of the following:

(i) Whether the failure of the contractor or subcontractor to pay the correct rate of per diem wages was a good faith mistake and, if so, the error was promptly and voluntarily corrected when brought to the attention of the contractor or subcontractor.

(ii) Whether the contractor or subcontractor has a prior record of failing to meet its prevailing wage obligations.

(B)(i) The penalty may not be less than forty dollars (\$40) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, unless the failure of the contractor or subcontractor to pay the correct rate of per diem wages was a good faith mistake and, if so, the error was promptly and voluntarily corrected when brought to the attention of the contractor or subcontractor.

(ii) The penalty may not be less than eighty dollars (\$80) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, if the contractor or subcontractor has been assessed penalties within the previous three years for failing to meet its prevailing wage obligations on a separate contract, unless those penalties were subsequently withdrawn or overturned.

(iii) The penalty may not be less than one hundred twenty dollars (\$120) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, if the Labor Commissioner determines that the violation was willful, as defined in subdivision (c) of Section 1777.1.

(C) If the amount due under this section is collected from the contractor or subcontractor, any outstanding wage claim under Chapter 1 (commencing with Section 1720) of Part 7 of Division 2 against that contractor or subcontractor shall be satisfied before applying that amount to the penalty imposed on that contractor or subcontractor pursuant to this section.

(D) The determination of the Labor Commissioner as to the amount of the penalty shall be reviewable only for abuse of discretion.

(E) The difference between the prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing wage rate shall be paid to each worker by the contractor or subcontractor, and the body awarding the contract shall cause to be inserted in the contract a stipulation that this section will be complied with.

(b) If a worker employed by a subcontractor on a public works project is not paid the general prevailing rate of per diem wages by the subcontractor, the prime contractor of the project is not liable for any penalties under subdivision (a) unless the prime contractor had knowledge of that failure of the subcontractor to pay the specified prevailing rate of wages to those workers or unless the prime contractor fails to comply with all of the following requirements:

(1) The contract executed between the contractor and the subcontractor for the performance of work on the public works project shall include a copy of the provisions of this section and Sections 1771, 1776, 1777.5, 1813, and 1815.

(2) The contractor shall monitor the payment of the specified general prevailing rate of per diem wages by the subcontractor to the employees, by periodic review of the certified payroll records of the subcontractor.

(3) Upon becoming aware of the failure of the subcontractor to pay his or her workers the specified prevailing rate of wages, the contractor shall diligently take corrective action to halt or rectify the failure, including, but not limited to, retaining sufficient funds due the subcontractor for work performed on the public works project.

(4) Prior to making final payment to the subcontractor for work performed on the public works project, the contractor shall obtain an affidavit signed under penalty of perjury from the subcontractor that the subcontractor has paid the specified general prevailing rate of per diem wages to his or her employees on the public works project and any amounts due pursuant to Section 1813.

(c) The Division of Labor Standards Enforcement shall notify the contractor on a public works project within 15 days of the receipt by the Division of Labor Standards Enforcement of a complaint of the failure of a subcontractor on that public works project to pay workers the general prevailing rate of per diem wages.

Section 1776. Payroll records; retention; inspection; redacted information; agencies entitled to receive nonredacted copies of certified records; noncompliance penalties; rules

(a) Each contractor and subcontractor shall keep accurate payroll records, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the public work. Each payroll record shall contain or be verified by a written declaration that it is made under penalty of perjury, stating both of the following:

(1) The information contained in the payroll record is true and correct.

(2) The employer has complied with the requirements of Sections 1771, 1811, and 1815 for any work performed by his or her employees on the public works project.

(b) The payroll records enumerated under subdivision (a) shall be certified and shall be available for inspection at all reasonable hours at the principal office of the contractor on the following basis:

(1) A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request.

(2) A certified copy of all payroll records enumerated in subdivision (a) shall be made available for inspection or furnished upon request to a representative of the body awarding the contract and the Division of Labor Standards Enforcement of the Department of Industrial Relations.

(3) A certified copy of all payroll records enumerated in subdivision (a) shall be made available upon request by the public for inspection or for copies thereof. However, a request by the public shall be made through either the body awarding the contract or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to paragraph (2), the requesting party shall, prior to being provided the records, reimburse the costs of preparation by the contractor, subcontractors, and the entity through which the request was made. The public may not be given access to the records at the principal office of the contractor.

(c) Unless required to be furnished directly to the Labor Commissioner in accordance with paragraph (3) of subdivision (a) of Section 1771.4, the certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the division. The payroll records may consist of printouts of payroll data that are maintained as computer records, if the printouts contain the same information as the forms provided by the division and the printouts are verified in the manner specified in subdivision (a).

(d) A contractor or subcontractor shall file a certified copy of the records enumerated in subdivision (a) with the entity that requested the records within 10 days after receipt of a written request.

(e) Except as provided in subdivision (f), any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the awarding body or the Division of Labor Standards Enforcement shall be marked or obliterated to prevent disclosure of an individual's name, address, and social security number. The name and address of the contractor awarded the contract or the subcontractor performing the contract shall not be marked or obliterated. Any copy of records made available for inspection by, or furnished to, a multiemployer Taft-Hartley trust fund (29 U.S.C. Sec. 186(c)(5)) that requests the records for the purposes of allocating contributions to participants shall be marked or obliterated only to prevent disclosure of an individual's full social security number, but shall provide the last four digits of the social security number. Any copy of records made available for inspection by, or furnished to, a joint labor-management committee established pursuant to the federal Labor Management Cooperation Act of 1978 (29 U.S.C. Sec. 175a) shall be marked or obliterated only to prevent disclosure of an individual's social security number.

(f)(1) Notwithstanding any other provision of law, agencies that are included in the Joint Enforcement Strike Force on the Underground Economy established pursuant to Section 329 of the Unemployment Insurance Code and other law enforcement agencies investigating violations of law shall, upon request, be provided nonredacted copies of certified payroll records. Any copies of records or certified payroll made available for inspection and furnished upon request to the public by an agency included in the Joint Enforcement Strike

Force on the Underground Economy or to a law enforcement agency investigating a violation of law shall be marked or redacted to prevent disclosure of an individual's name, address, and social security number.

(2) An employer shall not be liable for damages in a civil action for any reasonable act or omission taken in good faith in compliance with this subdivision.

(g) The contractor shall inform the body awarding the contract of the location of the records enumerated under subdivision (a), including the street address, city, and county, and shall, within five working days, provide a notice of a change of location and address.

(h) The contractor or subcontractor has 10 days in which to comply subsequent to receipt of a written notice requesting the records enumerated in subdivision (a). In the event that the contractor or subcontractor fails to comply within the 10-day period, he or she shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit one hundred dollars (\$100) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due. A contractor is not subject to a penalty assessment pursuant to this section due to the failure of a subcontractor to comply with this section.

(i) The body awarding the contract shall cause to be inserted in the contract stipulations to effectuate this section.

(j) The director shall adopt rules consistent with the California Public Records Act (Chapter 3.5 (commencing with Section 6250) of Division 7 of Title 1 of the Government Code) and the Information Practices Act of 1977 (Title 1.8 (commencing with Section 1798) of Part 4 of Division 3 of the Civil Code) governing the release of these records, including the establishment of reasonable fees to be charged for reproducing copies of records required by this section.

Section 1777.5. Employment of registered apprentices; wages; standards; number; apprenticeable craft or trade; exemptions; contributions; compliance program

(a)(1) This chapter does not prevent the employment upon public works of properly registered apprentices who are active participants in an approved apprenticeship program.

(2) For purposes of this chapter, "apprenticeship program" means a program under the jurisdiction of the California Apprenticeship Council established pursuant to Section 3070.

(b)(1) Every apprentice employed upon public works shall be paid the prevailing rate of per diem wages for apprentices in the trade to which he or she is registered and shall be employed only at the work of the craft or trade to which he or she is registered.

(2) Unless otherwise provided by a collective bargaining agreement, when a contractor requests the dispatch of an apprentice pursuant to this section to perform work on a public works project and requires the apprentice to fill out an application or undergo testing, training, an examination, or other preemployment process as a condition of employment, the apprentice shall be paid for the time spent on the required preemployment activity, including travel time to and from the required activity, if any, at the prevailing rate of per diem wages for apprentices in the trade to which he or she is registered. Unless otherwise provided by a collective bargaining agreement, a contractor is not required to compensate an apprentice for the time spent on preemployment activities if the apprentice is required to take a preemployment drug or alcohol test and he or she fails to pass that test.

(c) Only apprentices, as defined in Section 3077, who are in training under apprenticeship standards that have been approved by the Chief of the Division of Apprenticeship Standards and who are parties to written apprentice agreements under Chapter 4 (commencing with Section 3070) of Division 3 are eligible to be employed at the apprentice wage rate on public works. The employment and training of each apprentice shall be in accordance with either of the following:

(1) The apprenticeship standards and apprentice agreements under which he or she is training.

(2) The rules and regulations of the California Apprenticeship Council.

(d) If the contractor to whom the contract is awarded by the state or any political subdivision, in performing any of the work under the contract, employs workers in any apprenticeable craft or trade, the contractor shall employ apprentices in at least the ratio set forth in this section and may apply to any apprenticeship program in the craft or trade that can provide apprentices to the site of the public work for a certificate approving the contractor under the apprenticeship standards for the employment and training of apprentices in the area or industry affected. However, the decision of the apprenticeship program to approve or deny a certificate shall be subject to review by the Administrator of Apprenticeship. The apprenticeship program or programs, upon approving the contractor, shall arrange for the dispatch of apprentices to the contractor. A contractor covered by an apprenticeship program's standards shall not be required to submit any additional application in order to include additional public works contracts under that program. "Apprenticeable craft or trade," as used in this section, means a craft or trade determined as an apprenticeable occupation in accordance with rules and regulations prescribed by the California Apprenticeship Council. As used in this section, "contractor" includes any subcontractor under a contractor who performs any public works not excluded by subdivision (o).

(e) Before commencing work on a contract for public works, every contractor shall submit contract award information to an applicable apprenticeship program that can supply apprentices to the site of the public work. The information submitted shall include an estimate of journeyman hours to be performed under the contract, the number of apprentices proposed to be employed, and the approximate dates the apprentices would be employed. A copy of this information shall also be submitted to the awarding body, if requested by the awarding body. Within 60 days after concluding work on the contract, each contractor and subcontractor shall submit to the awarding body, if requested, and to the apprenticeship program a verified statement of the journeyman and apprentice hours performed on the contract. The information under this subdivision shall be public. The apprenticeship programs shall retain this information for 12 months.

(f) The apprenticeship program supplying apprentices to the area of the site of the public work shall ensure equal employment and affirmative action in apprenticeship for women and minorities.

(g) The ratio of work performed by apprentices to journeymen employed in a particular craft or trade on the public work may be no higher than the ratio stipulated in the apprenticeship standards under which the apprenticeship program operates if the contractor agrees to be bound by those standards. However, except as otherwise provided in this section, in no case shall the ratio be less than one hour of apprentice work for every five hours of journeyman work.

(h) This ratio of apprentice work to journeyman work shall apply during any day or portion of a day when any journeyman is employed at the jobsite and shall be computed on the basis of the hours worked during the day by journeymen so employed. Any work performed by a journeyman in excess of eight hours per day or 40 hours per week shall not be used to calculate the ratio. The contractor shall employ apprentices for the number of hours computed as above before the end of the contract or, in the case of a subcontractor, before the end of the subcontract. However, the contractor shall endeavor, to the greatest extent possible, to employ

apprentices during the same time period that the journeymen in the same craft or trade are employed at the jobsite. When an hourly apprenticeship ratio is not feasible for a particular craft or trade, the Administrator of Apprenticeship, upon application of an apprenticeship program, may order a minimum ratio of not less than one apprentice for each five journeymen in a craft or trade classification.

(i) A contractor covered by this section who has agreed to be covered by an apprenticeship program's standards upon the issuance of the approval certificate, or who has been previously approved for an apprenticeship program in the craft or trade, shall employ the number of apprentices or the ratio of apprentices to journeymen stipulated in the applicable apprenticeship standards, but in no event less than the 1-to-5 ratio required by subdivision (g).

(j) Upon proper showing by a contractor that he or she employs apprentices in a particular craft or trade in the state on all of his or her contracts on an annual average of not less than one hour of apprentice work for every five hours of labor performed by journeymen, the Administrator of Apprenticeship may grant a certificate exempting the contractor from the 1-to-5 hourly ratio, as set forth in this section for that craft or trade.

(k) An apprenticeship program has the discretion to grant to a participating contractor or contractor association a certificate, which shall be subject to the approval of the Administrator of Apprenticeship, exempting the contractor from the 1-to-5 ratio set forth in this section when it finds that any one of the following conditions is met:

(1) Unemployment for the previous three-month period in the area exceeds an average of 15 percent.

(2) The number of apprentices in training in the area exceeds a ratio of 1 to 5.

(3) There is a showing that the apprenticeable craft or trade is replacing at least one-thirtieth of its journeymen annually through apprenticeship training, either on a statewide basis or on a local basis.

(4) Assignment of an apprentice to any work performed under a public works contract would create a condition that would jeopardize his or her life or the life, safety, or property of fellow employees or the public at large, or the specific task to which the apprentice is to be assigned is of a nature that training cannot be provided by a journeyman.

(l) If an exemption is granted pursuant to subdivision (k) to an organization that represents contractors in a specific trade from the 1-to-5 ratio on a local or statewide basis, the member contractors shall not be required to submit individual applications for approval to local joint apprenticeship committees, if they are already covered by the local apprenticeship standards.

(m)(1) A contractor to whom a contract is awarded, who, in performing any of the work under the contract, employs journeymen or apprentices in any apprenticeable craft or trade shall contribute to the California Apprenticeship Council the same amount that the director determines is the prevailing amount of apprenticeship training contributions in the area of the public works site. A contractor may take as a credit for payments to the council any amounts paid by the contractor to an approved apprenticeship program that can supply apprentices to the site of the public works project. The contractor may add the amount of the contributions in computing his or her bid for the contract.

(2)(A) At the conclusion of the 2002-03 fiscal year and each fiscal year thereafter, the California Apprenticeship Council shall distribute training contributions received by the council under this subdivision, less the expenses of the Department of Industrial Relations for administering this subdivision, by making

grants to approved apprenticeship programs for the purpose of training apprentices. The grant funds shall be distributed as follows:

(i) If there is an approved multiemployer apprenticeship program serving the same craft or trade and geographic area for which the training contributions were made to the council, a grant to that program shall be made.

(ii) If there are two or more approved multiemployer apprenticeship programs serving the same craft or trade and county for which the training contributions were made to the council, the grant shall be divided among those programs based on the number of apprentices from that county registered in each program.

(iii) All training contributions not distributed under clauses (i) and (ii) shall be used to defray the future expenses of the Department of Industrial Relations for the administration and enforcement of apprenticeship and preapprenticeship standards and requirements under this code.

(B) An apprenticeship program shall only be eligible to receive grant funds pursuant to this subdivision if the apprenticeship program agrees, prior to the receipt of any grant funds, to keep adequate records that document the expenditure of grant funds and to make all records available to the Department of Industrial Relations so that the Department of Industrial Relations is able to verify that grant funds were used solely for training apprentices. For purposes of this subparagraph, adequate records include, but are not limited to, invoices, receipts, and canceled checks that account for the expenditure of grant funds. This subparagraph shall not be deemed to require an apprenticeship program to provide the Department of Industrial Relations with more documentation than is necessary to verify the appropriate expenditure of grant funds made pursuant to this subdivision.

(C) The Department of Industrial Relations shall verify that grants made pursuant to this subdivision are used solely to fund training apprentices. If an apprenticeship program is unable to demonstrate how grant funds are expended or if an apprenticeship program is found to be using grant funds for purposes other than training apprentices, then the apprenticeship program shall not be eligible to receive any future grant pursuant to this subdivision and the Department of Industrial Relations may initiate the process to rescind the registration of the apprenticeship program.

(3) All training contributions received pursuant to this subdivision shall be deposited in the Apprenticeship Training Contribution Fund, which is hereby created in the State Treasury. Upon appropriation by the Legislature, all moneys in the Apprenticeship Training Contribution Fund shall be used for the purpose of carrying out this subdivision and to pay the expenses of the Department of Industrial Relations.

(n) The body awarding the contract shall cause to be inserted in the contract stipulations to effectuate this section. The stipulations shall fix the responsibility of compliance with this section for all apprenticeable occupations with the prime contractor.

(o) This section does not apply to contracts of general contractors or to contracts of specialty contractors not bidding for work through a general or prime contractor when the contracts of general contractors or those specialty contractors involve less than thirty thousand dollars (\$30,000).

(p) An awarding body that implements an approved labor compliance program in accordance with subdivision (b) of Section 1771.5 may, with the approval of the director, assist in the enforcement of this section under the terms and conditions prescribed by the director.

Section 1813. Forfeiture for violations; contract stipulation; report of violations

The contractor or subcontractor shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit twenty- five dollars (\$25) for each worker employed in the execution of the contract by the respective contractor or subcontractor for each calendar day during which the worker is required or permitted to work more than 8 hours in any one calendar day and 40 hours in any one calendar week in violation of the provisions of this article. In awarding any contract for public work, the awarding body shall cause to be inserted in the contract a stipulation to this effect. The awarding body shall take cognizance of all violations of this article committed in the course of the execution of the contract, and shall report them to the Division of Labor Standards Enforcement.

Section 1815. Overtime

Notwithstanding the provisions of Sections 1810 to 1814, inclusive, of this code, and notwithstanding any stipulation inserted in any contract pursuant to the requirements of said sections, work performed by employees of contractors in excess of 8 hours per day, and 40 hours during any one week, shall be permitted upon public work upon compensation for all hours worked in excess of 8 hours per day at not less than 1 ½ times the basic rate of pay.

ATTACHMENT NO. 2

CALIFORNIA PUBLIC CONTRACT CODE SECTION 9204

Section 9204. Legislative findings and declarations regarding timely and complete payment of contractors for public works projects; claims process (Eff: January 1, 2017)

(a) The Legislature finds and declares that it is in the best interests of the state and its citizens to ensure that all construction business performed on a public works project in the state that is complete and not in dispute is paid in full and in a timely manner.

(b) Notwithstanding any other law, including, but not limited to, Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2, Chapter 10 (commencing with Section 19100) of Part 2, and Article 1.5 (commencing with Section 20104) of Chapter 1 of Part 3, this section shall apply to any claim by a contractor in connection with a public works project.

(c) For purposes of this section:

(1) "Claim" means a separate demand by a contractor sent by registered mail or certified mail with return receipt requested, for one or more of the following:

(A) A time extension, including, without limitation, for relief from damages or penalties for delay assessed by a public entity under a contract for a public works project.

(B) Payment by the public entity of money or damages arising from work done by, or on behalf of, the contractor pursuant to the contract for a public works project and payment for which is not otherwise expressly provided or to which the claimant is not otherwise entitled.

(C) Payment of an amount that is disputed by the public entity.

(2) "Contractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who has entered into a direct contract with a public entity for a public works project.

(3)(A) "Public entity" means, without limitation, except as provided in subparagraph (B), a state agency, department, office, division, bureau, board, or commission, the California State University, the University of California, a city, including a charter city, county, including a charter county, city and county, including a charter city and county, district, special district, public authority, political subdivision, public corporation, or nonprofit transit corporation wholly owned by a public agency and formed to carry out the purposes of the public agency.

(B) "Public entity" shall not include the following:

(i) The Department of Water Resources as to any project under the jurisdiction of that department.

(ii) The Department of Transportation as to any project under the jurisdiction of that department.

(iii) The Department of Parks and Recreation as to any project under the jurisdiction of that department.

(iv) The Department of Corrections and Rehabilitation with respect to any project under its jurisdiction pursuant to Chapter 11 (commencing with Section 7000) of Title 7 of Part 3 of the Penal Code.

(v) The Military Department as to any project under the jurisdiction of that department.

(vi) The Department of General Services as to all other projects.

(vii) The High-Speed Rail Authority.

(4) "Public works project" means the erection, construction, alteration, repair, or improvement of any public structure, building, road, or other public improvement of any kind.

(5) "Subcontractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who either is in direct contract with a contractor or is a lower tier subcontractor.

(d)(1)(A) Upon receipt of a claim pursuant to this section, the public entity to which the claim applies shall conduct a reasonable review of the claim and, within a period not to exceed 45 days, shall provide the claimant a written statement identifying what portion of the claim is disputed and what portion is undisputed. Upon receipt of a claim, a public entity and a contractor may, by mutual agreement, extend the time period provided in this subdivision.

(B) The claimant shall furnish reasonable documentation to support the claim.

(C) If the public entity needs approval from its governing body to provide the claimant a written statement identifying the disputed portion and the undisputed portion of the claim, and the governing body does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified mail, return receipt requested, the public entity shall have up to three days following the next duly publicly noticed meeting of the governing body after the 45-day period, or extension, expires to provide the claimant a written statement identifying the disputed portion and the undisputed portion.

(D) Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. If the public entity fails to issue a written statement, paragraph (3) shall apply.

(2)(A) If the claimant disputes the public entity's written response, or if the public entity fails to respond to a claim issued pursuant to this section within the time prescribed, the claimant may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the public entity shall schedule a meet and confer conference within 30 days for settlement of the dispute.

(B) Within 10 business days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, the public entity shall provide the claimant a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. Any disputed portion of the claim, as identified by the contractor in writing, shall be submitted to nonbinding mediation, with the public entity and the claimant sharing the associated costs equally. The public entity and claimant shall mutually agree to a mediator within 10 business days after the disputed portion of the claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator. If mediation is unsuccessful, the parts of the claim remaining in dispute shall be subject to applicable procedures outside this section.

(C) For purposes of this section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.

(D) Unless otherwise agreed to by the public entity and the contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.

(E) This section does not preclude a public entity from requiring arbitration of disputes under private arbitration or the Public Works Contract Arbitration Program, if mediation under this section does not resolve the parties' dispute.

(3) Failure by the public entity to respond to a claim from a contractor within the time periods described in this subdivision or to otherwise meet the time requirements of this section shall result in the claim being deemed rejected in its entirety. A claim that is denied by reason of the public entity's failure to have responded to a claim, or its failure to otherwise meet the time requirements of this section, shall not constitute an adverse finding with regard to the merits of the claim or the responsibility or qualifications of the claimant.

(4) Amounts not paid in a timely manner as required by this section shall bear interest at 7 percent per annum.

(5) If a subcontractor or a lower tier subcontractor lacks legal standing to assert a claim against a public entity because privity of contract does not exist, the contractor may present to the public entity a claim on behalf of a subcontractor or lower tier subcontractor. A subcontractor may request in writing, either on their own behalf or on behalf of a lower tier subcontractor, that the contractor present a claim for work which was performed by the subcontractor or by a lower tier subcontractor on behalf of the subcontractor. The subcontractor requesting that the claim be presented to the public entity shall furnish reasonable documentation to support the claim. Within 45 days of receipt of this written request, the contractor shall notify the subcontractor in writing as to whether the contractor presented the claim to the public entity and, if the original contractor did not present the claim, provide the subcontractor with a statement of the reasons for not having done so.

(e) The text of this section or a summary of it shall be set forth in the plans or specifications for any public works project that may give rise to a claim under this section.

(f) A waiver of the rights granted by this section is void and contrary to public policy, provided, however, that (1) upon receipt of a claim, the parties may mutually agree to waive, in writing, mediation and proceed directly to the commencement of a civil action or binding arbitration, as applicable; and (2) a public entity may prescribe reasonable change order, claim, and dispute resolution procedures and requirements in addition to the provisions of this section, so long as the contractual provisions do not conflict with or otherwise impair the timeframes and procedures set forth in this section.

(g) This section applies to contracts entered into on or after January 1, 2017.

(h) Nothing in this section shall impose liability upon a public entity that makes loans or grants available through a competitive application process, for the failure of an awardee to meet its contractual obligations.

(i) This section shall remain in effect only until January 1, 2027, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2027, deletes or extends that date.



Agenda Item

City Council

Item #: 3.29.

9/8/2020

File #: 20-068

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Chris Cash, Public Works Director

1. SUBJECT

Purchase of material and supplies for water maintenance operation from various vendors.

2. SUMMARY

Request to authorize purchase orders in the amount of \$150,000 with Yo Fire, \$100,000 with United Water Works, \$75,000 with C Wells Supply, \$75,000 with Ferguson, \$75,000 with S&J Supply, and \$50,000 with Armorcast for miscellaneous waterworks material and supplies on an as needed basis during Fiscal Year 2020/2021.

3. RECOMMENDED ACTION

Approve purchase orders for miscellaneous material and supplies for the following vendors and amounts: Yo Fire - \$150,000; United Waterworks - \$100,000; C Wells Supply - \$75,000; Ferguson - \$75,000; S&J Supply - \$75,000; and Armorcast - \$50,000, for a total not to exceed of \$525,000.

4. FISCAL IMPACT

The total expenditure for these purchases is \$525,000 and will be funded through the Water Fund (600).

5. STRATEGIC PLAN GOALS

Goal 1: Provide for a safe community.

b: Provide and maintain infrastructure necessary to ensure the safety of the public.

Goal 4: Provide outstanding public service:

b. Provide facilities and services to meet customer expectations.

6. DISCUSSION AND BACKGROUND

The Water Division purchases many different types of materials and supplies such as copper tubing, brass fittings, hydrants, couplings, saddles, valves, meter boxes, lids, etc. for its daily maintenance operations. These items are needed for the successful repair, installation, and maintenance of the City's water infrastructure. The Water Division uses the informal bid process to purchase the required materials by requesting all participating vendors to provide pricing for each individual item needed. There is no, one specific vendor that continually provides the lowest price for all items; therefore, the Water Division purchases material from the vendors that offer the lowest price for that

particular item.

The following six vendors are the ones from which the Water Division continuously purchases different materials and supplies. The amount of purchases from each vendor is over the \$30,000 per year limit per vendor. In order to continue purchasing from these vendors when they offer the lowest price, staff is requesting that the City Council authorize the purchase orders, on an as needed basis, not to exceed the amounts shown in the below table for Fiscal Year 2020/2021.

Vendor	Amount
Yo Fire	\$150,000
United Waterworks	\$100,000
C Wells Supply	\$ 75,000
Ferguson	\$ 75,000
S&J Supply	\$ 75,000
Armorcast	\$ 50,000

The Water Division continues to monitor and seek out vendors with the lowest prices to ensure the City is getting the best value available.

7. ATTACHMENTS

None.



Agenda Item

City Council

Item #: 3.29.

9/8/2020

File #: 20-068

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Chris Cash, Public Works Director

1. SUBJECT

Purchase of material and supplies for water maintenance operation from various vendors.

2. SUMMARY

Request to authorize purchase orders in the amount of \$150,000 with Yo Fire, \$100,000 with United Water Works, \$75,000 with C Wells Supply, \$75,000 with Ferguson, \$75,000 with S&J Supply, and \$50,000 with Armorcast for miscellaneous waterworks material and supplies on an as needed basis during Fiscal Year 2020/2021.

3. RECOMMENDED ACTION

Approve purchase orders for miscellaneous material and supplies for the following vendors and amounts: Yo Fire - \$150,000; United Waterworks - \$100,000; C Wells Supply - \$75,000; Ferguson - \$75,000; S&J Supply - \$75,000; and Armorcast - \$50,000, for a total not to exceed of \$525,000.

4. FISCAL IMPACT

The total expenditure for these purchases is \$525,000 and will be funded through the Water Fund (600).

5. STRATEGIC PLAN GOALS

Goal 1: Provide for a safe community.

b: Provide and maintain infrastructure necessary to ensure the safety of the public.

Goal 4: Provide outstanding public service:

b. Provide facilities and services to meet customer expectations.

6. DISCUSSION AND BACKGROUND

The Water Division purchases many different types of materials and supplies such as copper tubing, brass fittings, hydrants, couplings, saddles, valves, meter boxes, lids, etc. for its daily maintenance operations. These items are needed for the successful repair, installation, and maintenance of the City's water infrastructure. The Water Division uses the informal bid process to purchase the required materials by requesting all participating vendors to provide pricing for each individual item needed. There is no, one specific vendor that continually provides the lowest price for all items; therefore, the Water Division purchases material from the vendors that offer the lowest price for that

particular item.

The following six vendors are the ones from which the Water Division continuously purchases different materials and supplies. The amount of purchases from each vendor is over the \$30,000 per year limit per vendor. In order to continue purchasing from these vendors when they offer the lowest price, staff is requesting that the City Council authorize the purchase orders, on an as needed basis, not to exceed the amounts shown in the below table for Fiscal Year 2020/2021.

Vendor	Amount
Yo Fire	\$150,000
United Waterworks	\$100,000
C Wells Supply	\$ 75,000
Ferguson	\$ 75,000
S&J Supply	\$ 75,000
Armorcast	\$ 50,000

The Water Division continues to monitor and seek out vendors with the lowest prices to ensure the City is getting the best value available.

7. ATTACHMENTS

None.



Agenda Item

City Council

Item #: 3.30.

9/8/2020

File #: 20-085

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Thomas C. Kisela, Chief of Police

1. SUBJECT

Purchase of equipment and labor needed to upgrade the Records Bureau filing system, from McMurray Stern, as a single source vendor, in the amount of \$59,204.

2. SUMMARY

Upgrade of the Records Bureau filing system from McMurray Stern of Santa Fe Springs, California, as a single source vendor. The total not to exceed amount of \$59,204 includes equipment and labor costs of \$53,822, and a 10% contingency of \$5,382.

3. RECOMMENDED ACTION

Approve the purchase of equipment and labor from McMurray Stern in the total amount of \$59,204, representing equipment and labor of \$53,822, plus a contingency of \$5,382 (10%), for upgrades to the Records Bureau filing system.

4. FISCAL IMPACT

The total expenditure for this purchase is \$59,204 and will be funded in CIP-Records Retractable Filing System (20433) through Police Facility Fees (570).

5. STRATEGIC PLAN GOALS

Goal 1: Provide for a safe community

b: Provide and maintain infrastructure necessary to ensure the safety of the public.

6. DISCUSSION AND BACKGROUND

The Records Bureau is responsible for all aspects of police records management and provides support and assistance to police officers with various police reports. The existing Spacesaver powered filing system located in the Records Bureau of the Orange Police Department is used on a daily basis and allows the department to store and manage nine years of department incident reports. The Spacesaver filing system was installed in 1990 and is original to the building. The department has managed to extend the life of the system through the annual maintenance program acquired through McMurray Stern. The maintenance program includes two preventative maintenance visits per year and unlimited service calls used to identify and correct minor problems. Many of the system components in the existing system have become obsolete and replacement parts are no

longer available making it difficult for maintenance technicians to properly service the system. Due to the age of the system and increased service calls, a system upgrade has been recommended.

Spacesaver has made tremendous advancements in the 30 years since the original system was installed. The upgrade is an economical investment with most of the system remaining intact with the exception of the motors, safety features, face panels, and touch screen controls on six moveable carriages. Existing rails, carriages, and shelves will remain installed and will be re-used. The installation process will take three to five working days and will require the removal of existing files to allow access to the carriage housing unit. The Spacesaver Eclipse System upgrade will provide technological advancements, flexibility, and ease of use. Some features include the following:

- Built in safety guards including sensors and light-immune photo sweep
- Touch technology controls to operate the system
- Power override unit used in the event of a power failure
- Secure storage with access restrictions
- Programmable speed
- Programmable non-contact switches

Staff has researched available competitive options and, with the approval of the City Manager, certifies the required upgrade is offered by only one vendor. McMurray Stern in Santa Fe Springs, California, is the only authorized dealer certified to install, service, move or add to any new or existing system in this territory. The vendor was previously used to install the existing filing system and has serviced the filing system for the past 30 years. The upgrade will include a manufacturer's warranty along with one-year scheduled maintenance provided by McMurray Stern.

Capital Improvement Project No. 20433 provides for the improvement of the Records Bureau filing system. The Police Department recommends upgrades to the Records, Spacesaver powered filing system in an amount not to exceed \$59,204, which includes a 10% contingency of \$5,382.

7. ATTACHMENTS

- Proposal from McMurray Stern



Agenda Item

City Council

Item #: 3.30.

9/8/2020

File #: 20-085

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Thomas C. Kisela, Chief of Police

1. SUBJECT

Purchase of equipment and labor needed to upgrade the Records Bureau filing system, from McMurray Stern, as a single source vendor, in the amount of \$59,204.

2. SUMMARY

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3. RECOMMENDED ACTION

Approve the purchase of equipment and labor from McMurray Stern in the total amount of \$59,204, representing equipment and labor of \$53,822, plus a contingency of \$5,382 (10%), for upgrades to the Records Bureau filing system.

4. FISCAL IMPACT

The total expenditure for this purchase is \$59,204 and will be funded in CIP-Records Retractable Filing System (20433) through Police Facility Fees (570).

5. STRATEGIC PLAN GOALS

Goal 1: Provide for a safe community

b: Provide and maintain infrastructure necessary to ensure the safety of the public.

6. DISCUSSION AND BACKGROUND

The Records Bureau is responsible for all aspects of police records management and provides support and assistance to police officers with various police reports. The existing Spacesaver powered filing system located in the Records Bureau of the Orange Police Department is used on a daily basis and allows the department to store and manage nine years of department incident reports. The Spacesaver filing system was installed in 1990 and is original to the building. The department has managed to extend the life of the system through the annual maintenance program acquired through McMurray Stern. The maintenance program includes two preventative maintenance visits per year and unlimited service calls used to identify and correct minor problems. Many of the system components in the existing system have become obsolete and replacement parts are no

longer available making it difficult for maintenance technicians to properly service the system. Due to the age of the system and increased service calls, a system upgrade has been recommended.

Spacesaver has made tremendous advancements in the 30 years since the original system was installed. The upgrade is an economical investment with most of the system remaining intact with the exception of the motors, safety features, face panels, and touch screen controls on six moveable carriages. Existing rails, carriages, and shelves will remain installed and will be re-used. The installation process will take three to five working days and will require the removal of existing files to allow access to the carriage housing unit. The Spacesaver Eclipse System upgrade will provide technological advancements, flexibility, and ease of use. Some features include the following:

- Built in safety guards including sensors and light-immune photo sweep
- Touch technology controls to operate the system
- Power override unit used in the event of a power failure
- Secure storage with access restrictions
- Programmable speed
- Programmable non-contact switches

Staff has researched available competitive options and, with the approval of the City Manager, certifies the required upgrade is offered by only one vendor. McMurray Stern in Santa Fe Springs, California, is the only authorized dealer certified to install, service, move or add to any new or existing system in this territory. The vendor was previously used to install the existing filing system and has serviced the filing system for the past 30 years. The upgrade will include a manufacturer's warranty along with one-year scheduled maintenance provided by McMurray Stern.

Capital Improvement Project No. 20433 provides for the improvement of the Records Bureau filing system. The Police Department recommends upgrades to the Records, Spacesaver powered filing system in an amount not to exceed \$59,204, which includes a 10% contingency of \$5,382.

7. ATTACHMENTS

- Proposal from McMurray Stern



McMurray Stern Revised Proposal #28616

August 24, 2020

Spacesaver Powered Storage System Upgrade for:

Orange Police Department
1107 North Batavia
Orange, CA 92867

Proposal presented to:

Kathy Palacio, Police Records Manager

Presented by:

Laura Borda
Senior Design Consultant
McMurray Stern
714-856-1928 cell
lborda@mcstern.com



August 24, 2020

Kathy Palacio, Police Records Manager
Orange Police Department
1107 North Batavia Street
Orange, CA 92867-4615

RE: Revised Proposal #28616 – Spacesaver Powered Storage System Upgrade for Orange Police Department

Dear Kathy:

Thank you for the opportunity to present this Revised Proposal for the upgrade of the existing Spacesaver powered storage system. The proposed system upgrade has been specifically selected and tailored to meet the unique needs of Orange Police Department.

With this proposal, McMurray Stern, Inc. is committing all the resources and experiences that we have gained over the past 40 years. We value the opportunity to present our capabilities, and we look forward to continuing our relationship as a sustaining resource for Orange PD.

If you have any questions regarding this proposal, please call me at 714-856-1928. Again, thank you for your consideration I look forward to working with you on this project.

Sincerely,

A handwritten signature in cursive script that reads "Laura Borda".

Laura Borda
Senior Design Consultant
McMurray Stern - The Storage Solutions Group



RECOMMENDED SOLUTION

BACKGROUND

The existing Spacesaver powered system located within the Records File Storage area of Orange Police Department was installed in 1990. Spacesaver has made tremendous advancements in the powered system technology and functionality in the 30 years since the original system was installed. Many of the system components in the existing system have become obsolete, therefore it is highly recommended that Orange Police Department invest in a system upgrade. The system upgrade is quite an economical investment as most of the parts and components will be re-used. In fact, the system will remain mostly intact and installed during the upgrade process.

UPGRADE PROCESS

McMurray Stern's team of factory trained installers will replace the: motors; safety features; face panels, and touch screen controls on the six movable carriages of existing Spacesaver powered system to bring the technology and functionality up to current standards. All the existing rail, carriages, and shelving will remain installed and will be re-used. The installation process will take three to five working days. The process will require that approximately 9% of the existing folders will need to be removed (folder move not included in price but can be provided) to allow access to the carriage housing.

INVESTMENT

The price for the Spacesaver Eclipse System Upgrade – Model #ECL2415-6UPG detailed in this proposal and tailored to the unique needs of Orange Police Department is:

Material/Equipment:	\$38,795.00
Freight:	2,180.00
Installation @ Prevailing Wage:	8,975.00
Sub-Total:	\$49,950.00
Sales Tax @ 7.75%:	3,871.14
Total:	\$53,821.13

TERMS

- Payment: Payable with a fifty percent deposit, balance due net 15 after shipment.
- Prices shown are valid for 30 days.
- Lead time is approximately seven to ten weeks after receipt of order.

Standard Items Included:

Applicable California State Sales Taxes

Freight Charges

All freight charges from the point of manufacture to our warehouse.

To be added

Included



Receiving at our facility **Included**
Materials are unloaded, inspected and staged for delivery to jobsite.

Material delivery to jobsite **Included**
Materials are delivered to the jobsite only as needed to minimize disruption of operations and to avoid "Trade Stacking".

Installation **Included**
Installation crews are McMurray Stern uniformed, factory-trained and bonded full-time employees. After hours on Monday through Friday installation is available at no extra charge.

Union labor **Included**
Southern California Carpenter's Union Local 721.

Removal of all debris and clean-up **Included**
Upon completion of installation, all packing materials and other debris are removed from the jobsite and hauled away.

Warranty & 1-year scheduled maintenance **Included**
To insure long-term trouble-free operation. Service Technicians are McMurray Stern uniformed, factory-trained and bonded full-time employees. Our Service Technicians are not subcontracted. Extended warranty and scheduled maintenance contracts are available upon request.

User training on system operation **Included**
Unlimited training to all potential users to insure safe and efficient system operation. Training on basic trouble-shooting and remedial maintenance techniques is also provided to client's assigned maintenance personnel.

Optional Items for Consideration

Structural Calculation Services
McMurray Stern will provide structural calculations for the seismic anchorage of the shelving system. Services include preparation of calculations by a licensed structural engineer and all wet stamped & signed copies.

Permit Services
In jurisdictions that require a building permit for installation of shelving or movable cabinets in excess of 69" in height (2007 California Building Code), McMurray Stern can provide Permit Services. If Permit Services are ordered, it is required to obtain structural calculations (see Structural Calculation Service information above). McMurray Stern will obtain structural calculations (stamped by a licensed structural engineer) for the anchorage of the proposed systems. In addition, McMurray Stern will submit this documentation to the appropriate regulatory agency to obtain the necessary permits. Client is responsible for the load bearing capacity of the floor upon which the proposed installation shall be constructed. Floor loading evaluation is not included in this cost but can be quoted separately.



Floor Load Analysis*

Floor loading data that applies to the project is subject to interpretation by a certified structural engineer. McMurray Stern is providing reference data for determining load and distribution conditions. Floor load and considerations are to be reviewed and evaluated by a qualified engineer. It is the responsibility of the client to have this system approved for the floor loading if needed.

Plan Check and Permit Fees*

Actual plan check and permit fees charged by the city are not included and will be added to the final invoice.

The State has determined that any person who purports to have the capacity to undertake or submits a bid to construct these types of structures must be licensed pursuant to Contractor's License Law (B & P Code, Division 3, Chapter 9).

CALIFORNIA STATE CONTRACTOR LICENSE NUMBER 1041651

Client Approval
Orange Police Department

Date



Agenda Item

City Council

Item #: 3.31.

9/8/2020

File #: 20-107

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Cash, Public Works Director

1. SUBJECT

Purchase heavy duty hydraulic hoist system using Cooperative Purchasing Agreement.

2. SUMMARY

Purchase one heavy-duty hoist system for Public Works Fleet Services.

3. RECOMMENDED ACTION

Approve the purchase of specialized lift for the lifting of heavy duty Fire Apparatus and heavy equipment from Steril Koni using Sourcewell Contract No. 061015-SKI in the amount of \$99,940.

4. FISCAL IMPACT

The expenditure for this purchase is \$99,940 and will be funded through Equipment Replacement (720).

5. STRATEGIC PLAN GOALS

Goal 1: Provide for a safe community

a: Provide staffing and resources to deliver services that ensure public safety.

Goal 2: Be a fiscally healthy community.

a: Expend fiscal resources responsibly.

6. DISCUSSION AND BACKGROUND

Public Works, Fleet Services maintains light and heavy-duty vehicles that include key equipment and Fire Apparatus. The large heavy-duty vehicles have weight ratings up to 75,000 Gross Vehicle Weight Rating, requiring specialized lift systems. The current lift system is 14 years old and is near the end of its' normal service life of 15 years and repair parts are becoming hard to procure with some being obsolete. This replacement will ensure continued support to our safety vehicles and apparatus.

7. ATTACHMENTS

- Sourcewell Contract No. 061015-SKI CPA Bid



Agenda Item

City Council

Item #: 3.31.

9/8/2020

File #: 20-107

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Cash, Public Works Director

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7. ATTACHMENTS

- Sourcewell Contract No. 061015-SKI CPA Bid

Stertil-Koni
 200 Log Canoe Circle
 Stevensville, MD 21666
 United States

T: 410.643.9001
 F: 410.643.8901

Quote #	2224 v2
Date	06/29/2020
Expires	09/24/2020
Contact	Ron Reazer

Prepared for City Of Orange
 Julian Bernal
 CA
 United States

T: 714-497-8645
 E: jbernal@cityoforange.org

Sourcewell

Item	Qty	Price	Total
ST1085 MODEL 4, EARTHLIFTM CONTROLS WITH SYNTHETIC FIXED FRONT WHEELS	2	\$67,722.00	\$135,444.00
Set of 4 Wireless, Battery-Powered, EARTHLIFT Regenerative Mobile Lifts - 74,000 lbs. capacity, 24 V DC, control box on every column. Adj. Forks			\$92,101.92
32% Item Discount (\$43,342.08)			
STERTIL-KONI (Code: ST-1085-2FRA)			

Please contact us if you have any questions.

Subtotal	\$135,444.00
Discount	(\$43,342.08)
Shipping	\$700.00
CA Sales Tax (7.75%)	\$7,137.90
Total Due	\$99,939.82 USD

Contract

Sourcewell/Formerly NJPA - Contract #: 061015-SKI

Local Distributor

Terms and Conditions

1. Product availability and proposed delivery date provided ARO
2. Please submit PO to orders@sterdil-koni.com



Stertil-Koni

Vehicle Lifts

#013020-SKI

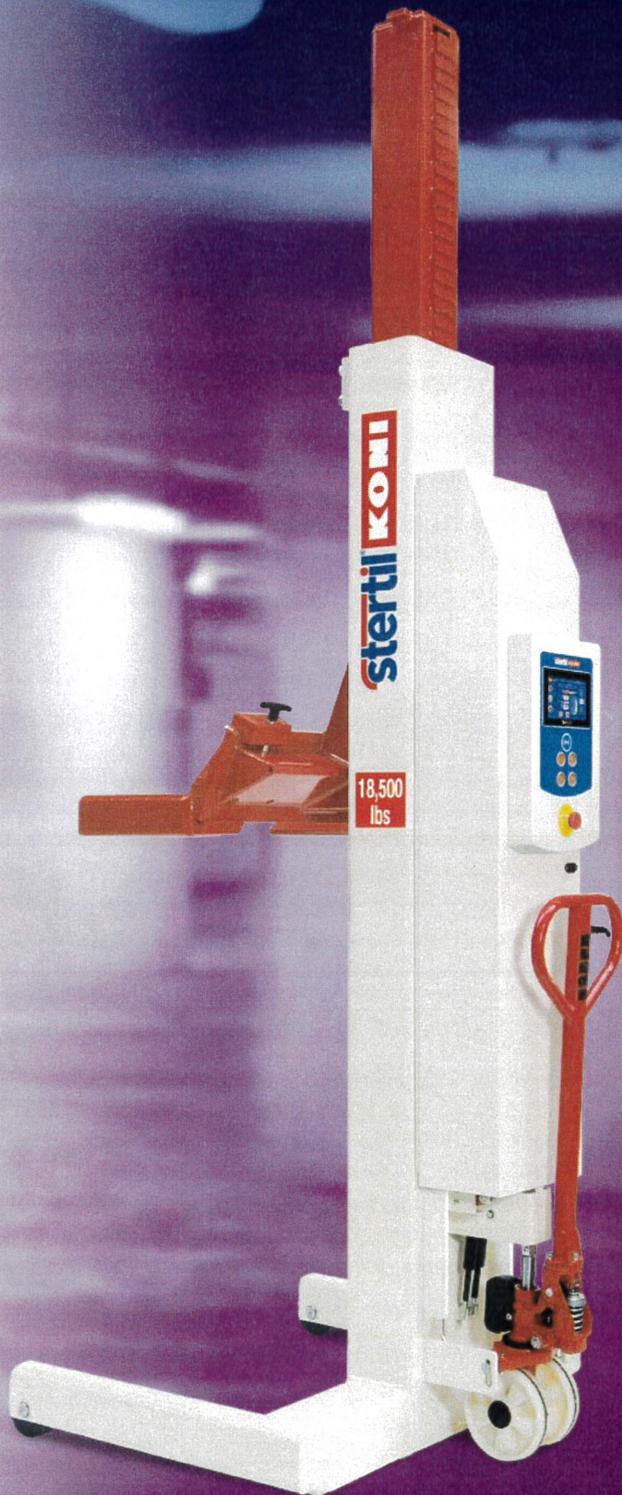
Maturity Date: 04/13/2024

MOBILE COLUMN LIFT

ST 1085 - ST 1100

Capacity 18,500 lbs.
or 22,000 lbs.

stertil[®]**KOMI**



STERIL
SUPERIOR SOLUTIONS BY
QUALITY PEOPLE

Wireless mobile column lifts

with **ebright Smart Control System**



TOUCH SCREEN



WIRELESS



... or cabled, it's up to you

If you predominantly work in a fixed location the cabled mobile column lifts could be the best solution for you. This setup offers the possibility to connect up to 32 columns in a single lift set. All interconnection cables are equipped with heavy-duty plugs at both ends. Both the wireless and the cabled column lifts are equipped with a control panel on each individual column. Columns can be operated individually, in pairs or simultaneously as a complete set with the touch of a button. Each column can therefore be used at any given location.

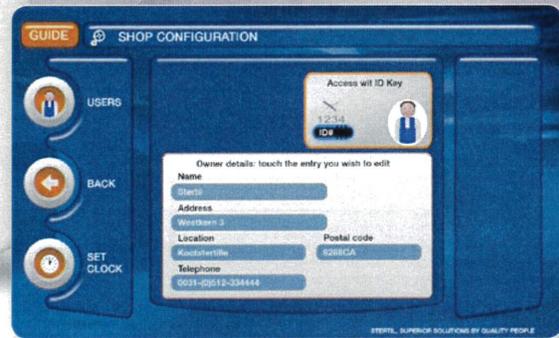
Full color touch screen control

The revolutionary **ebright Smart Control System** combines intuitive ease of use with maximum visual information about the lifting process. The main advantages:

- 7" full color touch screen, works even when wearing gloves
- User-configured options, such as choice of language, safety warnings and scheduled maintenance notifications
- All relevant information available at a glance
- Customizable ID-Key to prevent unauthorized operation
- Wireless Mesh network for optimal connectivity



- High resolution 7" touch screen
- Intuitive controls



ebright Features

- High resolution 7" touch screen
- Owner/User configurable system with user ID key
 - Individual user settings for setting language and units of measure
 - Protection against unauthorized use, thanks to personalized ID key
- Maintenance notifications
- Visual display of maximum programmable lifting height
- Warning and failure information
- Operation manual available on-screen
- Tracking of specific operations and information codes
- Intuitive controls with actual data about the lift:
 - Indication for Single, All or Pair operation mode
 - Information about how many columns are in the set (up to 32 columns)
 - Actual lifting height displayed
 - Lowering speed can be manually adjusted on the touch screen
 - Battery status information
 - Customizable ID-Key to prevent unauthorized operation
- Wireless Mesh network with continuous active channel search offering optimal connectivity

Well thought out in all aspects



**32
MAX**

MAX 32 LINKED
COLUMNS



ADJUSTABLE
LOWERING SPEED



OVERLOAD
PROTECTION



UNIQUE
SYNCHRONIZATION
SYSTEM

Easy to move

Stertil-Koni mobile column lifts are indeed mobile, thanks to the synthetic roller wheels and hydraulic pallet jack mechanism with patented overload protection.

Safe working space

As an extra safety feature, we have also designed ample working space between the column and the vehicle. This ensures that the vehicle will not come into contact with the column in the event of sagging vehicle suspension.

Unique synchronization

The synchronization system is activated at a height difference of just 9/16". This ensures a safe and smooth lifting and lowering cycle, even in cases where the distribution of the vehicle weight is extremely uneven.

Lifetime guarantee

The innovative synthetic runner wheels within the column come with a lifetime parts guarantee.



Everything under control

Overview of ST 1085 – ST 1100 models	ebright wireless ST 1085-FWA ST 1100-FWA	ebright wireless ST 1085-RWA ST 1100-RWA	ebright cabled ST 1085-FSA ST 1100-FSA	ebright cabled ST 1085-RSA ST 1100-RSA
ebright Smart Control System with a control box on each individual mobile column	●	●	●	●
Touch screen with important information about the system e.g. lifting height, operation mode	●	●	●	●
Wireless Mesh network with continuous active channel search offering optimal connectivity	●	●		
These columns utilize a power outlet in the workshop and communicate with each other via interconnecting cables			●	●
Adjustable lowering speed for slow or normal lowering	●	●	●	●
Hydraulic pallet truck mechanism with patented overload protection	●	●	●	●
14"-long adjustable fork, suitable for super single tires	ST 1085	ST 1085	ST 1085	ST 1085
12"-long adjustable fork	ST 1100	ST 1100	ST 1100	ST 1100
Fixed synthetic wheels that reduce the floor surface pressure	●		●	
Retractable synthetic wheels integrated into the base frame, for 10x less floor pressure		●		●



Agenda Item

City Council

Item #: 3.32.

9/8/2020

File #: 20-121

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Cash, Public Works Director

1. SUBJECT

Purchase order for major Fire Engine and Apparatus repairs from Southern California Fleet Services as a sole source vendor.

2. SUMMARY

Authorize purchase order in the amount of \$100,000 with Southern California Fleet Services for major Fire Engine and Apparatus repairs on an as needed basis during Fiscal Year 2020-2021.

3. RECOMMENDED ACTION

Approve the purchase order to repair major Fire Engine and Apparatus from Southern California Fleet Services in the amount not to exceed \$100,000 in FY 2020-2021.

4. FISCAL IMPACT

The total expenditure for this purchase is \$100,000 and will be funded through the Vehicle Maintenance Fund (710).

5. STRATEGIC PLAN GOALS

Goal 1: Provide for a safe community

a: Provide staffing and resources to deliver services that ensure public safety.

Goal 2: Be a fiscally healthy community

a: Expend fiscal resources responsibly.

6. DISCUSSION AND BACKGROUND

Fire Department Truck-1, Unit #1563, a 2009 Seagrave Ladder Truck with a 100 foot ladder is in immediate need of a frame-in diesel engine rebuild, due to low power, excessive smoke and 55,000 service duty miles on it. Southern California Fleet Services is the only local vendor that is a Caterpillar Service Center and is able to provide the required time frame of three weeks or less on Fire Apparatus. Based on the estimated cost of \$45,000 per engine rebuild and starting FY 21 off by needing one engine rebuild completed on Truck-1; staff recommends approving a purchase order in the amount of \$100,000 on an as needed basis.

7. ATTACHMENTS

- None



Agenda Item

City Council

Item #: 3.32.

9/8/2020

File #: 20-121

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Cash, Public Works Director

1. SUBJECT

Purchase order for major Fire Engine and Apparatus repairs from Southern California Fleet Services as a sole source vendor.

2. SUMMARY

Authorize purchase order in the amount of \$100,000 with Southern California Fleet Services for major Fire Engine and Apparatus repairs on an as needed basis during Fiscal Year 2020-2021.

3. RECOMMENDED ACTION

Approve the purchase order to repair major Fire Engine and Apparatus from Southern California Fleet Services in the amount not to exceed \$100,000 in FY 2020-2021.

4. FISCAL IMPACT

The total expenditure for this purchase is \$100,000 and will be funded through the Vehicle Maintenance Fund (710).

5. STRATEGIC PLAN GOALS

Goal 1: Provide for a safe community

a: Provide staffing and resources to deliver services that ensure public safety.

Goal 2: Be a fiscally healthy community

a: Expend fiscal resources responsibly.

6. DISCUSSION AND BACKGROUND

Fire Department Truck-1, Unit #1563, a 2009 Seagrave Ladder Truck with a 100 foot ladder is in immediate need of a frame-in diesel engine rebuild, due to low power, excessive smoke and 55,000 service duty miles on it. Southern California Fleet Services is the only local vendor that is a Caterpillar Service Center and is able to provide the required time frame of three weeks or less on Fire Apparatus. Based on the estimated cost of \$45,000 per engine rebuild and starting FY 21 off by needing one engine rebuild completed on Truck-1; staff recommends approving a purchase order in the amount of \$100,000 on an as needed basis.

7. ATTACHMENTS

- None



Agenda Item

City Council

Item #: 3.33.

9/8/2020

File #: 20-053

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Cash, Public Works Director

1. SUBJECT

Update to the City of Orange Sewer System Management Plan.

2. SUMMARY

State Water Resources Control Board Order No. 2006-0003-DWQ adopted by the State on May 2, 2006 requires owners of sewer collection systems to update and recertify their Sewer System Management Plan at least once every five years.

3. RECOMMENDED ACTION

1. Adopt the updated Sewer System Management Plan.
2. Authorize and direct the Public Works Director to do any and all things necessary to execute and deliver any and all documents (including amendments or modifications to the Sewer System Management Plan) deemed necessary or advisable in order to carry out, give effect to, and comply with the terms and intent of State Water Resources Control Board Order No. 2006-0003-DWQ.

4. FISCAL IMPACT

None.

5. STRATEGIC PLAN GOALS

Goal 3: Enhance and promote quality of life in the community

- b: Deliver high quality and safe recreational, social, environmental, educational and cultural services.

6. DISCUSSION AND BACKGROUND

Order No. R8-2002-0014 adopted by the Santa Ana Regional Water Quality Control Board on April 26, 2002 required cities in Orange County that own their own sewer collection systems to adopt a Sewer System Management Plan (SSMP) for the management of their sewer collection systems. On October 11, 2005 the City Council adopted the required SSMP. On May 2, 2006 the State Water Resources Control Board adopted Order No. 2006-0003-DWQ regulating sanitary sewer collection systems statewide. This Order superseded waste discharge requirement Order R8-2002-0014 from the Santa Ana Regional Water Quality Control Board and required a new SSMP. On July 14, 2009 the City Council adopted an updated and revised SSMP consistent with the new statewide Order.

Order 2006-0003-DWQ contains a provision that requires permittees to update and recertify their

SSMP every five years. Consistent with this requirement, the City's SSMP has been updated to reflect changes incorporated into management of the sewer system. The updated SSMP includes the latest sanitary sewer and storm drain maps, ordinances, new Sewer Master Plan, and revised organization charts. The SSMP also includes minor text changes in the body of the SSMP and the Overflow Emergency Response Plan as well as the Fats, Oils and Grease (FOG) program referenced in the SSMP. A copy of the SSMP and Appendices is available for review at the City Clerk's office and on the City website.

7. ATTACHMENTS

1. Updated Sewer System Management Plan without appendices.
2. Previously adopted Sewer System Management Plan without appendices.



Agenda Item

City Council

Item #: 3.33.

9/8/2020

File #: 20-053

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Cash, Public Works Director

1. SUBJECT

Update to the City of Orange Sewer System Management Plan.

2. SUMMARY

State Water Resources Control Board Order No. 2006-0003-DWQ adopted by the State on May 2, 2006 requires owners of sewer collection systems to update and recertify their Sewer System Management Plan at least once every five years.

3. RECOMMENDED ACTION

1. Adopt the updated Sewer System Management Plan.
2. Authorize and direct the Public Works Director to do any and all things necessary to execute and deliver any and all documents (including amendments or modifications to the Sewer System Management Plan) deemed necessary or advisable in order to carry out, give effect to, and comply with the terms and intent of State Water Resources Control Board Order No. 2006-0003-DWQ.

4. FISCAL IMPACT

None.

5. STRATEGIC PLAN GOALS

Goal 3: Enhance and promote quality of life in the community

- b: Deliver high quality and safe recreational, social, environmental, educational and cultural services.

6. DISCUSSION AND BACKGROUND

Order No. R8-2002-0014 adopted by the Santa Ana Regional Water Quality Control Board on April 26, 2002 required cities in Orange County that own their own sewer collection systems to adopt a Sewer System Management Plan (SSMP) for the management of their sewer collection systems. On October 11, 2005 the City Council adopted the required SSMP. On May 2, 2006 the State Water Resources Control Board adopted Order No. 2006-0003-DWQ regulating sanitary sewer collection systems statewide. This Order superseded waste discharge requirement Order R8-2002-0014 from the Santa Ana Regional Water Quality Control Board and required a new SSMP. On July 14, 2009 the City Council adopted an updated and revised SSMP consistent with the new statewide Order.

Order 2006-0003-DWQ contains a provision that requires permittees to update and recertify their

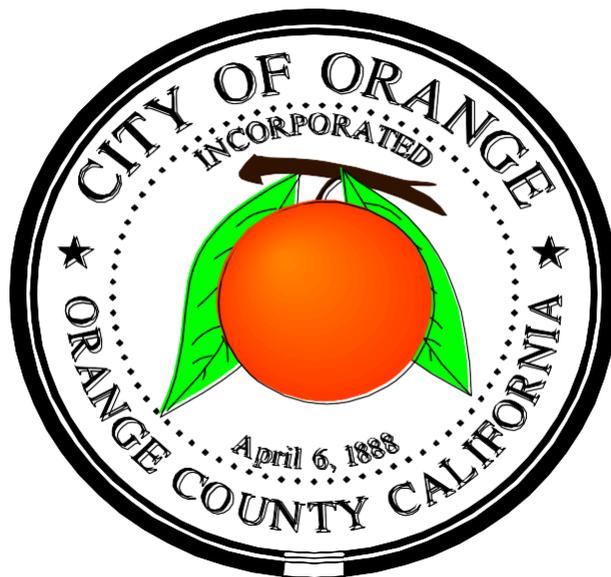
SSMP every five years. Consistent with this requirement, the City's SSMP has been updated to reflect changes incorporated into management of the sewer system. The updated SSMP includes the latest sanitary sewer and storm drain maps, ordinances, new Sewer Master Plan, and revised organization charts. The SSMP also includes minor text changes in the body of the SSMP and the Overflow Emergency Response Plan as well as the Fats, Oils and Grease (FOG) program referenced in the SSMP. A copy of the SSMP and Appendices is available for review at the City Clerk's office and on the City website.

7. ATTACHMENTS

1. Updated Sewer System Management Plan without appendices.
2. Previously adopted Sewer System Management Plan without appendices.

SANITARY SEWER MANAGEMENT PLAN

PREPARED BY
CITY OF ORANGE



PREPARED FOR
STATE WATER RESOURCES CONTROL BOARD
ORDER NO.2006-003-DWQ
GENERAL WASTE DISCHARGES REQUIREMENTS

Updated May 2020

SSMP UPDATE LOG SHEET

DATE	REV. No.	By	Revisions
January 12	1	G. Estrada	Title change, update org chart, sewer maps, other minor changes
May 2013	2	G. Estrada	Update SSMP text, Overflow Emergency Response Plan, org charts, ordinances, maps, sewer master plan,
May 2014	3	G. Estrada	Updated org charts and maps, City Council Certification
November 2017	4	G. Estrada	Update Public Works Organization, maps, spill guide
May 2020	5	Frank Sun	Update Public Works Organization, add definitions, update Operations and Maintenance Program, update Overflow Emergency Response Plan

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APPENDICES

Appendix A – Orange Public Works Organization Chart

Appendix B – Sanitary Sewer Overflow Emergency Response Plan

Appendix C – Municipal Code Sections

Appendix D – Pump Station Maintenance and Manhole Inspection Form

Appendix E – Orange Sewer and Storm Drain System Maps

Appendix F – Sewer System Maintenance Frequency Map

Appendix G – Orange Sewer Main Hot Spot List

Appendix H – Sewer System Deficiency Update

DEFINITIONS

Authorized Inspector – the individual responsible for notifying regulatory agencies that an SSO has occurred. This person is also responsible for reporting the spill to the state online database and ensuring that the SSO affected area has been cleaned.

Collection System - The system of pipes, sewer lines, or other conveyances owned by the City and located within the City's boundaries used to collect and convey wastewater to Reclamation Plant No. 1 in Fountain Valley or Treatment Plant No. 2 in Huntington Beach (“the Facility”), excluding sanitary sewer laterals and satellite systems.

Condition Assessment - A report that comprises inspection, rating, and evaluation of the existing condition of the Collection System. Inspection is based upon closed circuit television ("CCTV") inspections of sewer lines, manhole inspections, inspections for structural defects, and inspections of pipe connections at the manhole. After CCTV inspection occurs, pipe conditions are assigned a grade, such as the Pipeline Assessment and Certification Program ("PACP") rating system developed by the National Association of Sewer Service Companies.

Condition Assessment Cycle - A Condition Assessment of the entire sewer system that requires each gravity sewer line to be CCTV'd every ten years, but does not require all sewer lines to be on the same CCTV schedule. Accordingly, each gravity sewer line will be on its own cycle, where such CCTV will occur at least every ten years or more frequently, if necessary.

Full Condition Assessment - A Condition Assessment, (excluding Surface Water Condition Assessment(s) which are defined below) of all sewer lines in the Collection System, except sanitary sewer laterals.

Onsite Supervisor - the onsite supervisor is an individual at a sewer spill who is of the highest rank within Orange Streets and Sanitation Division. This person is responsible for directing the operations, gathering information and ensuring that the SSOERP and SSOP are adhered to.

Sanitary Sewer Overflow - a sanitary sewer overflow (a.k.a. sewer spill, sanitary sewers spill, sewer overflow) is any overflow, spill, release, discharge or diversion of untreated or partially untreated from a sanitary sewer system. Sanitary sewer overflows include: (i) overflows or release of untreated or partially treated wastewater that reach waters of the United States; (ii) overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and (iii) wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer (not a building lateral). Wastewater backups into buildings caused by a blockage or other malfunction of the building lateral that is privately owned is a sanitary sewer overflow when sewage is discharged off a private property into streets, storm drains, or waters of the State.

Sanitary Sewer System - any system of pipes, pump stations, sewer lines, or other conveyances upstream of a wastewater treatment plant headworks used to collect and convey wastewater to the publicly owned treatment facility. Temporary storage and conveyance facilities (such as vaults, temporary piping, construction trenches, wet wells, impoundments, tanks, etc.) are considered to be part of the sanitary sewer system and discharges into these temporary storage facilities are not considered sanitary sewer overflows.

Surface Water Condition Assessment - A Condition Assessment of sewer lines in the Collection System, (excluding sanitary sewer laterals) located within 200 feet of a surface water.

Significantly Defective - A sewer pipe is considered Significantly Defective if its condition receives a Structural or Operation and Maintenance grade of 4 or 5 based on the PACP rating system or an equivalent

rating system developed by the City. The PACP assigns grades based on the significance of the defect, extent of damage, percentage of flow capacity restriction, and/or the amount of pipe wall loss due to deterioration. Grades are assigned as follows:

5 - Most significant

4 - Significant

3 - Moderate

2 - Minor to moderate

1 - Minor.

Surface Waters - Refer to the Santa Ana River, Santiago Creek, and Handy Creek, those portions of which are located within the City of Orange.

SEWER SYSTEM MANAGEMENT PLAN

I. GOAL

The goal of the SSMP is to provide a plan and schedule to properly manage, operate and maintain all parts of the sanitary sewer system. This will help reduce and prevent SSOs, as well as mitigate any SSOs that do occur.

The City of Orange recognizes the importance of protecting ocean water quality by preventing sewer spills and is supplementing its existing sewer system management program with the requirements of the State regulations

II. ORGANIZATION

THE SSMP MUST IDENTIFY:

A. The name of the responsible or authorized representative as described in Section J of the Order.

All signed reports required by the WDR are signed by representatives of the City of Orange identified as Legally Responsible Officials. The names and their responsibility are shown in the table below.

Name	Title	Responsibility
Rick Otto	City Manager	Overall program responsibilities
Christopher Cash	Public Works Director	Carrying out WDR Activities
Mike Carney	Environmental Program Mgr.	FOG Program, SSO reports

B. The names and telephone numbers for management, administrative and maintenance positions responsible for implementing specific measures of the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation.

The City of Orange Public Works Department is responsible for implementing the Sanitary Sewer Management Plan (SSMP). A set of organization charts that includes names and telephone numbers of sewer maintenance personnel is contained in Appendix A along with their individual responsibilities for implementing this SSMP. The charts also outline the lines of authority for administrative and field staff.

C. The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or California Emergency Management Agency (CALEMA) (formally State Office of Emergency Services (OES)).

Public Works Engineering Division's Surface Water Quality Section is responsible for oversight of the reporting process. Depending on the time of day in which SSOs occur, calls for the reporting of SSOs occur in two ways as reported in Section VI and the Sewer System Overflow Emergency Response Plan included in Attachment B. During normal working office hours, calls of SSOs are reported to the Public Works Maintenance Division at 714-532-6480. After normal working hours including weekends and holidays, calls are forwarded to the City's Public Works Water Division where the Water Plant Operator takes all information and forwards the information to the on-call Public Works supervisor. At that point City work crews are dispatched to the site along with an Environmental Compliance Specialist, who provides reports

to the state and affected regulatory agencies including the Orange County Health Care Agency, and procedures outlined in the Sanitary Sewer Overflow Emergency Response Plan are followed.

III. LEGAL AUTHORITY

Each Enrollee must demonstrate their sanitary sewer system uses ordinances, service agreements or other legally binding procedures, that it possesses the necessary legal authority to:

A. Prevent illicit discharges into its sanitary sewer system (examples may include I/I, storm water, chemical dumping, unauthorized debris and cut roots, etc.);

B. Require that sewers and connections be properly designed and constructed;

C. Ensure access for maintenance, inspection, or repairs for portions of the laterals owned or maintained by the public agency;

D. Limit the discharge of fats, oils, and grease and other debris that may cause blockages, and

E. Enforce any violation of its sewer ordinances.

The City of Orange's legal authority for items A-E is established by the following: (responses listed in corresponding order to the items above)

1. OCSD Ord. 37 (This is an Orange County Sanitation District ordinance that covers the City of Orange and can be found in Appendix C.)

This is a general ordinance for the Orange County Sanitary District which treats all of the wastewater from the City of Orange. The ordinance contains requirements on what can be disposed of in the sewers, prohibited discharges, authority to carry out ordinance and enforcement.

2. City of Orange Specifications and Standard Plans, Standard Specifications for Public Works Construction (See Appendix C for specific sections) and Design and Construction Requirements of Sanitary Sewers.

Design of sewers in the City's collection system is based on the requirements contained in Design and Construction Requirements of Sanitary Sewers by the Orange County Sanitation District. It contains design requirements such as maximum peak flow allowed, minimum velocity, depth of cover, land use density, manhole spacing, materials and other criteria used in designing sewers within the City. While not formally incorporated into the City's municipal code, it is used by the various divisions involved in the design of sewers. The City of Orange Standard Plans Series 200 provides information on constructing sewer manholes and other elements related to sanitary sewers.

Through its municipal code, the City has adopted the Standard Specifications for Public Works Construction more commonly known as the Green Book. This document, particularly sections 306 and 500 are used in the construction of City sewers. Section 306 Underground Conduit Construction covers sewer pipe construction and includes information on excavation, trenching, bedding, joints, backfill, air pressure tests, water pressure tests and other items related to the installation and acceptance of underground pipes. Section 500, Pipeline Rehabilitation, includes information on various lining methods that can be used to rehabilitate underground pipes.

3. OMC 13.56

Most laterals in the City of Orange are privately owned. It is the responsibility of the owner to maintain the private lateral in good working condition free of obstructions (OMC 13.56.050). In cases where a sewer

lateral is required to be maintained by the City, an easement is recorded that contains provisions for access, maintenance and inspection by the City.

4. OMC 13.66 Fats, Oils and Grease Control Regulations and OCSD Ord. 37

The fats, oils and grease (FOG) requirements are contained within Section 13.66 of the Orange Municipal Code. The FOG requirements allow the City to require grease capturing devices for food service establishments if there is a possibility that the facilities may discharge excessive grease into the sewer system. The Municipal Code contains requirements for design, construction and enforcement. Separately, a document titled Fog Program has been prepared that provides information on the implementation of the FOG Program to reduce discharges of fats, oils and grease into the City's sewer system. The Municipal Code is included in Appendix C and the FOG Program can be viewed on the City's SSMP website.

5. OMC 13.66 and OMC 13.64 Industrial Waste

The City uses OMC 13.66 (FOG requirements) and OMC 13.64 (Industrial Waste) to prohibit the discharge of waste that may be harmful or obstruct flow within the sewer system.

IV. OPERATION AND MAINTENANCE PROGRAM

The SSMP must include those elements listed below where appropriate and applicable to the Enrollee's system:

A. Maintain up-to- date maps of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable storm water conveyance facilities:

The City of Orange collection system has been mapped including all gravity lines and manholes, pump facilities and storm water conveyance systems. These maps are stored within the City's geographic information system (GIS) and are maintained and updated as needed. Attributes available for viewing within the GIS system include pipe size, material, year built, pipe identifier, slope, invert, manhole number and other attributes. Storm water conveyance facilities are also stored in a GIS database and include information such as pip size, material, catch basin and their identifier and other information. A copy of these maps can be found in Appendix E.

B. Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system and frequent cleaning and maintenance targeted at known problem areas. The preventive maintenance program should have a system to document scheduled and conducted activities, such as work orders.

The City of Orange has historically had a Preventive Maintenance Plan, which included cleaning of the City's collection system. Since 2010, to provide increased and dedicated resources to the sewer system, the City has contracted out a vast majority of the cleaning and inspection. This includes routine cleaning and inspection as well as the more frequent "hot spots" cleaning. The city has been divided into 5 sections based on their primary servicing requirements where areas of greater need would be emphasized such as industrial/commercial areas and areas where sewer pipe grades were minimal. The oldest sections of the city will be inspected annually. Residential areas and areas where sewer pipe grades are in excess of minimal scour velocity will be cleaned less frequently (every two to three years) and other areas inspected every five years. Until a specific cause is identified and eliminated, hot spots will be monitored and cleaned as needed, typically every three or six months depending on suspected cause and buildup in the pipe.

The City of Orange will implement mechanical root control methods when roots are determined to be the cause of buildup in the pipe. Chemical root control is not allowed.

The City of Orange will continue to monitor and adjust schedules to facilitate optimal operation of the collection system and proper allocation of limited resources. Cleaning and CCTV inspection will be on the schedule identified in Appendix F. A listing of the existing hot spots can be found in Appendix G.

In addition, the City of Orange has two sewer pump stations, which are serviced and inspected monthly under a contract. See Appendix D.

Manhole inspections are conducted during field visits and documented using the form in Appendix D.

C. Develop a rehabilitation replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure needs. The plan shall include a time schedule for implementing the short and long-term plans and a schedule for developing the funds needed for the capital improvement plan.

The City of Orange will utilize the CCTV inspection program as outlined in (B) above. This program identifies structural deficiencies in the City's collection system. Prioritization along with short and long-term strategies for rehabilitation of any structural deficiencies found through the inspection program will be addressed in the City's capital improvement program. This is a comprehensive budgeting program, which looks forward seven years and is updated annually. Items related to deficiencies identified in the City's Master Plan of Sewers are discussed in Section 6 of the latest plan dated August 2012.

By February 2025, for all sewer lines in the Collection System located within two hundred (200) feet of Surface Waters, the City of Orange will:

1. Repair or replace all gravity sewer lines previously found to be Significantly Defective;
2. Begin a Surface Water Assessment to prioritize the review, rating, and repairs of gravity sewer lines located within 200 feet of a surface water.
3. Sewer pipe segments containing defects with a PACP rating of 3 that are not repaired or replaced within five (5) years after completion of the Surface Water Condition Assessment are to be re-CCTV'd every ten (10) years to ascertain their condition. If the City determines the sewer pipe segment has deteriorated and needs to be repaired or replaced, the City shall complete such repair or replacement within five (5) years after the last CCTV cycle.

For the remainder of the Collection System, the City will implement the Condition Assessment Cycle and re-inspect all gravity sewer lines, manholes, pump/lift stations, and pipe segments at least every ten (10) years. This program of re-inspection will begin one (1) year following completion of the Full Condition Assessment.

D. Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be a properly trained.

Administrative and Field Staff attend training as available. California Water Environment Association (CWEA) certification training for Field staff is conducted on a regular basis. Attainment of the following certification grades will be the goal of the City of Orange.

Position	Level	Cert. Type
Maintenance Division Manager	Grade 4	Collections
Assistant Field Services Manager	Grade 3	Collections
General/Sanitation Supervisor	Grade 2	Collections
All Field support staff	Grade 1	Collections
Environmental Compliance Specialist	Grade 1	Collections
Environmental Scientist	Grade 3	Collections
Environmental Program Manager (Surface Water Quality)	Grade 3	Collections
Contract personnel are trained on an as-needed basis.		

E. Provide equipment and replace part inventories, including identification of critical replacement parts.

The City of Orange has or has on order general maintenance equipment necessary to perform minor sewer construction, maintenance, and inspection work. The City maintains a limited supply of sewer pipe, clamps, manhole covers and emergency pumps and hoses stored at the City’s Corporation Yard. In addition, as part an emergency response cooperative, the City is able to contact other local wastewater agencies to obtain emergency repair parts.

V. DESIGN AND PERFORMANCE PROVISIONS

A. Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems.

As noted in Section III B, design of the City’s sewer collection system is based on the Orange County Sanitation District’s document Design and Construction Requirements of Sanitary Sewers. The document contains design requirements such as maximum peak flow allowed, minimum velocity, depth of cover, land use density, manhole spacing, materials and other criteria used in designing sewers within the City.

Construction specifications for construction and performance of its new sewer lines and the rehabilitation of existing sewer lines are through the Standard Specifications for Public Works Construction (Green book) as modified internally to meet City requirements. The Green Book sections most commonly used in the construction of City sewers are sections 306 and 500.

Section 306 Underground Conduit Construction covers sewer pipe construction and includes information on excavation, trenching, bedding, joints, backfill, air pressure tests, water pressure tests and other items related to the installation and acceptance of underground pipes. Section 500, Pipeline Rehabilitation, includes information on various lining methods that can be used to rehabilitate underground pipes. These sections are contained in Appendix C.

In addition, the City of Orange Standard Plans Series 200 provides information on constructing sewer manholes and other elements related to sanitary sewers. Copies of these plans are contained in Appendix C.

B. Procedures and standards for inspecting and testing installation of new sewers, pumps and other appurtenances and for rehabilitation and repair projects.

Inspection and testing standards of new sewers and rehabilitation of existing sewers are in accordance with Section 306 of the Green Book as noted in Section V.A above. Applicable sections are contained in Appendix C.

VI. OVERFLOW EMERGENCY RESPONSE PLAN

Each Enrollee shall develop and implement an overflow emergency response plan that describes measures to protect public health and the environment. At a minimum, this plan must include the following:

A. Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner.

The City of Orange maintains a 24-hour, 7-day per week emergency callout program. Call-in numbers are published for SSOs occurring during normal business hours and after close of business. Notification procedures are in accordance with the State WDR Order as identified in the City's Sanitary Sewer Overflow Emergency Response Plan included in Appendix B.

B. A program to assure on appropriate response to all overflows.

The City of Orange has developed a Sanitary Sewer Overflow Emergency Response Plan (SSOERP) that identifies how the City responds to SSOs during normal and after business hours. The plan identifies specific activities conducted at the SSO site, reporting of SSOs to regulatory agencies and roles assigned to specific individuals. This plan can be found in Appendix B.

C. Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, regional water boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the MRP. All SSOs shall be reported in accordance with this MRP, the California Water Code, other state law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The SSMP should identify the officials who receive immediate notification.

As noted above, the City's SSOERP identifies reporting responsibilities and to whom notifications are made and the time frames for reporting SSOs. The Santa Ana Regional Board receives notification of all SSOs regardless of their category designation within 24 hours. The California Emergency Management Agency (CAL-EMA) (formerly, the State Office of Emergency Services (OES)) and the Orange County Health Care Agency receive notification of an SSO within the first 2 hours of an SSO.

D. Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the emergency response plan and are properly trained.

City of Orange staff has regular meetings and training. Following each public response to a sewer overflow, staff meetings are held where response procedures are evaluated and future actions discussed to maximize efficiency in the response. Appropriate information is then related to the entire sewer response team through

subsequent staff meetings and training, typically accomplished at the next monthly all-hands safety meeting. Contract staff receive printed materials for review and guidance from City staff to ensure optimum performance.

E. Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities.

City of Orange staff is trained in emergency operations response. Meetings are held frequently to ensure staff is properly trained to respond to all situations including the use of traffic control. If deemed necessary, staff is also trained on when to seek support from other City departments such as Police or Fire Department.

F. A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerator or additional monitoring as may be necessary to determine the nature and impact of the discharge.

The City of Orange's goal is to contain all SSOs and prevent discharge to surface waters to the maximum extent practicable. As noted above, meetings are held following public spills and response procedures evaluated. Any changes recommended are utilized in future spill responses. These efforts are undertaken to ensure timely and maximum efficiency in minimizing spills to Waters of the United States.

Water bodies within the City of Orange are primarily engineered flood control channels that are fenced off from the public. This minimizes any public contact with potential sewer overflows. In addition, 91% of all creeks and channels discharge to the Santa Ana River, which is earthen bottom with sandy soils that allow rapid infiltration of all nuisance water flowing in storm drain pipes further reducing the impact to the public.

VII. FOG CONTROL PROGRAM

Each Enrollee shall evaluate its service area to determine whether a FOG control program is needed. If an Enrollee determines that a FOG program is not needed, the Enrollee must provide justification for why it is not needed. If FOG is thought to be a problem, then Enrollee must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include the following as appropriate:

A. An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG.

The City of Orange has provided a poster and two informational DVDs to all City restaurants on the proper disposal of FOG and kitchen best management practices. When a new restaurant opens in the City it receives a poster and DVD containing appropriate best management procedures for kitchen practices to ensure it adheres to proper FOG disposal. In addition, the City currently uses its local newsletter Our Orange and website to reach residents and inform them of the need for proper FOG disposal. FOG brochures are also available at the City's Public Works counter.

B. A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and or additional facilities needed to adequately a dispose of FOG generated within a sanitary sewer system service area.

Each City of Orange restaurant is responsible for the proper disposal of FOG generated within its facility. If necessary and requested by the facility, the City provides a list of acceptable FOG disposal operators.

Operators can dispose of their FOG at the Orange County Sanitary District facilities located in Fountain Valley.

C. The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG.

The City of Orange adopted Ordinance 17-04 its Fats, Oils and Grease Control Regulations Applicable to Food Service Establishments on November 9, 2004 to control the discharge of FOG into the City's sanitary sewer system. The ordinance was codified into its municipal code in Chapter 13.66. The ordinance contains information on how to reduce the impact of FOG on the sewer system through the use of kitchen best management practices. A copy of the ordinance can be found in Appendix C

D. Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, and maintenance requirements, BMP requirements, recordkeeping and reporting requirements.

Ordinance 17-04 requires all new food service facilities (FSEs) to install grease interceptors or grease traps as necessary to control the discharge of FOG into the sanitary sewer system. FSEs that are upgraded or have operational changes may also be required to install grease interceptors or grease traps if they trigger certain requirements in the ordinance. In addition, existing FSE may be required to install new grease control devices if it is determined that they are discharging an excessive amount of grease and it is contributing to sanitary sewer overflows. The ordinance also contains BMP, recordkeeping and reporting requirements. A copy of the ordinance can be found in Appendix C.

E. Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance.

Ordinance 17-04 provides authority to inspect grease producing facilities and contains enforcement provisions that include Civil and Criminal penalties to ensure those discharging FOG into the sanitary sewer system can be prosecuted. The City of Orange currently contracts with the Orange County Health Care Agency to inspect all of the City's restaurants to ensure proper best management practices are being implemented and FOG is not being discharged. City staff are used to inspect grease interceptors and grease traps every 3 to 6 months as needed based on the amount of FOG generated.

F. An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section.

The City of Orange has produced a list of hot spots associated with FOG discharges. Hot spots are cleaned regularly every 3 to 6 months to minimize wastewater overflows. These hot spots can be found in Appendix G

G. Development and implementation of source control measures for all the sources of FOG discharged to the sanitary sewer system for each section identified in F. above.

As noted in A above, all grease producing facilities are provided with education and training material on the proper disposal of FOG. Where specific sources have been identified, attempts are made to remove the FOG source through education, additional BMP training or installation of grease capturing devices. Where the source cannot be identified, the area is targeted for outreach through flier distribution of door hangers or educational letters. The area may also be added for frequent cleaning. All of this is considered instrumental in reducing wastewater overflows from hot spot areas. Based on the frequency of sewer spills the previous years, the program seems to be successful.

VIII. SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

The Enrollee shall prepare and implement a capital improvement plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum the plan must include:

A. Evaluation: Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events.

The City of Orange completed an update to its Master Plan of Sewers in August 2012. Included in that plan is a complete capacity analysis of the collection system. The plan identifies deficient segments within the system along with the recommended upgrades. These recommendations will be evaluated and included in the City's CIP program as needed. A copy of the new Master Plan recommendations are contained in Appendix H.

B. Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified in A above to establish appropriate design criteria.

The City of Orange utilizes the County Sanitation Districts of Orange County design criteria to design and assess the capacity of its collection system. This criterion is the basis for analysis of its existing sewer collection system contained in the City's Master Plan of Sewers.

C. Capacity Enhancement Measures: The steps needed to establish a short and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.

A capital improvement program is a part of the Master Plan of Sewers and is contained in Appendix H. Separately, the City has prepared another document Sanitary Sewer Rehabilitation and Replacement Plan that contains the latest information on the CIP.

D. Schedule: The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in A-C above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements described in section D.14.

The City's proposed sewer sections for improvement are included in Appendix H and the Sanitary Sewer Rehabilitation and Replacement Plan as noted above.

IX. MONITORING, MEASURING, AND PROGRAM MODIFICATIONS

The Enrollee shall:

A. Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities.

The City of Orange will evaluate its activities annually to ensure that its resources are used effectively and targeted to minimize sewer spills. This includes the review of sewer spill locations, causes of spills, cleaning and videoing frequency of its sewer system, capital improvement program and hot spot and sewer deficiency locations. This information will be contained in its GIS system for rapid visual assessment or contained in spread sheets where information can be tracked accurately. Once compiled, the information will be reviewed annually with the goal of reducing sewer spills and future work will be prioritized accordingly.

B. Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP.

The SSMP will be reviewed annually and each program element assessed. Where changes are needed, the SSMP will be revised. In addition, where resources or changes are deemed more crucial to a particular part of the program, those changes will be implemented following the annual review noted in paragraph A above.

C. Assess the success of the preventive maintenance program.

The maintenance program will be evaluated on an annual basis to ensure resources are applied where deemed necessary. This includes the review of all relevant factors noted in paragraph A above.

D. Update program elements, as appropriate, based on monitoring or performance evaluations.

The City of Orange will review and update the program elements of the SSMP annually in accordance with (A), (B), and (C) and this paragraph to assess and measure their effectiveness and update as necessary.

E. Identify and illustrate SSO trends, including: frequency, location, and volume.

As part of the annual review of the SSMP program elements, the City of Orange will look for trends, frequency, locations and volumes to assess changes to its maintenance program.

X. SSMP PROGRAM AUDITS

As part of the SSMP, the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the Enrollee's compliance with the SSMP requirements identified in this subsection (D. 13), including identification of any deficiencies in the SSMP and steps to correct them.

The City of Orange will undertake the audit of the SSMP as specified.

XI. COMMUNICATION PROGRAM

The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented.

The Enrollee shall also create a plan of communication with systems that are tributary and/or satellite to the Enrollee's sanitary sewer system.

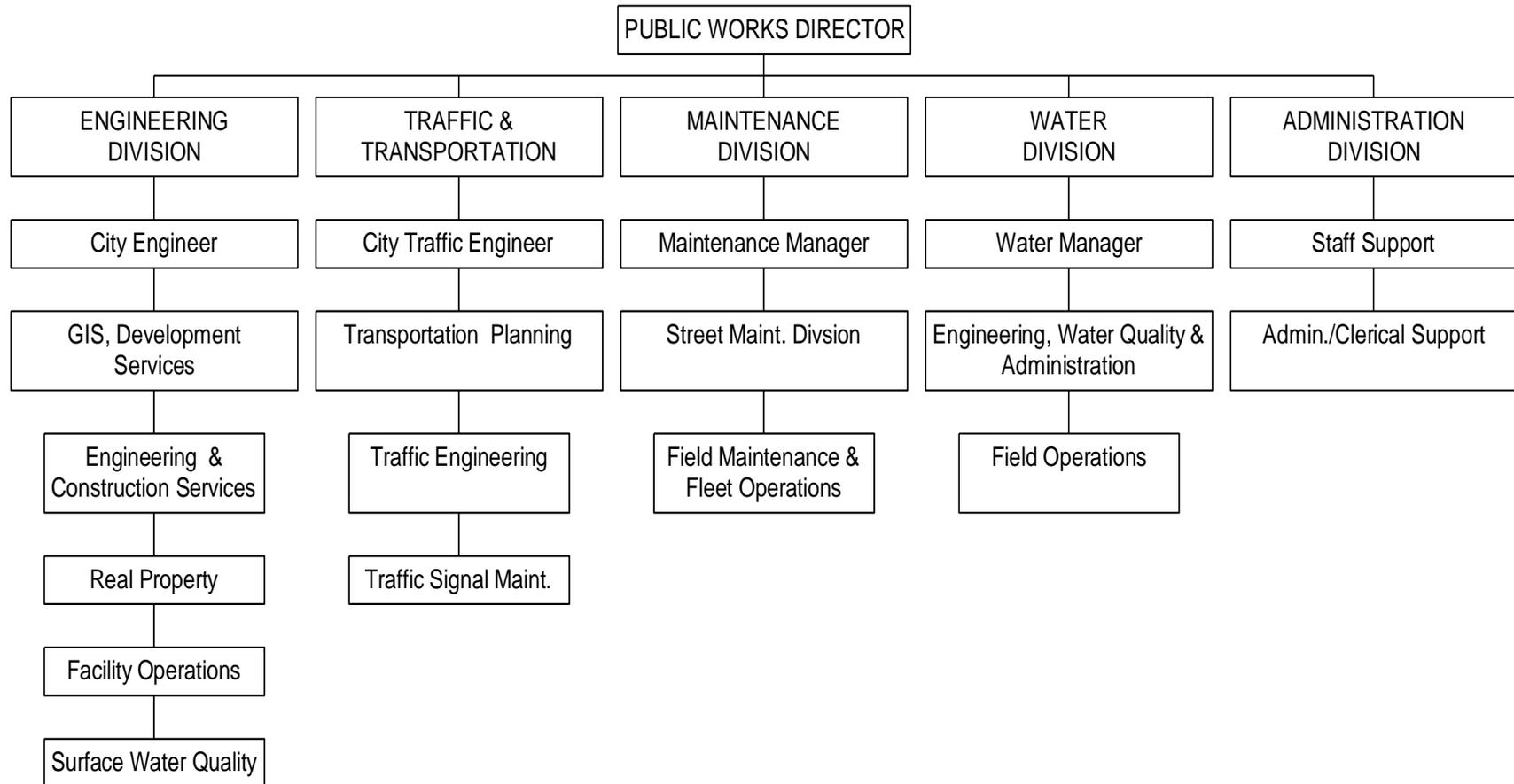
SSMP City of Orange
Updated May 2020

The City of Orange has established a website that describes the SSMP and posted companion documents. Input from interested parties is solicited via the website.

APPENDIX A

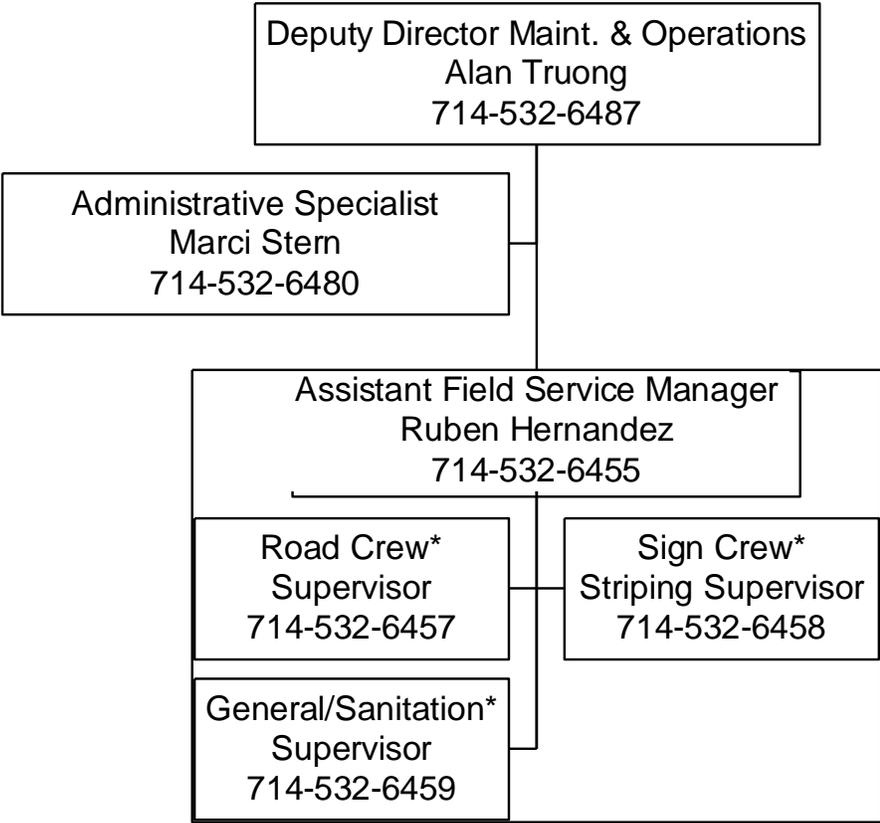
PUBLIC WORKS ORGANIZATION

CITY OF ORANGE PUBLIC WORKS DEPARTMENT 2020 Organization Chart



PUBLIC WORKS DEPARTMENT

Maintenance Division & SSO Response 2020 Organization Chart



* Under each supervisor are lead workers, maintenance workers, equipment operators or other personnel necessary to carry out the unit's duties. In the case of Sweeping, this includes street sweepers.

SSMP RESPONSIBILITY

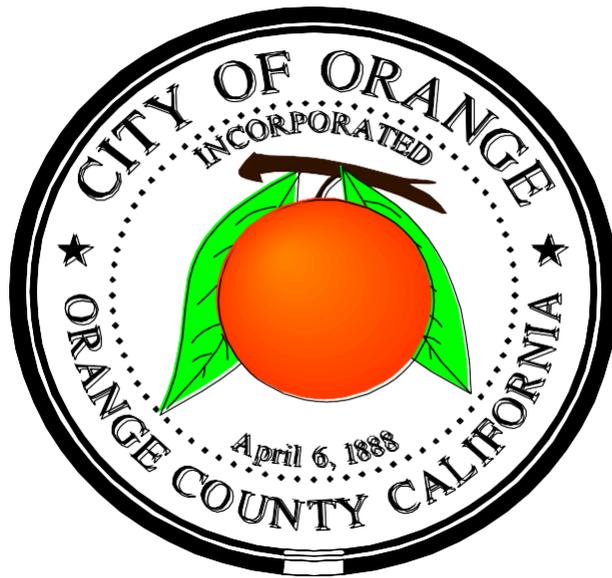
Name	Title	Telephone No. (714)	Responsibility	SSMP Section D13 of WDR Order
Chris Cash	Public Works Director	714-744-5545	Legally Responsible Official	Overall responsibility X
Alan Truong	Senior Maintenance Manager	714-714-5568	Operation and Maintenance Program (Sewer line cleaning & videoing, maintenance and repair, personnel training, SSO response, monitoring)	IV b,c,d,e VI d,e,f IX
Frank Sun	Deputy Director/ City Engineer	714-744-5529	Capital Improvement Projects/Design (new sewer design and repair, system capacity assessment)	V VIII
Mike Carney	Environmental Program Manager	714-744-5557	FOG Control Program SSMP Communication SSO trends	VI a,b,c VII IX d,e XI
Randy Nguyen	Principal Civil Engineer	714-744-5531	Capital Improvement Projects/Design (new sewer design and repair, system capacity assessment)	V VIII
Medel Llanes	Principal Civil Engineer	714-744-5535	GIS Maps	IV a

APPENDIX B

SANITARY SEWER OVERFLOW EMERGENCY RESPONSE PLAN

SANITARY SEWER OVERFLOW EMERGENCY RESPONSE PLAN

PREPARED BY
CITY OF ORANGE



PREPARED FOR
STATE WATER RESOURCES CONTROL BOARD
ORDER NO.2006-003-DWQ
GENERAL WASTE DISCHARGES REQUIREMENTS MAY 2, 2009
Updated November 2017
Updated May 2020

Sanitary Sewer Overflow Emergency Response Plan

Foreword

The City of Orange is pleased to submit the Sewer System Management Plan's (SSMPs) Sanitary Sewer Overflow Emergency Response Plan (SSOERP) in accordance with the time schedule detailed in Order-2006-003-DWQ (Order) Section D.15. The SSOERP generally follows the chronological stepwise procedures for receiving information on a possible sewer spill, dispatching response staff, performing required field work and reporting on these activities. This document satisfies the requirements of Section D.13 (vi) of the Order and Order WQ 2013-0058-EXEC.

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I. AUTHORITY

- A.** The State Water Resources Control Board (SWRCB) issued Order No. 2006-003-DWQ (commonly referred to as Sewer Waste Discharge Requirements for the State (Sewer WDR)) to the City of Orange and other collection agencies throughout the State on May 2, 2006. On July 30, 2013 the State issued an update to Order 2006-003-DWQ's Monitoring and Reporting Program WQ 2013-0058-EXEC. The intent of the Order and modified Monitoring and Reporting Program is to ensure the collection agencies within the State provide adequate and appropriate system capacity, adequate maintenance and operation, emergency sewers spill response and legal authority to reduce or eliminate discharges of wastewater to the waters of the State.
- B.** The City of Orange owns and operates the sanitary sewer collection system within the City limits. As the operator of the sewer collection system, the City of Orange has the right and responsibility to properly fund and maintain the system and respond to spills as prescribed in the Sewer WDR.
- C.** In the case of spills caused by private entities, the Orange Municipal Code (OMC) provides the legal authority to enforce violations. Applicable sections include the following:
- OMC Chapter 7.01.030A (2) prohibits the discharge of pollutants including fecal coliform, fecal streptococcus or enterococcus.
 - OMC Chapter 7.01.030A (2) makes it unlawful for any person to “place or deposit any human or animal excrement... on public or private property within the City...” or to “discharge to any natural outlet...any sewage..”
 - OMC Chapter 13.56 prohibits discharges to the sanitary sewer system “causing obstruction to the flow in sewers...”
 - OMC Chapter 13.64.040 prohibits discharge of “industrial waste into or upon any area in the City.”

The City of Orange is responsible for utilizing the aforementioned Municipal Codes to control and prevent future spills from occurring from private property. This responsibility is prescribed in part in the Enforcement Consistency Guide developed by the County of Orange and required by Order No. R8-2002-0010 (commonly known as the MS4 NPDES Permit). Additionally, the City of Orange is required, in the Legal Authority Section [D.13.(iii)(d)] of the Sewer WDR, to develop and implement the legal

authority to “limit fats and greases and other debris that may cause blockages in the sewage collection system.”

II. GENERAL

The Sanitary Sewer Overflow Emergency Response Plan (SSOERP) is designed to ensure that every report of a sewer overflow is immediately dispatched to the appropriate crews so the report can be confirmed and the effects of the overflow controlled or minimized with respect to impacts to public health and the beneficial uses of the waters of the State. The SSOERP also includes provisions to ensure safety pursuant to the directions provided by the Orange County Health Care Agency (OCHCA), and the Occupational Health and Safety Agency (OSHA) and that notification in writing is made to the appropriate local, state and federal authorities (Regional Water Quality Control Board (RWQCB), OCHCA, and California Office of Emergency Services (OES).

A. Objectives

The primary objectives of the SSOERP are to protect public health, the environment, beneficial uses of the receiving waters, satisfy conditions of the Sewer WDR discharge requirements and minimize liability and potential enforcement actions or third-party lawsuits involving the City of Orange.

Additional objectives of the SSOERP are as follows:

- Provide appropriate customer service;
- Protect wastewater treatment plants and collection system personnel;
- Protect the collection system, wastewater treatment facilities, and all appurtenances;
- Protect private and public property beyond the collection and treatment facilities; and
- Provide clearly documented policies, procedures and guidelines for City staff to reference and follow.

This plan shall not supersede existing emergency plans or standard operating procedures (SOPs) unless directed by the Public Works Director or the Maintenance Division Manager and shall, in most cases, refer to these plans and will work in conjunction rather than conflict with them. The existing plans referenced have been reviewed and are consistent with the objectives of this plan.

B. Organization of Plan

The key elements of the SSOERP are addressed individually as follows:

Section III. Notification Procedures, Call Routing and Dispatch

- Section IV. Overflow Containment Correction and Cleanup
- Section V. Reporting
- Section VI. Follow-up Procedures
- Section VII. Update, Distribution and Training
- Section VIII. Definitions

C. SANITARY SEWER OVERFLOW TRACKING

Four mechanisms will be employed to track sanitary sewer overflows (SSOs). These are listed as follows:

- Initial Report - This report is the initial summary of information typically received from citizens or City staff. Receipt of a report initiates dispatch of City crews. The procedures for report taking and information distribution are compiled in Section III below of the SSOERP.
- 2 hr, 24 hr and 3-Day and 15 Day Report - This reporting requirement (required by the revised Order WQ 2013-0058-EXEC of the Monitoring and Reporting Program) requires that within 2 hours of being notified of a spill, the City must notify the Orange County Health Care Agency (OCHCA) along with the Santa Ana Regional Board and OES if the spill is 1000 gallons or more. In addition, a certification is required within 24 hours to the Santa Ana Regional Board that OES and the OCHCA have been notified of a Category 1 spill. A draft report is due to the State within three business days of the date when the spill is brought to the attention of the City of Orange. A final report is due within calendar 15 days.
- Monthly Reporting - This report (required by section B.4. of the revised Monitoring and Reporting Program) is a summary of all Category 2 and 3 spills occurring within a calendar month. Information on the completion, distribution and tracking of these reports can be found in section V of the SSOERP.
- Annual Review - The number of SSOs within the City of Orange will be evaluated annually to assess problem or hot spot areas and appropriate changes to the cleaning and maintenance program will be implemented.

III. NOTIFICATION PROCEDURES, CALL ROUTING AND DISPATCH

This section establishes the procedures for the City of Orange to communicate internally, mobilize and respond to any condition which may cause or contribute to an unpermitted

discharge of wastewater. There is a response to each reported spill caused by public or private facilities which occur on public or private property. This plan considers a wide range of potential system failures that could create an overflow to surface waters, onto land, into groundwater, or into buildings.

A. Receipt of Information Regarding a Sewer Overflow

An overflow may be detected by City of Orange employees or by others (i.e. business owners, residents, etc.). The Maintenance Division in the Department of Public Works is responsible for accepting all phone calls regarding possible sewer overflows during business hours, and is responsible for responding to these notifications 24 hours a day. After hours, a notification system is established with the City's Water Division, which immediately directs any reports to the 24-hour on-call Maintenance Division supervisor who dispatches the crews, calls the Authorized Inspector (AI), who makes the notifications to the regulatory agencies and compiles the spill report. Additional information is provided below on the reporting procedures followed by City of Orange staff.

1. During Business Hours:

- a. Upon receiving a SSO complaint via the Maintenance Division call-in number of 714-532-6480, or the City of Orange's 24 hour emergency call in number of 714-538-1961, or via an employee's city-issued cell phone, the Public Works Street Maintenance Division (general crew) and/or supervisor is dispatched immediately to investigate and mitigate any problems at the SSO location.
- b. The on-site supervisor (OSS) visually determines if the SSO is exiting from a private sanitary sewer lateral, publicly owned (City of Orange) sanitary sewer line or a privately owned sewer line of another agency such as the Orange County Sanitation District (OCSD).
- c. Depending on the type of SSO, public, private or other, procedures are followed in accordance with Section IV below.

2. After Working Hours Procedure:

- a. Upon receiving a potential SSO complaint via the emergency call number of 714-538-1961, the water plant operator places a call to the on-call Supervisor (OS), the OS contacts the on-call Equipment Operator (EO) and maintenance worker (OMW) for immediate response to the reported SSO location to mitigate any problems which may exist and the OS alerts the on-call AI that a potential SSO has been reported.
- b. The EO and OMW visually determines if the SSO is exiting from a private sanitary sewer lateral, publicly owned (City of Orange) sanitary sewer line

or a privately owned sewer line, such as the Orange County Sanitation District (OCSD) or other agency.

- c. Depending on the type of SSO, public, private or other, procedures are followed in accordance with Section IV below.

IV. OVERFLOW CONTAINMENT, CORRECTION AND CLEANUP

The failure of any element within the wastewater collection system that threatens to cause or causes a sewer overflow will trigger an immediate response to isolate and correct the problem. Personnel are immediately dispatched to any site where there is a report of a possible sewer overflow and in most circumstances the City of Orange will handle all response actions with its own equipment and maintenance forces. However, situations may arise, which due to their magnitude or unusual nature, require additional crews or equipment. This is particularly true of situations where sewer pipes are broken or have failed in some way and an on-call contractor is needed to affect emergency repairs. Mutual aid is available from neighboring cities through a “handshake agreement” and the Orange County Sanitation District through a written statement to this effect.

The objectives of these response procedures are to protect public health and the environment. The details of the procedures to achieve these objectives are generally summarized below and complete procedures identified in the following paragraphs for public, private and other SSOs that are brought to the attention of the City of Orange.

- Sanitary sewer spills are immediately contained to the greatest extent possible with all available equipment and resources.
- If additional support is required or mutual aid is needed, these requests are made by the Maintenance Division Manager.
- Perimeters are established and signs are posted as needed (cones, tape, traffic signs, etc.).
- If the spill is the result of a blockage, break or deficiency and is a public sewer line, every effort is made to either clear the blockage or begin emergency repair efforts.
- If the spill is the result of a blockage, break or deficiency in a private sewer line, the responsible party is contacted immediately and containment continues until the blockage is cleared or the private property owner assumes all containment responsibilities.

- At the first opportunity or following clearing of the blockage or reasonably permanent containment (i.e. bypass, or holding tank), cleanup procedures are put in place.
- During cleanup procedures or at an earlier stage if possible, downstream containment/cleanup procedures are employed.

Response During Normal Business Hours

A. SSO from City Owned Collection System

1. If the SSO is determined to be from a city-owned sewer line the OSS places a call via the city-issued cell phone or through the Maintenance Division Secretary at 714-532-6480, to an AI for immediate response to the SSO location and the following procedures are followed:
 - a. SSO reaching the public right-of-way.
 - i. The general or sanitation crew determines the appropriate location to place berm(s), dam(s) or dike(s) either near the SSO source or in the street curb to prevent the SSO from entering the storm drain. Additionally, the covering of the catch basin with sandbags or other available means may be necessary if deemed appropriate.
 - ii. If the SSO site requires a lane closure, the general crew will close the lane and place barricades to keep vehicle and pedestrian traffic away from contact with spilled sewage. The crew will use traffic controls and arrow board(s), following the most up-to-date WATCH handbook guidelines.
 - iii. The general or sanitation crew determines the wastewater levels and blockage point, if any, inside City sewer lines by removing the sewer manhole covers in the surrounding area and performing a visual inspection. The general or sanitation crew then attempts to remove the sewer blockage once it is found. If necessary, the OSS may also call a private contractor or another agency for assistance.
 - iv. Upon arrival at the SSO, the AI is briefed by the OSS or other response personnel and ensures containment berms have been placed at appropriate locations. The AI then determines the overflow rate; through visual inspection and/or the SSO calculation chart (Attachment 2), the AI uses the city-issued cell phone to immediately call the OCHCA at 714-433-6419. The City will assist the OCHCA in determining whether the SSO poses a risk to health or the environment, and conduct any sampling it may deem appropriate.
 1. If there has been an impact to the storm drain/catch basin and the spill is 1000 gallons or greater, the AI will contact OES at (800) 852-7550 using the City-issued cell phone within 2 hours of

- becoming aware of the discharge and the RWQCB as soon as possible at 951-782-4130, but no later than twenty-four (24) hours regardless of the actual spill amount.
2. The AI, when conditions allow, will take pictures showing the location and travel path of the SSO for inclusion in the report to the state's CIWQS online reporting system.
- v. If the SSO has reached or has the potential to reach the storm drain, based on size and location, the OSS or AI places a call via the city-issued cell phone, the handheld radio or through the Maintenance Division Secretary at 714-532-6480, to a sweeper vacuum truck operator for immediate response to the SSO location.
1. Upon arrival on the scene the sweeper vacuum truck operator will attempt to park over the manhole or as close to the SSO discharge point as possible and vacuum the overflow into the truck. The truck operator will remain until the blockage is cleared; is relieved by an additional sweeper vacuum truck; is directed to move or is directed to leave by the OSS or AI.
 2. Before leaving the site, the sweeper vacuum truck operator will recover all SSO wastewater/fluids/discharges, including, to the extent practicable, those that have entered a storm drain pipe or drainage channel.
 3. The sweeper vacuum truck operator will transport all liquids and any contaminated earthen materials to the City of Orange Public Works Corporation Yard at 637 W. Struck Ave.
- vi. If deemed necessary, the OSS may place a call via the city-issued cell phone, the handheld radio or through the Maintenance Division Secretary at 714-532-6480, to a sewer line jetting truck operator for immediate response to the SSO location.
1. Upon arrival, the jetting truck operator requests any assistance needed to enable the operator to fill the hose lines from a nearby fire hydrant and remove the manhole cover; then drives to the manhole that will be the entry point for clearing the line and begins to clear the blockage.
 2. Upon clearance of the blockage and discussion of the cause of the blockage with the OSS and/or AI, a determination will be made on whether any adjacent sewer lines need to be cleaned immediately.
 - a. If immediate cleaning is decided upon, then the jetting truck operator will drive to locations identified for cleaning and begin cleaning the lines.
 - b. If it is determined that the lines in the adjacent area do not need to be cleaned immediately, then the lines will be scheduled for

cleaning as soon as possible.

- c. After final cleaning of the lines the jetting truck operator returns to the Public Works Corporation Yard at 637 W. Struck and releases the remaining tank water into the designated wash area.
- vii. Upon clearing of the sewer line or elimination of the overflow the general crew will remove any uncontaminated berm(s), all traffic controls, response tools, and remain on site until cleared to leave by the OSS or AI.
- viii. The AI takes inventory of the response staff, vehicles, supplies, and time spent at the SSO location for tracking purposes, this information will be compared to the information compiled by the OSS as well.
- ix. The AI performs a final inspection of the area and everyone leaves.

B. SSO from a Privately Owned Sewer Line

1. If the SSO is determined to be from a private sanitary sewer lateral the OSS places a call via the city-issued cell phone or through the Maintenance Division Secretary at 714-532-6480, to an AI for immediate response to the SSO location and the following procedures are followed:
 - a. SSOs on private property.
 - i. The responsible party (RP) will be identified and contacted by the AI and informed that the City of Orange provides initial response and cleanup; however, the RP is required, per the Orange Municipal Code, to eliminate the blockage in their lateral or sewer line, cleanup all SSOs on public and private property, and reimburse the City of Orange for all incurred costs during the SSO response. Additionally the RP will be made aware that the OCHCA will be contacted immediately to inform them of the potential threat to human health. The City will assist the OCHCA in determining whether the SSO poses a risk to health or the environment, and conduct any sampling it may deem appropriate.
 - ii. The AI informs the RP that the City of Orange response crews will remain on-site until the RP has a plumber working on-site and has a cleanup crew working on-site with the ability to contain and isolate the SSO area and remove and adequately dispose of all SSO.
 - iii. If the private property spill involves a restaurant or multi-unit dwelling and the owner is non-responsive, and a significant amount of time has passed, the AI with the OCHCA can make the determination to shut off the water to the location. The AI will contact the Water Division at 714-538-1961 via the city-issued cell phone and request a shutoff.
 1. If the shutoff involves a multi-unit apartment, then an attempt to

- notify each tenant will be made by OCHCA and/or the AI as agreed to on-site
2. If the shutoff involves a restaurant's water service, the OCHCA will be the lead agency in discussing the matter with the restaurant.
- iv. The AI, when conditions allow, will take pictures showing the location and travel path of the SSO.
 - v. The AI takes inventory of the response staff, vehicles, supplies, and time spent at the SSO location for billing purposes, this information will be compared to the information compiled by the OSS as well.
 - vi. When the AI determines that all work has been completed satisfactorily, the OSS in agreement with the AI will instruct all remaining city crews to leave the site.

C. SSO from Other Privately Owned Sewer Line

1. When the OSS determines that the SSO has occurred from a privately owned sewer line such as OCSO or other government agency, the following procedures are followed in addition to the procedures outlined in Section B above:
 - a. The AI will determine the responsible agency and will contact them via the city-issued cell phone for a request for response to the SSO location.
 - b. The response crews and AI will remain on-site, until the agency arrives and is prepared for their response procedures.
 - c. The City of Orange will offer any assistance the responding agency may need before leaving the site.
 - d. The AI, when conditions allow, will take pictures showing the location and travel path of the SSO.
 - e. The AI takes inventory of the response staff, vehicles, supplies, and time spent at the SSO location for billing purposes, this information will be compared to the information compiled by the OSS as well.

Response After Normal Business Hours

D. SSO from City Owned Collection System

1. If the SSO is determined to be from a city-owned sewer line, the on-call supervisor (OS) or on-call Equipment Operator (EO) and maintenance worker (OMW) places a call to the water plant operator at 714-538-1961 via the city-issued cell phone or handheld radio and requests that the on-call AI be contacted for immediate response to the SSO location, and requests any

additional personnel as needed and the following procedures are followed:

- a. SSO reaching the public right-of-way.
 - i. The EO and OMW determines the appropriate location to place berm(s), dam(s), or dike(s), either near the SSO source or in the street curb to prevent the SSO from entering the storm drain. Additionally, the covering of the catch basin with sandbags or other available means may be necessary if deemed appropriate.
 - ii. If the SSO site requires a lane closure, the OMW will close the lane and place barricades to keep vehicle and pedestrian traffic away from contact with spilled sewage. The OMW will use available traffic controls, following the most up- to-date WATCH handbook guidelines.
 - iii. The EO and OMW determines the wastewater levels and blockage point, if any, inside City sewer lines by removing the sewer manhole covers in the surrounding area and performing a visual inspection.
 - iv. Upon arrival, the AI ensures that containment berms have been placed at strategic locations to prevent the spill from entering the storm drain system or receiving waters. The AI determines the overflow rate; through visual inspection or spill chart (Attachment 2) and places a call to Control 1 at 714-628-7008 who will contact the on-call OCHCA personnel. The City will assist the OCHCA in determining whether the SSO poses a risk to health or the environment, and conduct any sampling it may deem appropriate. The following procedures are followed
 1. If the SSO enters the storm drain and/or catch basin and the spill is 1000 gallons or more the AI will notify OES within 2 hours of arriving at the spill site. Regardless of the spill size, the AI will contact the RWQCB within 24 hours.
 2. The AI, when conditions allow, will take pictures showing the location and travel path of the SSO for inclusion in the report to the state.
 - v. If the SSO has reached or has the potential to reach the storm drain, based on size and location, the OS or AI places a call via the city-issued cell phone or the handheld radio, to the water plant operator at 714-538-1961, to contact the on-call sweeper vacuum truck operator for immediate response to the SSO location.
 1. Upon arrival on the scene, the sweeper vacuum truck operator will attempt to park over the manhole or as close to the SSO discharge point as possible and vacuum the overflow into the truck. The truck operator will remain until the blockage is

- cleared, is relieved by an additional sweeper vacuum truck, is directed to move, or is directed to leave by the OS or AI.
2. Before leaving the site, the sweeper vacuum truck operator will recover all SSO wastewater/fluids/ discharges, including, to the extent practicable, those that have entered a storm drain pipe or drainage channel.
 3. The sweeper vacuum truck operator will transport all liquids and any contaminated earthen materials to the City of Orange Public Works Corporation Yard at 637 W. Struck Ave.
- vi. If deemed necessary, the OS/AI may place a call via the city-issued cell phone or the handheld radio to the water plant operator at 714-538-1961, with a request to contact the current on-call sewer line jetting truck operator/company for immediate response to the SSO location.
1. Upon arrival, the jetting truck operator requests any assistance needed to enable the operator to fill the hose lines from a nearby fire hydrant and remove the manhole cover; then drives to the manhole that will be the entry point for clearing the line and begins to clear the blockage.
 2. Upon clearance of the blockage and discussion of the cause of the blockage with the AI, a determination will be made on whether any adjacent sewer lines need to be cleaned immediately.
 3. If immediate cleaning is decided upon, then the jetting truck operator will drive to locations identified for cleaning and begin cleaning the lines.
 4. If it is determined that the lines in the adjacent area do not need to be cleaned immediately, then the lines will be scheduled for cleaning as soon as possible.
 5. After final cleaning of the lines the jetting truck operator returns to the Public Works Corporation Yard at 637 W. Struck or the jetting truck company returns to their place of business and releases the remaining tank water into a designated wash area.
- vii. Upon clearance of the sewer line or elimination of the overflow the OMW will remove any uncontaminated berm(s), all traffic controls, response tools, and remain on site until cleared to leave by the AI.
- viii. The AI, when conditions allow, will take pictures showing the location and travel path of the SSO for inclusion in the report to the state.
- ix. The AI takes inventory of the response staff, vehicles, supplies, and time spent at the SSO location for tracking purposes, this information will be compared to the information compiled by the OS as well.

- x. The AI performs a final inspection of the area and everyone leaves.
- xi. The AI will place a call via the city-issued cell phone or handheld radio to the water plant operator at 714-538-1961 and indicate the time at which the entire response crew has completed work at the SSO location.

E. SSO from a Privately Owned Sewer Line

1. If the SSO is determined to be from a private sanitary sewer lateral the OMW places a call via the city-issued cell phone or the handheld radio, to the water plant operator at 714-538-1961 for a request to contact the on-call AI for immediate response to the SSO location and the following procedures are followed:
 - a. SSO on private property
 - i. The responsible party (RP) will be identified and contacted by the AI and informed that the City of Orange provides initial response and cleanup; however, the RP is required, per the Orange Municipal Code, to eliminate the blockage in their lateral or sewer line, cleanup all SSO on public and private property, and reimburse the City of Orange for all incurred costs during the SSO response. Additionally the RP will be made aware that the OCHCA will be contacted immediately to inform them of the potential threat to human health. The City will assist the OCHCA in determining whether the SSO poses a risk to health or the environment and conduct any sampling it may deem appropriate.
 - ii. The AI informs the RP that the City of Orange response crews will remain on-site until the RP has a plumber working on-site and has a cleanup crew working on-site with the ability to contain and isolate the SSO area and remove and adequately dispose of all SSO.
 - iii. If the private property spill involves a restaurant or multi-unit dwelling, the owner is non-responsive, and a significant amount of time has passed, the AI with the OCHCA can make the determination to shut off the water to the location. The AI will contact the Water Division at 714-538-1961 via the city-issued cell phone or handheld radio and request a shutoff.
 1. If the shutoff involves a multi-unit apartment, then an attempt to notify each tenant will be made by OCHCA and/or the AI as agreed to on-site.
 2. If the shutoff involves a restaurant's water service the OCHCA will be the lead agency in discussing the matter with the restaurant.
 - iv. The AI, when conditions allow, will take pictures showing the location and travel path of the SSO.

- v. The AI takes inventory of the response staff, vehicles, supplies, and time spent at the SSO location for billing purposes, this information will be compared to the information compiled by the OS as well.
- vi. When the AI determines that all work has been completed satisfactorily, the AI will instruct all remaining city response crews to leave the site.

F. SSO from Other Privately Owned Sewer Line

- 1. When the AI determines that the SSO has occurred from a privately owned sewer line such as OCSD or other government agency, the following procedures are followed in addition to the procedures outlined in Section B above:
 - a. The AI will determine the responsible agency and will contact them via the city-issued cell phone for a request for response to the SSO location.
 - b. The response crews and AI will remain on-site, until the agency arrives and is prepared for their response procedures.
 - c. The City of Orange will offer any assistance the responding agency may need before leaving the site.
 - d. The AI takes inventory of the response staff, vehicles, supplies, and time spent at the SSO location for billing purposes, this information will be compared to the information compiled by the OS as well.

A Flow Chart is attached at the end of this SSOERP showing the steps necessary to comply with this procedure.

V. REPORTING

For each sanitary sewer overflow, reports are made in accordance with the procedures outlined in the Monitoring and Reporting Section of the sewer WDR as listed below.

Reporting Procedures

- 1. The responding AI will be responsible for adhering to these reporting requirements.
 - a. Upon returning to the office the AI will complete a City of Orange Spill Report (Attachment 1) for each spill. In completing the spill report the AI shall identify the spill category based on the following:
 - i. A Category 1 spill is defined as all discharges of wastewater resulting from a failure in the City’s sanitary sewer collection system that: reach a surface water and/or reach a drainage channel tributary to a surface

water; or discharge that reaches the MS4 and is not fully captured and returned to the sanitary sewer system.

- ii. A Category 2 spill is defined as a spill resulting from a failure of the City's sanitary sewer system equal to or greater than 1000 gallons that does not reach a surface water or drainage channel or the MS4.
 - iii. A Category 3 spill is defined as all other discharges resulting from a failure of the City's sanitary sewer system.
 - iv. Private Lateral Sewage Discharge (PLSD) is defined as sewage discharges that are caused by blockages or other problems within a privately owned lateral.
- b. A copy of the report will be faxed to the OCHCA at 714-433-6481 and the RWQCB at (951) 320-6362 using the fax machine with the phone number of 714-532-6444 in the Street Maintenance Division office.
 - c. The SSO information will be taken from the Spill Report Form and used to input the following information into the California Integrated Water Quality System (CIWQS), the State's SSO Online Database, at <http://ciwqs.waterboards.ca.gov/>:
 - i. The method for calculations used for estimating total spill volume, spill volume that reached surface waters, and spill volume recovered, as recommended by the State Water Resources Control Board ("State Board") and sanitary sewer collection industry (e.g., the California Water Environmental Association/Southern Collection System Committee);
 - ii. For Category I and II SSOs, a good faith effort to ascertain an accurate estimate of the start time of the SSO based upon direct observation and witness inquiry, rather than setting the start time of the SSO as the time the call was received reporting the SSO, or the time the SSO was reported. The City shall attempt to contact adjacent residents or business owners to more accurately establish the SSO start time, duration, and flow rate, if such start time, duration, and flow rate have not been otherwise reasonably ascertained; and,
 - iii. Taking of photographs of the manhole flow at the SSO site using photographic evidence that may aid in establishing the spill volume. To the extent feasible, photographs shall be taken with a camera that date and time-stamps the photographs. If not possible, the City will use another method to provide the location, date, and time the photographs were taken.
2. **2 Hour, 24 Hour, Three (3) Day, 15 Day and Thirty (30) Day Reporting Requirement:**
 - a. All Category 1 spills shall be reported to the OCHCA and the Santa Ana

Regional Board within 2 hours of becoming aware of such discharge and to OES if equal to or greater than 1000 gallons. In addition, a certification is to be submitted to the Santa Ana Regional Board within 24 hours that OES and OCHCA have been notified of the spill. The phone call placed to the Regional Board within the 2 hour period noted above along with the draft spill report submitted in V.1.c above to the CIWQS system will satisfy this requirement.

- b. A draft report of all Category 1 spills shall be submitted to the State's online CIWQS system within 3 business days and a copy of the City of Orange completed Spill Report shall be submitted to the RWQCB.
 - c. A completed spill report certified by the LRO shall be submitted on the State's online CIWQS system within 15 calendar days.
 - d. All Category 2 and 3 SSO reports shall be input into CIWQS within 30 days after the end of the calendar month in which the spill occurs.
 - e. Before the end of the thirty (30) day period, from the end of the previous month, the Category 2 and 3 SSO reports in CIWQS shall be reviewed by the LRO.
 - f. The LRO will review the Category 2 and 3 spills reports and will certify and electronically submit the report to the State on the online CIWQS database.
3. **Filing Procedures:**
- a. The AI files the City of Orange Spill Report Form in the file cabinet in the Environmental Compliance Specialists' office.

VI. FOLLOW-UP PROCEDURES

Following the spill response, cleanup and reporting, oftentimes additional actions must be taken to ensure similar spills do not occur in the future. These actions can include but are not limited to the following:

- Issuance of a Notice of Violation to property owner
- Issuance of a Compliance Order to private property owner
- Issuance of a Cease and Desist order to a private property owner
- Coordination of enforcement action with other agencies (OCHCA)
- Civil and or criminal prosecution
- CCTV of sanitary sewer main
- Increase cleaning frequency of segment of sanitary sewer main
- Regular monitoring of sanitary sewer main

- Repair of sanitary sewer main
- Realignment and/or reconstruction of the sanitary sewer main
- Monitoring and testing

Also applicable to this section are the following guidelines for media notification. Current City policy is that only designated representatives are permitted to provide information to members of the media or their representatives.

VII. UPDATE, DISTRIBUTION AND TRAINING

A. Update of SSOERP

Annual reviews shall be made to the SSOERP. More reviews shall be performed as warranted. If an element of this plan, related document or appendix is revised, a review would be initiated.

In addition to the periodic reviews, a standard annual review shall be made to ensure that the SSOERP is current, correct and applicable. Any changes shall be made within one month of this review, which shall occur on the anniversary date of the initial distribution.

B. Availability to the public

Section D.13.xi of the Order requires the City of Orange to communicate with the public on a regular basis on the development and implementation of the SSMP and hence the SSOERP. The SSMP is posted on the City’s website to satisfy this requirement. However, due to the ongoing dynamic nature of the SSOERP the following statement is provided: *“please be aware that this is a living document and is regularly revised. To obtain the latest copy, please contact the Public Works Department of the City of Orange.*

C. Training

This section prescribes the frequency, content and positions responsible for fulfilling the training requirements of the SSOERP.

1. Onsite Supervisor

Training on the SSOERP shall be provided to any staff member holding the position of Onsite Supervisor or directly supervises one or more of these staff members. Training shall be conducted by the Public Works Director or his/her designee. The trainer shall have an intimate knowledge of the SSOERP, City of Orange and its staff, resources, field conditions, policies and procedures as they apply to the sewer system maintenance and emergency response. The topics covered shall include:

- Overview of the Sewer WDR and intent of the SSMP
- Overview of the function and need for the SSOERP
- Review of each section of the SSOERP
- Review of related documents and their procedures
- Discussion and focus on any shortfalls of the OSS or crews in execution of the required actions and procedures and the SSOERP
- Discussion and documentation of any shortcomings and the SSOERP

Training shall be provided annually and-except for the initial training which will be held within one month following the completion of the SSOERP-shall precede the review and update of the SSMP by one month to provide time to review and incorporate changes based on his input.

2. Sanitation Field Crews

Fields staff shall also be trained on an annual basis on proper response procedures. Again this training shall precede the review and update of the SSMP by one month to provide time to review and incorporate any changes based on staff input. New sanitation staff is trained on an individual basis within one month of starting work.

The general training for field staff required by Section D.13.iv.d of the Sewer WDR requiring staff and contractors to be adequately trained will be developed as part of the SSMP. This will focus more on the routine maintenance activities and equipment used in exercising daily or typical duties.

VIII. Definitions

Authorized Inspector – the individual responsible for notifying regulatory agencies that an SSO has occurred. This person is also responsible for reporting the spill to the state online database and ensuring that the SSO affected area has been cleaned.

Collection System - The system of pipes, sewer lines, or other conveyances owned by the City and located within the City's boundaries used to collect and convey wastewater to Reclamation Plant No. 1 in Fountain Valley or Treatment Plant No. 2 in Huntington Beach (“the Facility”), excluding sanitary sewer laterals and satellite systems.

Condition Assessment - A report that comprises inspection, rating, and evaluation of the existing condition of the Collection System. Inspection is based upon closed circuit television ("CCTV") inspections of sewer lines, manhole inspections, inspections for structural defects, and inspections of pipe connections at the manhole. After CCTV inspection occurs, pipe conditions are assigned a

grade, such as the Pipeline Assessment and Certification Program ("PACP") rating system developed by the National Association of Sewer Service Companies.

Condition Assessment Cycle - A Condition Assessment of the entire sewer system that requires each gravity sewer line to be CCTV'd every ten years, but does not require all sewer lines to be on the same CCTV schedule. Accordingly, each gravity sewer line will be on its own cycle, where such CCTV will occur at least every ten years or more frequently, if necessary.

Full Condition Assessment - A Condition Assessment, (excluding Surface Water Condition Assessment(s) which are defined below) of all sewer lines in the Collection System, except sanitary sewer laterals.

Onsite Supervisor - the onsite supervisor is an individual at a sewer spill who is of the highest rank within Orange Streets and Sanitation Division. This person is responsible for directing the operations, gathering information and ensuring that the SSOERP and SSOP are adhered to.

Sanitary Sewer Overflow - a sanitary sewer overflow (a.k.a. sewer spill, sanitary sewers spill, sewer overflow) is any overflow, spill, release, discharge or diversion of untreated or partially untreated from a sanitary sewer system. Sanitary sewer overflows include: (i) overflows or release of untreated or partially treated wastewater that reach waters of the United States; (ii) overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and (iii) wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer (not a building lateral). Wastewater backups into buildings caused by a blockage or other malfunction of the building lateral that is privately owned is a sanitary sewer overflow when sewage is discharged off a private property into streets, storm drains, or waters of the State.

Sanitary Sewer System - any system of pipes, pump stations, sewer lines, or other conveyances upstream of a wastewater treatment plant headworks used to collect and convey wastewater to the publicly owned treatment facility. Temporary storage and conveyance facilities (such as vaults, temporary piping, construction trenches, wet wells, impoundments, tanks, etc.) are considered to be part of the sanitary sewer system and discharges into these temporary storage facilities are not considered sanitary sewer overflows.

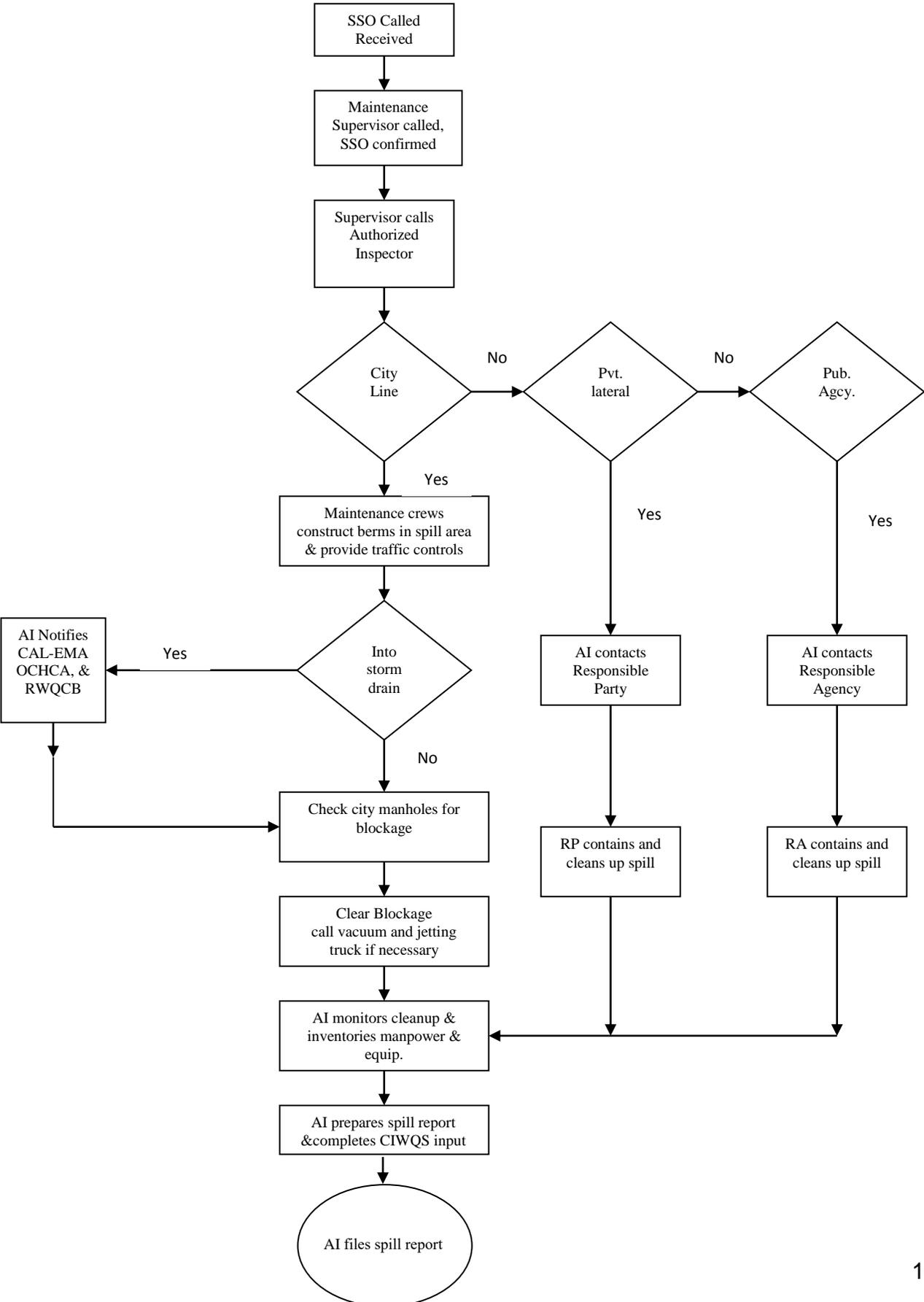
Surface Water Condition Assessment - A Condition Assessment of sewer lines in the Collection System, (excluding sanitary sewer laterals) located within 200 feet of a surface water.

Significantly Defective - A sewer pipe is considered Significantly Defective if its condition receives a Structural or Operation and Maintenance grade of 4 or 5 based on the PACP rating system or an equivalent rating system developed by the City. The PACP assigns grades based on the significance of the defect, extent of damage, percentage of flow capacity restriction, and/or the amount of pipe wall loss due to deterioration. Grades are assigned as follows:

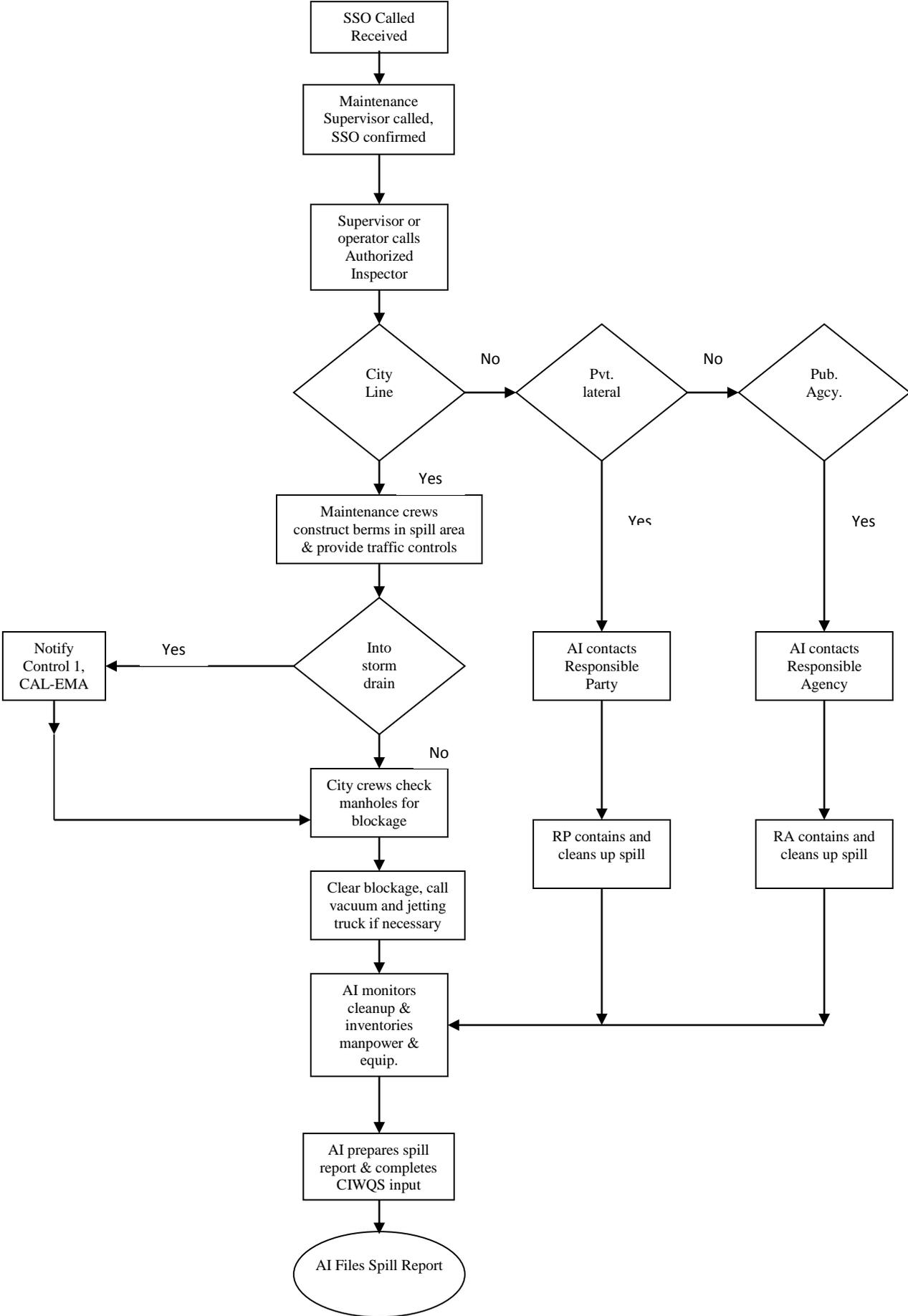
- 5 - Most significant
- 4 - Significant
- 3 - Moderate
- 2 - Minor to moderate
- 1 - Minor.

Surface Waters - Refer to the Santa Ana River, Santiago Creek, and Handy Creek, those portions of which are located within the City of Orange.

SSO Response During Normal Working Hours



SSO After Normal Working Hours





CITY OF ORANGE SPILL REPORT

Type of Spill	
<input type="checkbox"/>	Sanitary Sewer Overflow
<input type="checkbox"/>	Hazardous material
Other: _____	

Date of spill: _____ 20____ Reported by: _____ Phone: _____

Location: _____ GIS Coordinates: _____

Time reported: _____ am pm Estimated start time of spill: _____ am pm

Arrival time: _____ am pm Estimated stop time of spill: _____ am pm

Response Personnel: _____

Origin of spill: City sewer line County sewer line Private line Private property flowing into public street

If private ownership; name, address, & phone number of responsible party or property owner: _____

_____ Contact: _____

Est. total spill volume: _____ Est. total volume recovered: _____ Photos taken of the spill? Yes No

Method of volume estimation: _____

Did the spill enter a: Catch basin/ storm drain? Yes No Storm channel? Yes No

If yes, est. volume: _____

Receiving water: N/A Santa Ana River Santiago Creek Handy Creek County Channel Other: _____

Cause of spill: Grease Roots Broken line Rain inflow Vandalism: _____ Other: _____

Date of clean up: _____ 20____ Time completed: _____ am pm Method of disinfection: _____

Containment: Earth/ Sand berm Sandbags Seal Catch Basin Other: _____

Cleanup Action taken: _____

Action to Prevent Recurrence: _____

OTHER AGENCIES NOTIFIED: Check all that apply

	<u>Date & Time Notified</u>	<u>Contact Person/Additional Info</u>
<input type="checkbox"/> CONTROL ONE (714) 628-7008	_____	_____
<input type="checkbox"/> OCHCA - (714) 433-6419 Fax (714) 433-6481	_____	_____
<input type="checkbox"/> RWQCB - (951) 782-4130 Fax (951) 781-6288	_____	_____
<input type="checkbox"/> OCPW - (714) 955-0600 Fax (714) 955-0639	_____	_____
<input type="checkbox"/> OCSD - (714) 593-7025 Fax (714) 962-2591	_____	_____
<input type="checkbox"/> DFG - (916) 445-0045 Fax (916) 323-0774	_____	_____
<input type="checkbox"/> Cal EMA - (800) 852-7550 Fax (916) 845-8910	_____	_____

Control # _____

Form Completed By: _____ Phone: _____ Fax: _____



CITY OF ORANGE

SPILL VOLUME ESTIMATION SHEET

Spill Volume Method of Estimation (check appropriate box and provide appropriate information for method used below)

San Diego Manhole Flow Rate Chart CWEA Ruler Vent or Pick Holes Eyeball estimate Measured volume

Spill Start Time: _____ Spill End Time: _____

San Diego Manhole Flow Rate Chart - Describe what picture used and how the determination made, i.e. measured height, how far from spill, etc.

CWEA Ruler - Describe what picture used and how the determination made, i.e. measured height, how far from spill, etc.

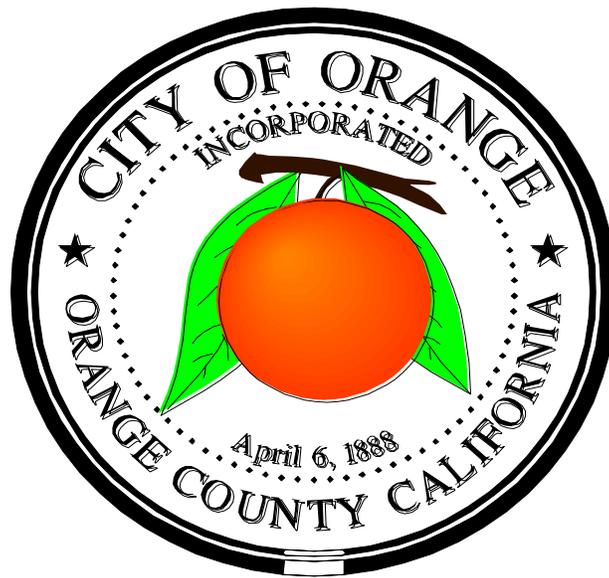
Vent or Pick Holes - Identify vent hole diameter, number holes, height, where measured, etc.

Eyeball Estimate – Describe how estimated (spill area, number of 5 gallon buckets, etc.)

Measured Volume – Describe area measured, depth of wastewater and its location, provide sketch below.

SEWER SYSTEM MANAGEMENT PLAN

PREPARED BY
CITY OF ORANGE



PREPARED FOR
STATE WATER RESOURCES CONTROL BOARD
ORDER NO.2006-003-DWQ
GENERAL WASTE DISCHARGES REQUIREMENTS

Updated November 2017

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APPENDICES

Appendix A – Orange Public Works Organization Chart

Appendix B – Sanitary Sewer Overflow Emergency Response Plan

Appendix C – Municipal Code Sections

Appendix D – Pump Station Maintenance and Manhole Inspection Form

Appendix E – Orange Sewer and Storm Drain System Maps

Appendix F – Sewer System Maintenance Frequency Map

Appendix G – Orange Sewer Main Hot Spot List

Appendix H – Sewer System Deficiency Update

SEWER SYSTEM MANAGEMENT PLAN

I. GOAL

The goal of the SSMP is to provide a plan and schedule to properly manage, operate and maintain all parts of the sanitary sewer system. This will help reduce and prevent SSOs, as well as mitigate any SSOs that do occur.

The City of Orange recognizes the importance of protecting ocean water quality by preventing sewer spills and is supplementing its existing sewer system management program with the requirements of the State regulations.

II. ORGANIZATION

THE SSMP MUST IDENTIFY:

A. The name of the responsible or authorized representative as described in Section J of the Order.

All signed reports required by the WDR are signed by representatives of the City of Orange identified as Legally Responsible Officials. The names and their responsibility are shown in the table below.

Name	Title	Responsibility
Rick Otto	City Manager	Overall program responsibilities
Joe DeFrancesco	Public Works Director	Carrying out WDR Activities
Gene Estrada	Environmental Program Mgr.	FOG Program, SSO reports

B. The names and telephone numbers for management, administrative and maintenance positions responsible for implementing specific measures of the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation.

The City of Orange Public Works Department is responsible for implementing the Sanitary Sewer Management Plan (SSMP). A set of organization charts that includes names and telephone numbers of sewer maintenance personnel is contained in Appendix A along with their individual responsibilities for

implementing this SSMP. The charts also outline the lines of authority for administrative and field staff.

- C. The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or California Emergency Management Agency (CAL-EMA) (formally State Office of Emergency Services (OES)).**

Public Works Engineering Division's Surface Water Quality Section is responsible for oversight of the reporting process. Depending on the time of day in which SSOs occur, calls for the reporting of SSOs occur in two ways as reported in Section VI and the Sewer System Overflow Emergency Response Plan included in Attachment B. During normal working office hours, calls of SSOs are reported to the Public Works Maintenance Division at 714-532-6480. After normal working hours including weekends and holidays, calls are forwarded to the City's Public Works Water Division where the Water Plant Operator takes all information and forwards the information to the on-call Public Works supervisor. At that point City work crews are dispatched to the site along with an Environmental Compliance Specialist, who provides reports to the state and affected regulatory agencies including the Orange County Health Care Agency, and procedures outlined in the Sanitary Sewer Overflow Emergency Response Plan are followed.

III. LEGAL AUTHORITY

Each Enrollee must demonstrate their sanitary sewer system uses ordinances, service agreements or other legally binding procedures, that it possesses the necessary legal authority to:

- A. Prevent illicit discharges into its sanitary sewer system (examples may include I/I, storm water, chemical dumping, unauthorized debris and cut roots, etc.);**
- B. Require that sewers and connections be properly designed and constructed;**
- C. Ensure access for maintenance, inspection, or repairs for portions of the laterals owned or maintained by the public agency;**
- D. Limit the discharge of fats, oils, and grease and other debris that may cause blockages, and**
- E. Enforce any violation of its sewer ordinances.**

The City of Orange's legal authority for items A-E is established by the following:
(responses listed in corresponding order to the items above)

1. OCSD Ord. 37 (This is an Orange County Sanitation District ordinance that covers the City of Orange and can be found in Appendix C.)

This is a general ordinance for the Orange County Sanitary District which treats all of the wastewater from the City of Orange. The ordinance contains requirements on what can be disposed of in the sewers, prohibited discharges, authority to carry out ordinance and enforcement.

2. City of Orange Specifications and Standard Plans, Standard Specifications for Public Works Construction (See Appendix C for specific sections) and Design and Construction Requirements of Sanitary Sewers.

Design of sewers in the City's collection system is based on the requirements contained in Design and Construction Requirements of Sanitary Sewers by the Orange County Sanitation District. It contains design requirements such as maximum peak flow allowed, minimum velocity, depth of cover, land use density, manhole spacing, materials and other criteria used in designing sewers within the City. While not formally incorporated into the City's municipal code, it is used by the various divisions involved in the design of sewers. The City of Orange Standard Plans Series 200 provides information on constructing sewer manholes and other elements related to sanitary sewers.

Through its municipal code, the City has adopted the Standard Specifications for Public Works Construction more commonly known as the Green Book. This document, particularly sections 306 and 500 are used in the construction of City sewers. Section 306 Underground Conduit Construction covers sewer pipe construction and includes information on excavation, trenching, bedding, joints, backfill, air pressure tests, water pressure tests and other items related to the installation and acceptance of underground pipes. Section 500, Pipeline Rehabilitation, includes information on various lining methods that can be used to rehabilitate underground pipes.

3. OMC 13.56

Most laterals in the City of Orange are privately owned. It is the responsibility of the owner to maintain the private lateral in good working condition free of obstructions (OMC 13.56.050). In cases where a sewer lateral is required to be

maintained by the City, an easement is recorded that contains provisions for access, maintenance and inspection by the City.

4. OMC 13.66 Fats, Oils and Grease Control Regulations and OCSD Ord. 37

The fats, oils and grease (FOG) requirements are contained within Section 13.66 of the Orange Municipal Code. The FOG requirements allow the City to require grease capturing devices for food service establishments if there is a possibility that the facilities may discharge excessive grease into the sewer system. The Municipal Code contains requirements for design, construction and enforcement. Separately, a document titled Fog Program has been prepared that provides information on the implementation of the FOG Program to reduce discharges of fats, oils and grease into the City's sewer system. The Municipal Code is included in Appendix C and the FOG Program can be viewed on the City's SSMP website.

5. OMC 13.66 and OMC 13.64 Industrial Waste

The City uses OMC 13.66 (FOG requirements) and OMC 13.64 (Industrial Waste) to prohibit the discharge of waste that may be harmful or obstruct flow within the sewer system.

IV. OPERATION AND MAINTENANCE PROGRAM.

The SSMP must include those elements listed below where appropriate and applicable to the Enrollee's system:

A. Maintain up-to- date maps of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable storm water conveyance facilities:

The City of Orange collection system has been mapped including all gravity lines and manholes, pump facilities and storm water conveyance systems. These maps are stored within the City's geographic information system (GIS) and are maintained and updated as needed. Attributes available for viewing within the GIS system include pipe size, material, year built, pipe identifier, slope, invert, manhole number and other attributes. Storm water conveyance facilities are also stored in a GIS database and include information such as pip size, material, catch basin and their identifier and other information. A copy of these maps can be found in Appendix E.

- B. Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system and frequent cleaning and maintenance targeted at known problem areas. The preventive maintenance program should have a system to document scheduled and conducted activities, such as work orders.**

The City of Orange has historically had a Preventive Maintenance Plan, which included cleaning of the City's collection system. Since 2010, to provide increased and dedicated resources to the sewer system, the City has contracted out a vast majority of the cleaning and inspection. This includes routine cleaning and inspection as well as the more frequent "hot spots" cleaning. The city has been divided into 5 sections based on their primary servicing requirements where areas of greater need would be emphasized such as industrial/commercial areas and areas where sewer pipe grades were minimal. The oldest sections of the city will be inspected annually. Residential areas and areas where sewer pipe grades are in excess of minimal scour velocity will be cleaned less frequently (every two to three years) and other areas inspected every five years. Until a specific cause is identified and eliminated, hot spots will be monitored and cleaned as needed, typically every three or six months depending on suspected cause and buildup in the pipe.

The City of Orange will continue to monitor and adjust schedules to facilitate optimal operation of the collection system and proper allocation of limited resources. Cleaning and CCTV inspection will be on the schedule identified in Appendix F. A listing of the existing hot spots can be found in Appendix G.

In addition, the City of Orange has two sewer pump stations, which are serviced and inspected monthly under a contract. See Appendix D.

Manhole inspections are conducted during field visits and documented using the form in Appendix D.

- C. Develop a rehabilitation replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure needs. The plan**

shall include a time schedule for implementing the short and long-term plans and a schedule for developing the funds needed for the capital improvement plan.

The City of Orange will utilize the CCTV inspection program as outlined in (B) above. This program identifies structural deficiencies in the City’s collection system. Prioritization along with short and long-term strategies for rehabilitation of any structural deficiencies found through the inspection program will be addressed in the City’s capital improvement program. This is a comprehensive budgeting program, which looks forward seven years and is updated annually. Items related to deficiencies identified in the City’s Master Plan of Sewers are discussed in Section 6 of the latest plan dated August 2012.

D. Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be a properly trained.

Administrative and Field Staff attend training as available. California Water Environment Association (CWEA) certification training for Field staff is conducted on a regular basis. Attainment of the following certification grades will be the goal of the City of Orange.

<u>Position</u>	<u>Level</u>	<u>Cert. Type</u>
Maintenance Division Manager	Grade 4	Collections
Streets and Sanitation Superintendent	Grade 3	Collections
General/Sanitation Supervisor	Grade 2	Collections
All Field support staff	Grade 1	Collections
Environmental Compliance Specialist	Grade 1	Collections
Environmental Scientist	Grade 3	Collections
Environmental Program Manager (Surface Water Quality)	Grade 3	Collections

Contract personnel are trained on an as-needed basis.

E. Provide equipment and replace part inventories, including identification of critical replacement parts.

The City of Orange has or has on order general maintenance equipment necessary to perform minor sewer construction, maintenance, and inspection work. The City maintains a limited supply of sewer pipe, clamps, manhole covers and emergency pumps and hoses stored at the City's Corporation Yard. In addition, as part an emergency response cooperative, the City is able to contact other local wastewater agencies to obtain emergency repair parts.

V. DESIGN AND PERFORMANCE PROVISIONS

A. Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems.

As noted in Section III B, design of the City's sewer collection system is based on the Orange County Sanitation District's document Design and Construction Requirements of Sanitary Sewers. The document contains design requirements such as maximum peak flow allowed, minimum velocity, depth of cover, land use density, manhole spacing, materials and other criteria used in designing sewers within the City.

Construction specifications for construction and performance of its new sewer lines and the rehabilitation of existing sewer lines are through the Standard Specifications for Public Works Construction (Green book) as modified internally to meet City requirements. The Green Book sections most commonly used in the construction of City sewers are sections 306 and 500.

Section 306 Underground Conduit Construction covers sewer pipe construction and includes information on excavation, trenching, bedding, joints, backfill, air pressure tests, water pressure tests and other items related to the installation and acceptance of underground pipes. Section 500, Pipeline Rehabilitation, includes information on various lining methods that can be used to rehabilitate underground pipes. These sections are contained in Appendix C.

In addition, the City of Orange Standard Plans Series 200 provides information on constructing sewer manholes and other elements related to sanitary sewers. Copies of these plans are contained in Appendix C.

B. Procedures and standards for inspecting and testing installation of new sewers, pumps and other appurtenances and for rehabilitation and repair projects.

Inspection and testing standards of new sewers and rehabilitation of existing sewers are in accordance with Section 306 of the Green Book as noted in Section V.A above. Applicable sections are contained in Appendix C.

VI. OVERFLOW EMERGENCY RESPONSE PLAN

Each Enrollee shall develop and implement an overflow emergency response plan that describes measures to protect public health and the environment. At a minimum, this plan must include the following:

A. Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner.

The City of Orange maintains a 24-hour, 7-day per week emergency callout program. Call-in numbers are published for SSOs occurring during normal business hours and after close of business. Notification procedures are in accordance with the State WDR Order as identified in the City's Sanitary Sewer Overflow Emergency Response Plan included in Appendix B.

B. A program to assure on appropriate response to all overflows.

The City of Orange has developed a Sanitary Sewer Overflow Emergency Response Plan (SSOERP) that identifies how the City responds to SSOs during normal and after business hours. The plan identifies specific activities conducted at the SSO site, reporting of SSOs to regulatory agencies and roles assigned to specific individuals. This plan can be found in Appendix B.

C. Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, regional water boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the MRP. All SSOs shall be reported in accordance with this MRP, the California Water Code, other state law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The SSMP should identify the officials who receive immediate notification.

As noted above, the City's SSOERP identifies reporting responsibilities and to whom notifications are made and the time frames for reporting SSOs. The Santa Ana Regional Board receives notification of all SSOs regardless of their category designation within 24 hours. The California Emergency Management Agency (CAL-EMA) (formerly, the State Office of Emergency Services (OES)) and the Orange County Health Care Agency receive notification of an SSO within the first 2 hours of an SSO.

D. Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the emergency response plan and are properly trained.

City of Orange staff has regular meetings and training. Following each public response to a sewer overflow, staff meetings are held where response procedures are evaluated and future actions discussed to maximize efficiency in the response. Appropriate information is then related to the entire sewer response team through subsequent staff meetings and training, typically accomplished at the next monthly all-hands safety meeting. Contract staff receive printed materials for review and guidance from City staff to ensure optimum performance.

E. Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities.

City of Orange staff is trained in emergency operations response. Meetings are held frequently to ensure staff is properly trained to respond to all situations including the use of traffic control. If deemed necessary, staff is also trained on when to seek support from other City departments such as Police or Fire Department.

F. A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerator or additional monitoring as may be necessary to determine the nature and impact of the discharge.

The City of Orange's goal is to contain all SSOs and prevent discharge to surface waters to the maximum extent practicable. As noted above, meetings are held following public spills and response procedures evaluated. Any changes recommended are utilized in future spill responses. These efforts are undertaken to ensure timely and maximum efficiency in minimizing spills to Waters of the United States.

Water bodies within the City of Orange are primarily engineered flood control channels that are fenced off from the public. This minimizes any public contact with potential sewer overflows. In addition, 91% of all creeks and channels discharge to the Santa Ana River, which is earthen bottom with sandy soils that allow rapid infiltration of all nuisance water flowing in storm drain pipes further reducing the impact to the public.

VII. FOG CONTROL PROGRAM

Each Enrollee shall evaluate its service area to determine whether a FOG control program is needed. If an Enrollee determines that a FOG program is not needed, the Enrollee must provide justification for why it is not needed. If FOG is thought to be a problem, then Enrollee must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include the following as appropriate:

A. An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG.

The City of Orange has provided a poster and two informational DVDs to all City restaurants on the proper disposal of FOG and kitchen best management practices. When a new restaurant opens in the City it receives a poster and DVD containing appropriate best management procedures for kitchen practices to ensure it adheres to proper FOG disposal. In addition, the City currently uses its local newsletter Our Orange and website to reach residents and inform them of the need for proper FOG disposal. FOG brochures are also available at the City's Public Works counter.

B. A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and or additional facilities needed to adequately a dispose of FOG generated within a sanitary sewer system service area.

Each City of Orange restaurant is responsible for the proper disposal of FOG generated within its facility. If necessary and requested by the facility, the City provides a list of acceptable FOG disposal operators. Operators can dispose of their FOG at the Orange County Sanitary District facilities located in Fountain Valley.

C. The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG.

The City of Orange adopted Ordinance 17-04 its Fats, Oils and Grease Control Regulations Applicable to Food Service Establishments on November 9, 2004 to control the discharge of FOG into the City's sanitary sewer system. The ordinance was codified into its municipal code in Chapter 13.66. The ordinance contains information on how to reduce the impact of FOG on the sewer system through the use of kitchen best management practices. A copy of the ordinance can be found in Appendix C

D. Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, and maintenance requirements, BMP requirements, recordkeeping and reporting requirements.

Ordinance 17-04 requires all new food service facilities (FSEs) to install grease interceptors or grease traps as necessary to control the discharge of FOG into the sanitary sewer system. FSEs that are upgraded or have operational changes may also be required to install grease interceptors or grease traps if they trigger certain requirements in the ordinance. In addition, existing FSE may be required to install new grease control devices if it is determined that they are discharging an excessive amount of grease and it is contributing to sanitary sewer overflows. The ordinance also contains BMP, recordkeeping and reporting requirements. A copy of the ordinance can be found in Appendix C.

E. Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance.

Ordinance 17-04 provides authority to inspect grease producing facilities and contains enforcement provisions that include Civil and Criminal penalties to ensure those discharging FOG into the sanitary sewer system can be prosecuted. The City of Orange currently contracts with the Orange County Health Care Agency to inspect all of the City's restaurants to ensure proper best management practices are being implemented and FOG is not being discharged. City staff are used to inspect grease interceptors and grease traps every 3 to 6 months as needed based on the amount of FOG generated.

F. An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section.

The City of Orange has produced a list of hot spots associated with FOG discharges. Hot spots are cleaned regularly every 3 to 6 months to minimize wastewater overflows. These hot spots can be found in Appendix G

G. Development and implementation of source control measures for all the sources of FOG discharged to the sanitary sewer system for each section identified in F. above.

As noted in A above, all grease producing facilities are provided with education and training material on the proper disposal of FOG. Where specific sources have been identified, attempts are made to remove the FOG source through education,

additional BMP training or installation of grease capturing devices. Where the source cannot be identified, the area is targeted for outreach through flier distribution of door hangers or educational letters. The area may also be added for frequent cleaning. All of this is considered instrumental in reducing wastewater overflows from hot spot areas. Based on the frequency of sewer spills the previous years, the program seems to be successful.

VIII. SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

The Enrollee shall prepare and implement a capital improvement plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum the plan must include:

- A. Evaluation: Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events.**

The City of Orange completed an update to its Master Plan of Sewers in August 2012. Included in that plan is a complete capacity analysis of the collection system. The plan identifies deficient segments within the system along with the recommended upgrades. These recommendations will be evaluated and included in the City's CIP program as needed. A copy of the new Master Plan recommendations are contained in Appendix H.

- B. Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified in A above to establish appropriate design criteria.**

The City of Orange utilizes the County Sanitation Districts of Orange County design criteria to design and assess the capacity of its collection system. This criterion is the basis for analysis of its existing sewer collection system contained in the City's Master Plan of Sewers.

- C. Capacity Enhancement Measures: The steps needed to establish a short and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in**

pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.

A capital improvement program is a part of the Master Plan of Sewers and is contained in Appendix H. Separately, the City has prepared another document Sanitary Sewer Rehabilitation and Replacement Plan that contains the latest information on the CIP.

- D. Schedule: The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in A-C above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements described in section D.14.**

The City's proposed sewer sections for improvement are included in Appendix H and the Sanitary Sewer Rehabilitation and Replacement Plan as noted above.

IX. MONITORING, MEASURING, AND PROGRAM MODIFICATIONS

The Enrollee shall:

- A. Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities.**

The City of Orange will evaluate its activities annually to ensure that its resources are used effectively and targeted to minimize sewer spills. This includes the review of sewer spill locations, causes of spills, cleaning and videoing frequency of its sewer system, capital improvement program and hot spot and sewer deficiency locations. This information will be contained in its GIS system for rapid visual assessment or contained in spread sheets where information can be tracked accurately. Once compiled, the information will be reviewed annually with the goal of reducing sewer spills and future work will be prioritized accordingly.

- B. Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP.**

The SSMP will be reviewed annually and each program element assessed. Where changes are needed, the SSMP will be revised. In addition, where resources or changes are deemed more crucial to a particular part of the program, those changes will be implemented following the annual review noted in paragraph A above.

C. Assess the success of the preventive maintenance program.

The maintenance program will be evaluated on an annual basis to ensure resources are applied where deemed necessary. This includes the review of all relevant factors noted in paragraph A above.

D. Update program elements, as appropriate, based on monitoring or performance evaluations.

The City of Orange will review and update the program elements of the SSMP annually in accordance with (A), (B), and (C) and this paragraph to assess and measure their effectiveness and update as necessary.

E. Identify and illustrate SSO trends, including: frequency, location, and volume.

As part of the annual review of the SSMP program elements, the City of Orange will look for trends, frequency, locations and volumes to assess changes to its maintenance program.

X. SSMP PROGRAM AUDITS

As part of the SSMP, the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the Enrollee's compliance with the SSMP requirements identified in this subsection (D. 13), including identification of any deficiencies in the SSMP and steps to correct them.

The City of Orange will undertake the audit of the SSMP as specified.

XI. COMMUNICATION PROGRAM

The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented.

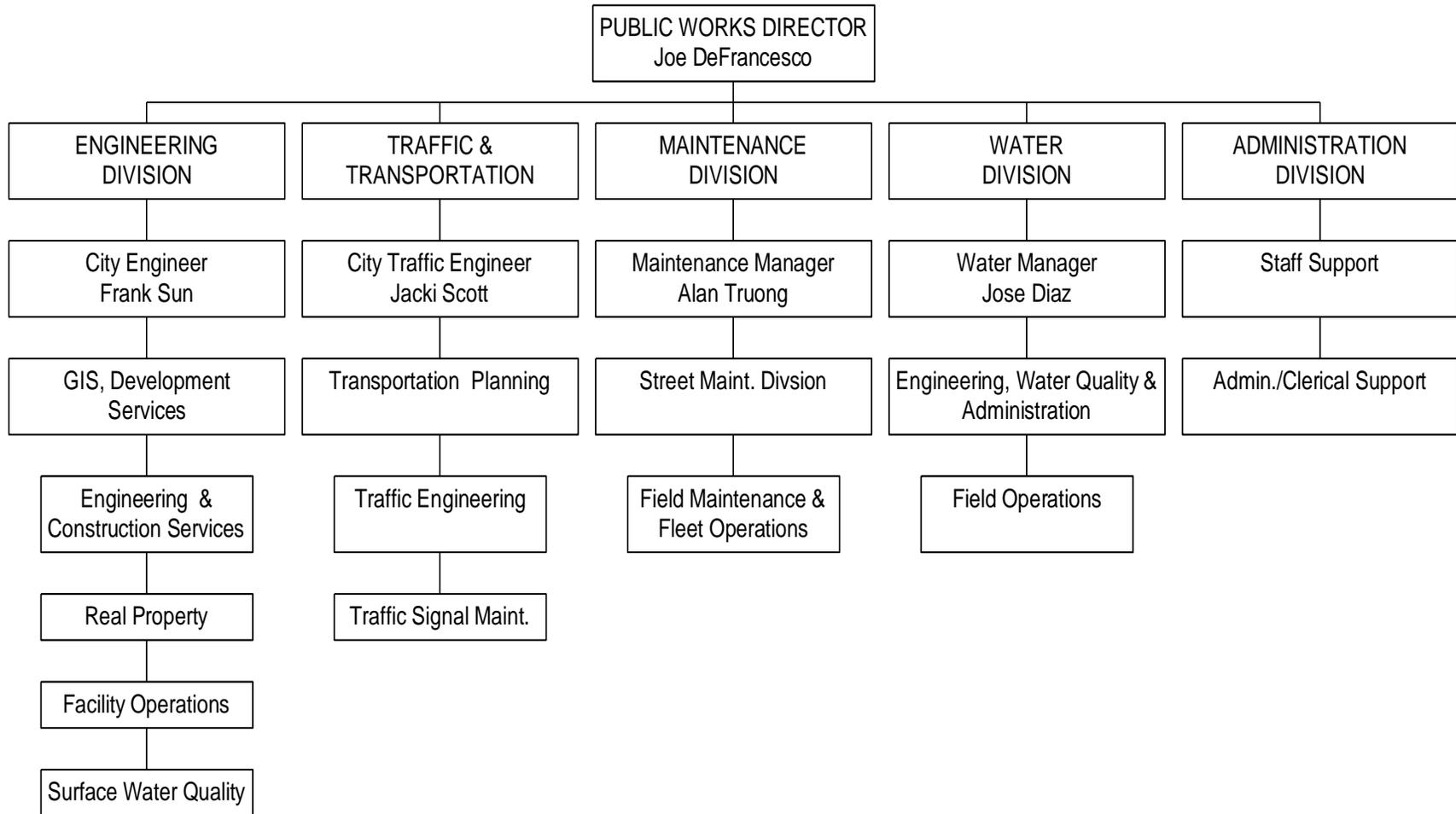
The Enrollee shall also create a plan of communication with systems that are tributary and/or satellite to the Enrollee's sanitary sewer system.

The City of Orange has established a website that describes the SSMP and posted companion documents. Input from interested parties is solicited via the website.

APPENDIX A

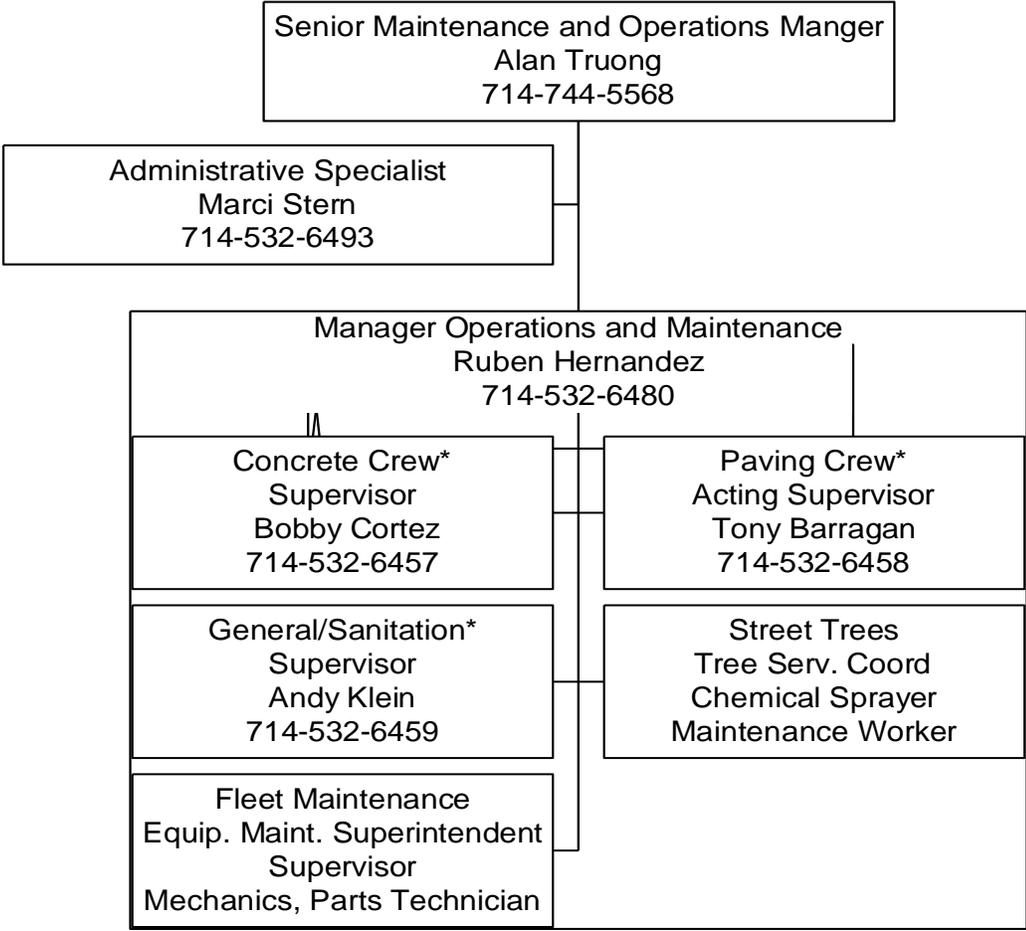
PUBLIC WORKS ORGANIZATION

CITY OF ORANGE PUBLIC WORKS DEPARTMENT 2017 Organization Chart



PUBLIC WORKS DEPARTMENT

Maintenance Division & SSO Response 2017 Organization Chart



* Under each supervisor are maintenance workers, equipment operators or other personnel necessary to carry out the unit's duties. In the case of Sweeping, this includes street sweepers.

SSMP RESPONSIBILITY

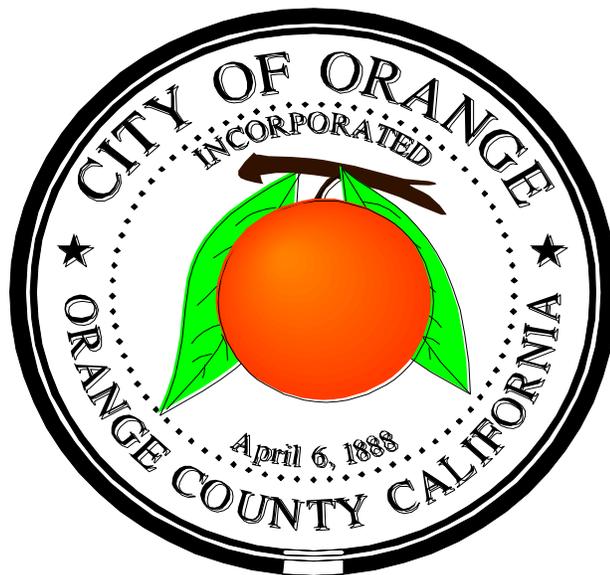
Name	Title	Telephone No. (714)	Responsibility	SSMP Section D13 of WDR Order
Joe DeFrancesco	Public Works Director	714-744-5545	Legally Responsible Official	Overall responsibility X
Alan Truong	Senior Maintenance Manager	714-714-5568	Operation and Maintenance Program (Sewer line cleaning & videoing, maintenance and repair, personnel training, SSO response, monitoring)	IV b,c,d,e VI d,e,f IX
Frank Sun	Deputy Director/ City Engineer	714-744-5529	Capital Improvement Projects/Design (new sewer design and repair, system capacity assessment)	V VIII
Gene Estrada	Environmental Program Manager.	714-744-5547	FOG Control Program SSMP Communication SSO trends	VI a,b,c VII IX d,e XI
Majid Farhat	Principal Civil Engineer	714-744-5562	Capital Improvement Projects/Design (new sewer design and repair, system capacity assessment)	V VIII
George Liang	Principal Civil Engineer	714-744-5528	GIS Maps	IV a

APPENDIX B

SANITARY SEWER OVERFLOW EMERGENCY RESPONSE PLAN

SANITARY SEWER OVERFLOW EMERGENCY RESPONSE PLAN

PREPARED BY
CITY OF ORANGE



PREPARED FOR
STATE WATER RESOURCES CONTROL BOARD
ORDER NO.2006-003-DWQ
GENERAL WASTE DISCHARGES REQUIREMENTS

MAY 2, 2009

Updated November 2017

Sanitary Sewer Overflow Emergency Response Plan

Foreword

The City of Orange is pleased to submit the Sewer System Management Plan's (SSMPs) Sanitary Sewer Overflow Emergency Response Plan (SSOERP) in accordance with the time schedule detailed in Order-2006-003-DWQ (Order) Section D.15. The SSOERP generally follows the chronological stepwise procedures for receiving information on a possible sewer spill, dispatching response staff, performing required field work and reporting on these activities. This document satisfies the requirements of Section D.13 (vi) of the Order and Order WQ 2013-0058-EXEC.

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I. AUTHORITY

- A. The State Water Resources Control Board (SWRCB) issued Order No. 2006-003-DWQ (commonly referred to as Sewer Waste Discharge Requirements for the State (Sewer WDR)) to the City of Orange and other collection agencies throughout the State on May 2, 2006. On July 30, 2013 the State issued an update to Order 2006-003-DWQ's Monitoring and Reporting Program WQ 2013-0058-EXEC. The intent of the Order and modified Monitoring and Reporting Program is to ensure the collection agencies within the State provide adequate and appropriate system capacity, adequate maintenance and operation, emergency sewers spill response and legal authority to reduce or eliminate discharges of wastewater to the waters of the State.
- B. The City of Orange owns and operates the sanitary sewer collection system within the City limits. As the operator of the sewer collection system, the City of Orange has the right and responsibility to properly fund and maintain the system and respond to spills as prescribed in the Sewer WDR.
- C. In the case of spills caused by private entities, the Orange Municipal Code (OMC) provides the legal authority to enforce violations. Applicable sections include the following:
- OMC Chapter 7.01.030A (2) prohibits the discharge of pollutants including fecal coliform, fecal streptococcus or enterococcus.
 - OMC Chapter 7.01.030A (2) makes it unlawful for any person to “place or deposit any human or animal excrement... on public or private property within the City...” or to “discharge to any natural outlet...any sewage..”
 - OMC Chapter 13.56 prohibits discharges to the sanitary sewer system “causing obstruction to the flow in sewers...”
 - OMC Chapter 13.64.040 prohibits discharge of “industrial waste into or upon any area in the City.”

The City of Orange is responsible for utilizing the aforementioned Municipal Codes to control and prevent future spills from occurring from private property. This responsibility is prescribed in part in the Enforcement Consistency Guide developed by the County of Orange and required by Order No. R8-2002-0010 (commonly known as the MS4 NPDES Permit). Additionally, the City of Orange is required, in the Legal Authority Section [D.13.(iii)(d)] of the Sewer WDR, to develop and implement the legal

authority to “limit fats and greases and other debris that may cause blockages in the sewage collection system.”

II. GENERAL

The Sanitary Sewer Overflow Emergency Response Plan (SSOERP) is designed to ensure that every report of a sewer overflow is immediately dispatched to the appropriate crews so the report can be confirmed and the effects of the overflow controlled or minimized with respect to impacts to public health and the beneficial uses of the waters of the State. The SSOERP also includes provisions to ensure safety pursuant to the directions provided by the Orange County Health Care Agency (OCHCA), and the Occupational Health and Safety Agency (OSHA) and that notification in writing is made to the appropriate local, state and federal authorities (Regional Water Quality Control Board (RWQCB), OCHCA, and California Office of Emergency Services (OES)).

A. Objectives

The primary objectives of the SSOERP are to protect public health, the environment, beneficial uses of the receiving waters, satisfy conditions of the Sewer WDR discharge requirements and minimize liability and potential enforcement actions or third-party lawsuits involving the City of Orange.

Additional objectives of the SSOERP are as follows:

- Provide appropriate customer service;
- Protect wastewater treatment plants and collection system personnel;
- Protect the collection system, wastewater treatment facilities, and all appurtenances;
- Protect private and public property beyond the collection and treatment facilities; and
- Provide clearly documented policies, procedures and guidelines for City staff to reference and follow.

This plan shall not supersede existing emergency plans or standard operating procedures (SOPs) unless directed by the Public Works Director or the Maintenance Division Manager and shall, in most cases, refer to these plans and will work in conjunction rather than conflict with them. The existing plans referenced have been reviewed and are consistent with the objectives of this plan.

B. Organization of Plan

The key elements of the SSOERP are addressed individually as follows:

Section III. Notification Procedures, Call Routing and Dispatch

- Section IV. Overflow Containment Correction and Cleanup
- Section V. Reporting
- Section VI. Follow-up Procedures
- Section VII. Update, Distribution and Training
- Section VIII. Definitions

C. SANITARY SEWER OVERFLOW TRACKING

Four mechanisms will be employed to track sanitary sewer overflows (SSOs). These are listed as follows:

- Initial Report - This report is the initial summary of information typically received from citizens or City staff. Receipt of a report initiates dispatch of City crews. The procedures for report taking and information distribution are compiled in Section III below of the SSOERP.
- 2 hr, 24 hr and 3-Day and 15 Day Report - This reporting requirement (required by the revised Order WQ 2013-0058-EXEC of the Monitoring and Reporting Program) requires that within 2 hours of being notified of a spill, the City must notify the Orange County Health Care Agency (OCHCA) along with the Santa Ana Regional Board and OES if the spill is 1000 gallons or more. In addition, a certification is required within 24 hours to the Santa Ana Regional Board that OES and the OCHCA have been notified of a Category 1 spill. A draft report is due to the State within three business days of the date when the spill is brought to the attention of the City of Orange. A final report is due within calendar 15 days.
- Monthly Reporting - This report (required by section B.4. of the revised Monitoring and Reporting Program) is a summary of all Category 2 and 3 spills occurring within a calendar month. Information on the completion, distribution and tracking of these reports can be found in section V of the SSOERP.
- Annual Review - The number of SSOs within the City of Orange will be evaluated annually to assess problem or hot spot areas and appropriate changes to the cleaning and maintenance program will be implemented.

III. NOTIFICATION PROCEDURES, CALL ROUTING AND DISPATCH

This section establishes the procedures for the City of Orange to communicate internally, mobilize and respond to any condition which may cause or contribute to an unpermitted

discharge of wastewater. There is a response to each reported spill caused by public or private facilities which occur on public or private property. This plan considers a wide range of potential system failures that could create an overflow to surface waters, onto land, into groundwater, or into buildings.

A. Receipt of Information Regarding a Sewer Overflow

An overflow may be detected by City of Orange employees or by others (i.e. business owners, residents, etc.). The Streets and Sanitation Division in the Department of Public Works is responsible for accepting all phone calls regarding possible sewer overflows during business hours, and is responsible for responding to these notifications 24 hours a day. After hours, a notification system is established with the City's Water Division, which immediately directs any reports to the 24-hour on-call Streets and Sanitation supervisor who dispatches the crews, calls the Authorized Inspector (AI), who makes the notifications to the regulatory agencies and compiles the spill report. Additional information is provided below on the reporting procedures followed by City of Orange staff.

1. During Business Hours:

- a. Upon receiving a SSO complaint via the Maintenance Division call-in number of 714-532-6480, or the City of Orange's 24 hour emergency call in number of 714-538-1961, or via an employee's city-issued cell phone, the Public Works Street Maintenance Division (general crew) and/or supervisor is dispatched immediately to investigate and mitigate any problems at the SSO location.
- b. The on-site supervisor (OSS) visually determines if the SSO is exiting from a private sanitary sewer lateral, publicly owned (City of Orange) sanitary sewer line or a privately owned sewer line of another agency such as the Orange County Sanitation District (OCSD).
- c. Depending on the type of SSO, public, private or other, procedures are followed in accordance with Section IV below.

2. After Working Hours Procedure:

- a. Upon receiving a potential SSO complaint via the emergency call number of 714-538-1961, the water plant operator places a call to the on-call Supervisor (OS), the OS contacts the on-call maintenance worker (OMW) for immediate response to the reported SSO location to mitigate any problems which may exist and the OS alerts the on-call AI that a potential SSO has been reported.
- b. The OMW visually determines if the SSO is exiting from a private sanitary sewer lateral, publicly owned (City of Orange) sanitary sewer line

or a privately owned sewer line, such as the Orange County Sanitation District (OCSD) or other agency.

- c. Depending on the type of SSO, public, private or other, procedures are followed in accordance with Section IV below.

IV. OVERFLOW CONTAINMENT, CORRECTION AND CLEANUP

The failure of any element within the wastewater collection system that threatens to cause or causes a sewer overflow will trigger an immediate response to isolate and correct the problem. Personnel are immediately dispatched to any site where there is a report of a possible sewer overflow and in most circumstances the City of Orange will handle all response actions with its own equipment and maintenance forces. However, situations may arise, which due to their magnitude or unusual nature, require additional crews or equipment. This is particularly true of situations where sewer pipes are broken or have failed in some way and an on-call contractor is needed to affect emergency repairs. Mutual aid is available from neighboring cities through a “handshake agreement” and the Orange County Sanitation District through a written statement to this effect.

The objectives of these response procedures are to protect public health and the environment. The details of the procedures to achieve these objectives are generally summarized below and complete procedures identified in the following paragraphs for public, private and other SSOs that are brought to the attention of the City of Orange.

- Sanitary sewer spills are immediately contained to the greatest extent possible with all available equipment and resources.
- If additional support is required or mutual aid is needed, these requests are made by the Maintenance Division Manager.
- Perimeters are established and signs are posted as needed (cones, tape, traffic signs, etc.).
- If the spill is the result of a blockage, break or deficiency and is a public sewer line, every effort is made to either clear the blockage or begin emergency repair efforts.
- If the spill is the result of a blockage, break or deficiency in a private sewer line, the responsible party is contacted immediately and containment continues until the blockage is cleared or the private property owner assumes all containment responsibilities.

- At the first opportunity or following clearing of the blockage or reasonably permanent containment (i.e. bypass, or holding tank), cleanup procedures are put in place.
- During cleanup procedures or at an earlier stage if possible, downstream containment/cleanup procedures are employed.

Response During Normal Business Hours

A. SSO from City Owned Collection System

1. If the SSO is determined to be from a city-owned sewer line the OSS places a call via the city-issued cell phone or through the Maintenance Division Secretary at 714-532-6480, to an AI for immediate response to the SSO location and the following procedures are followed:
 - a. SSO reaching the public right-of-way.
 - i. The general crew determines the appropriate location to place berm(s), dam(s) or dike(s) either near the SSO source or in the street curb to prevent the SSO from entering the storm drain. Additionally, the covering of the catch basin with sandbags or other available means may be necessary if deemed appropriate.
 - ii. If the SSO site requires a lane closure, the general crew will close the lane. The crew will use traffic controls and arrow board(s), following the most up-to-date WATCH handbook guidelines.
 - iii. The general crew determines the wastewater levels and blockage point, if any, inside City sewer lines by removing the sewer manhole covers in the surrounding area and performing a visual inspection. The general crew then attempts to remove the sewer blockage once it is found. If necessary, the onsite supervisor (OSS) may also call a private contractor or another agency for assistance.
 - iv. Upon arrival at the SSO, the AI is briefed by the OSS or other response personnel and ensures containment berms have been placed at appropriate locations. The AI then determines the overflow rate; through visual inspection and/or the SSO calculation chart (Attachment 2), the AI uses the city-issued cell phone to immediately call the OCHCA at 714-433-6419.
 1. If there has been an impact to the storm drain/catch basin and the spill is 1000 gallons or greater, the AI will contact OES at (800) 852-7550 using the City-issued cell phone within 2 hours of becoming aware of the discharge and the RWQCB as soon as possible at 951-782-4130, but no later than twenty-four (24) hours regardless of the actual spill amount.

2. The AI, when conditions allow, will take pictures showing the location and travel path of the SSO for inclusion in the report to the state's CIWQS online reporting system.
- v. If the SSO has reached or has the potential to reach the storm drain, based on size and location, the OSS or AI places a call via the city-issued cell phone, the handheld radio or through the Maintenance Division Secretary at 714-532-6480, to a sweeper vacuum truck operator for immediate response to the SSO location.
1. Upon arrival on the scene the sweeper vacuum truck operator will attempt to park over the manhole or as close to the SSO discharge point as possible and vacuum the overflow into the truck. The truck operator will remain until the blockage is cleared; is relieved by an additional sweeper vacuum truck; is directed to move or is directed to leave by the OSS or AI.
 2. Before leaving the site, the sweeper vacuum truck operator will vacuum all fluids/discharges.
 3. The sweeper vacuum truck operator will transport all liquids and any contaminated earthen materials to the City of Orange Public Works Corporation Yard at 637 W. Struck Ave.
- vi. If deemed necessary, the OSS may place a call via the city-issued cell phone, the handheld radio or through the Maintenance Division Secretary at 714-532-6480, to a sewer line jetting truck operator for immediate response to the SSO location.
1. Upon arrival, the jetting truck operator requests any assistance needed to enable the operator to fill the hose lines from a nearby fire hydrant and remove the manhole cover; then drives to the manhole that will be the entry point for clearing the line and begins to clear the blockage.
 2. Upon clearance of the blockage and discussion of the cause of the blockage with the OSS and/or AI, a determination will be made on whether any adjacent sewer lines need to be cleaned immediately.
 - a. If immediate cleaning is decided upon, then the jetting truck operator will drive to locations identified for cleaning and begin cleaning the lines.
 - b. If it is determined that the lines in the adjacent area do not need to be cleaned immediately, then the lines will be scheduled for cleaning as soon as possible.

- c. After final cleaning of the lines the jetting truck operator returns to the Public Works Corporation Yard at 637 W. Struck and releases the remaining tank water into the designated wash area.
- vii. Upon clearing of the sewer line or elimination of the overflow the general crew will remove any uncontaminated berm(s), all traffic controls, response tools, and remain on site until cleared to leave by the OSS or AI.
- viii. The AI takes inventory of the response staff, vehicles, supplies, and time spent at the SSO location for tracking purposes, this information will be compared to the information compiled by the OSS as well.
- ix. The AI performs a final inspection of the area and everyone leaves.

B. SSO from a Privately Owned Sewer Line

1. If the SSO is determined to be from a private sanitary sewer lateral the OSS places a call via the city-issued cell phone or through the Maintenance Division Secretary at 714-532-6480, to an AI for immediate response to the SSO location and the following procedures are followed:
 - a. SSOs on private property.
 - i. The responsible party (RP) will be identified and contacted by the AI and informed that the City of Orange provides initial response and cleanup; however, the RP is required, per the Orange Municipal Code, to eliminate the blockage in their lateral or sewer line, cleanup all SSOs on public and private property, and reimburse the City of Orange for all incurred costs during the SSO response. Additionally the RP will be made aware that the OCHCA will be contacted immediately to inform them of the potential threat to human health.
 - ii. The AI informs the RP that the City of Orange response crews will remain on-site until the RP has a plumber working on-site and has a cleanup crew working on-site with the ability to contain and isolate the SSO area and remove and adequately dispose of all SSO.
 - iii. If the private property spill involves a restaurant or multi-unit dwelling and the owner is non-responsive, and a significant amount of time has passed, the AI with the OCHCA can make the determination to shut off the water to the location. The AI will contact the Water Division at 714-538-1961 via the city-issued cell phone and request a shutoff.
 1. If the shutoff involves a multi-unit apartment, then an attempt to notify each tenant will be made by OCHCA and/or the AI as agreed to on-site.

2. If the shutoff involves a restaurant's water service, the OCHCA will be the lead agency in discussing the matter with the restaurant.
- iv. The AI, when conditions allow, will take pictures showing the location and travel path of the SSO for inclusion in the report to the state's online SSO system (CIWQS).
- v. The AI takes inventory of the response staff, vehicles, supplies, and time spent at the SSO location for billing purposes, this information will be compared to the information compiled by the OSS as well.
- vi. When the AI determines that all work has been completed satisfactorily, the OSS in agreement with the AI will instruct all remaining city crews to leave the site.

C. SSO from Other Privately Owned Sewer Line

1. When the OSS determines that the SSO has occurred from a privately owned sewer line such as OCSD or other government agency, the following procedures are followed in addition to the procedures outlined in Section B above:
 - a. The AI will determine the responsible agency and will contact them via the city-issued cell phone for a request for response to the SSO location.
 - b. The response crews and AI will remain on-site, until the agency arrives and is prepared for their response procedures.
 - c. The City of Orange will offer any assistance the responding agency may need before leaving the site.
 - d. The AI, when conditions allow, will take pictures showing the location and travel path of the SSO for inclusion in the monthly report to the SARWQCB.
 - e. The AI takes inventory of the response staff, vehicles, supplies, and time spent at the SSO location for billing purposes, this information will be compared to the information compiled by the OSS as well.

Response After Normal Business Hours

D. SSO from City Owned Collection System

1. If the SSO is determined to be from a city-owned sewer line, the on-call supervisor (OS) or on-call maintenance worker (OMW) places a call to the water plant operator at 714-538-1961 via the city-issued cell phone or handheld radio and requests that the on-call AI be contacted for immediate

response to the SSO location, and requests any additional personnel as needed and the following procedures are followed:

- a. SSO reaching the public right-of-way.
 - i. The OMW determines the appropriate location to place berm(s), dam(s), or dike(s), either near the SSO source or in the street curb to prevent the SSO from entering the storm drain. Additionally, the covering of the catch basin with sandbags or other available means may be necessary if deemed appropriate.
 - ii. If the SSO site requires a lane closure, the OMW will close the lane. The OMW will use available traffic controls, following the most up-to-date WATCH handbook guidelines.
 - iii. The OMW determines the wastewater levels and blockage point, if any, inside City sewer lines by removing the sewer manhole covers in the surrounding area and performing a visual inspection.
 - iv. Upon arrival, the AI ensures that containment berms have been placed at strategic locations to prevent the spill from entering the storm drain system or receiving waters. The AI determines the overflow rate; through visual inspection or spill chart (Attachment 2) and places a call to Control 1 at 714-628-7008 who will contact the on-call OCHCA personnel. The following procedures are followed
 1. If the SSO enters the storm drain and/or catch basin and the spill is 1000 gallons or more the AI will notify OES within 2 hours of arriving at the spill site. Regardless of the spill size, the AI will contact the RWQCB within 24 hours.
 2. The AI, when conditions allow, will take pictures showing the location and travel path of the SSO for inclusion in the report to the state.
 - v. If the SSO has reached or has the potential to reach the storm drain, based on size and location, the OS or AI places a call via the city-issued cell phone or the handheld radio, to the water plant operator at 714-538-1961, to contact the on-call sweeper vacuum truck operator for immediate response to the SSO location.
 1. Upon arrival on the scene, the sweeper vacuum truck operator will attempt to park over the manhole or as close to the SSO discharge point as possible and vacuum the overflow into the truck. The truck operator will remain until the blockage is cleared, is relieved by an additional sweeper vacuum truck, is directed to move, or is directed to leave by the OS or AI.

2. Before leaving the site, the sweeper vacuum truck operator will vacuum all fluids/ discharges.
 3. The sweeper vacuum truck operator will transport all liquids and any contaminated earthen materials to the City of Orange Public Works Corporation Yard at 637 W. Struck Ave.
- vi. If deemed necessary, the OS/AI may place a call via the city-issued cell phone or the handheld radio to the water plant operator at 714-538-1961, with a request to contact the current on-call sewer line jetting truck operator/company for immediate response to the SSO location.
1. Upon arrival, the jetting truck operator requests any assistance needed to enable the operator to fill the hose lines from a nearby fire hydrant and remove the manhole cover; then drives to the manhole that will be the entry point for clearing the line and begins to clear the blockage.
 2. Upon clearance of the blockage and discussion of the cause of the blockage with the AI, a determination will be made on whether any adjacent sewer lines need to be cleaned immediately.
 3. If immediate cleaning is decided upon, then the jetting truck operator will drive to locations identified for cleaning and begin cleaning the lines.
 4. If it is determined that the lines in the adjacent area do not need to be cleaned immediately, then the lines will be scheduled for cleaning as soon as possible.
 5. After final cleaning of the lines the jetting truck operator returns to the Public Works Corporation Yard at 637 W. Struck or the jetting truck company returns to their place of business and releases the remaining tank water into a designated wash area.
- vii. Upon clearance of the sewer line or elimination of the overflow the OMW will remove any uncontaminated berm(s), all traffic controls, response tools, and remain on site until cleared to leave by the AI.
- viii. The AI, when conditions allow, will take pictures showing the location and travel path of the SSO for inclusion in the report to the state.
- ix. The AI takes inventory of the response staff, vehicles, supplies, and time spent at the SSO location for tracking purposes, this information will be compared to the information compiled by the OS as well.
- x. The AI performs a final inspection of the area and everyone leaves.

- xi. The AI will place a call via the city-issued cell phone or handheld radio to the water plant operator at 714-538-1961 and indicate the time at which the entire response crew has completed work at the SSO location.

E. SSO from a Privately Owned Sewer Line

1. If the SSO is determined to be from a private sanitary sewer lateral the OMW places a call via the city-issued cell phone or the handheld radio, to the water plant operator at 714-538-1961 for a request to contact the on-call AI for immediate response to the SSO location and the following procedures are followed:
 - a. SSO on private property
 - i. The responsible party (RP) will be identified and contacted by the AI and informed that the City of Orange provides initial response and cleanup; however, the RP is required, per the Orange Municipal Code, to eliminate the blockage in their lateral or sewer line, cleanup all SSO on public and private property, and reimburse the City of Orange for all incurred costs during the SSO response. Additionally the RP will be made aware that the OCHCA will be contacted immediately to inform them of the potential threat to human health.
 - ii. The AI informs the RP that the City of Orange response crews will remain on-site until the RP has a plumber working on-site and has a cleanup crew working on-site with the ability to contain and isolate the SSO area and remove and adequately dispose of all SSO.
 - iii. If the private property spill involves a restaurant or multi-unit dwelling, the owner is non-responsive, and a significant amount of time has passed, the AI with the OCHCA can make the determination to shut off the water to the location. The AI will contact the Water Division at 714-538-1961 via the city-issued cell phone or handheld radio and request a shutoff.
 1. If the shutoff involves a multi-unit apartment, then an attempt to notify each tenant will be made by OCHCA and/or the AI as agreed to on-site.
 2. If the shutoff involves a restaurant's water service the OCHCA will be the lead agency in discussing the matter with the restaurant.
 - iv. The AI, when conditions allow, will take pictures showing the location and travel path of the SSO for inclusion in the monthly report to the RWQCB.

- v. The AI takes inventory of the response staff, vehicles, supplies, and time spent at the SSO location for billing purposes, this information will be compared to the information compiled by the OS as well.
- vi. When the AI determines that all work has been completed satisfactorily, the AI will instruct all remaining city response crews to leave the site.

F. SSO from Other Privately Owned Sewer Line

- 1. When the AI determines that the SSO has occurred from a privately owned sewer line such as OCSD or other government agency, the following procedures are followed in addition to the procedures outlined in Section B above:
 - a. The AI will determine the responsible agency and will contact them via the city-issued cell phone for a request for response to the SSO location.
 - b. The response crews and AI will remain on-site, until the agency arrives and is prepared for their response procedures.
 - c. The City of Orange will offer any assistance the responding agency may need before leaving the site.
 - d. The AI takes inventory of the response staff, vehicles, supplies, and time spent at the SSO location for billing purposes, this information will be compared to the information compiled by the OS as well.

A Flow Chart is attached at the end of this SSOERP showing the steps necessary to comply with this procedure.

V. REPORTING

For each sanitary sewer overflow, reports are made in accordance with the procedures outlined in the Monitoring and Reporting Section of the sewer WDR as listed below.

Reporting Procedures

- 1. The responding AI will be responsible for adhering to these reporting requirements.
 - a. Upon returning to the office the AI will complete a City of Orange Spill Report (Attachment 1) for each spill. In completing the spill report the AI shall identify the spill category based on the following:
 - i. A Category 1 spill is defined as all discharges of wastewater resulting from a failure in the City’s sanitary sewer collection system that: reach

a surface water and/or reach a drainage channel tributary to a surface water; or discharge that reaches the MS4 and is not fully captured and returned to the sanitary sewer system.

ii. A Category 2 spill is defined as a spill resulting from a failure of the City's sanitary sewer system equal to or greater than 1000 gallons that does not reach a surface water or drainage channel or the MS4.

iii. A Category 3 spill is defined as all other discharges resulting from a failure of the City's sanitary sewer system.

iv. Private Lateral Sewage Discharge (PLSD) is defined as sewage discharges that are caused by blockages or other problems within a privately owned lateral.

- b. A copy of the report will be faxed to the OCHCA at 714-433-6481 and the RWQCB at (951) 320-6362 using the fax machine with the phone number of 714-532-6444 in the Street Maintenance Division office.
- c. The SSO information will be taken from the Spill Report Form and used to input the required information into the California Integrated Water Quality System (CIWQS), the State's SSO Online Database, at <http://ciwqs.waterboards.ca.gov/>.

2. **2 Hour, 24 Hour, Three (3) Day, 15 Day and Thirty (30) Day Reporting Requirement:**

- a. All Category 1 spills shall be reported to the OCHCA and the Santa Ana Regional Board within 2 hours of becoming aware of such discharge and to OES if equal to or greater than 1000 gallons. In addition, a certification is to be submitted to the Santa Ana Regional Board within 24 hours that OES and OCHCA have been notified of the spill. The phone call placed to the Regional Board within the 2 hour period noted above along with the draft spill report submitted in V.1.c above to the CIWQS system will satisfy this requirement.
- b. A draft report of all Category 1 spills shall be submitted to the State's online CIWQS system within 3 business days and a copy of the City of Orange completed Spill Report shall be submitted to the RWQCB.
- c. A completed spill report certified by the LRO shall be submitted on the State's online CIWQS system within 15 calendar days.
- d. All Category 2, 3 and Private Lateral Sewage Discharges (PLSD) shall be input into CIWQS within 30 days after the end of the calendar month in which the spill occurs.

- e. Before the end of the thirty (30) day period, from the end of the previous month, the Category 2, 3 and/or PLSD SSO report in CIWQS shall be reviewed by the LRO.
 - f. The LRO will review the Category 2 and 3 spills reports and will certify and electronically submit the report to the State on the online CIWQS database.
3. **Filing Procedures:**
- a. The AI files the City of Orange Spill Report Form in the file cabinet in the Environmental Compliance Specialists' office.

VI. FOLLOW-UP PROCEDURES

Following the spill response, cleanup and reporting, oftentimes additional actions must be taken to ensure similar spills do not occur in the future. These actions can include but are not limited to the following:

- Issuance of a Notice of Violation to property owner
- Issuance of a Compliance Order to private property owner
- Issuance of a Cease and Desist order to a private property owner
- Coordination of enforcement action with other agencies (OCHCA)
- Civil and or criminal prosecution
- CCTV of sanitary sewer main
- Increase cleaning frequency of segment of sanitary sewer main
- Regular monitoring of sanitary sewer main
- Repair of sanitary sewer main
- Realignment and/or reconstruction of the sanitary sewer main
- Monitoring and testing

Also applicable to this section are the following guidelines for media notification. Current City policy is that only designated representatives are permitted to provide information to members of the media or their representatives.

VII. UPDATE, DISTRIBUTION AND TRAINING

A. Update of SSOERP

Annual reviews shall be made to the SSOERP. More reviews shall be performed as warranted. If an element of this plan, related document or appendix is revised, a review would be initiated.

In addition to the periodic reviews, a standard annual review shall be made to ensure that the SSOERP is current, correct and applicable. Any changes shall be made within one month of this review, which shall occur on the anniversary date of the initial distribution.

B. Availability to the public

Section D.13.xi of the Order requires the City of Orange to communicate with the public on a regular basis on the development and implementation of the SSMP and hence the SSOERP. The SSMP is posted on the City's website to satisfy this requirement. However, due to the ongoing dynamic nature of the SSOERP the following statement is provided: *"please be aware that this is a living document and is regularly revised. To obtain the latest copy, please contact the Public Works Department of the City of Orange."*

C. Training

This section prescribes the frequency, content and positions responsible for fulfilling the training requirements of the SSOERP.

1. Onsite Supervisor

Training on the SSOERP shall be provided to any staff member holding the position of Onsite Supervisor or directly supervises one or more of these staff members. Training shall be conducted by the Public Works Director or his/her designee. The trainer shall have an intimate knowledge of the SSOERP, City of Orange and its staff, resources, field conditions, policies and procedures as they apply to the sewer system maintenance and emergency response. The topics covered shall include:

- Overview of the Sewer WDR and intent of the SSMP
- Overview of the function and need for the SSOERP
- Review of each section of the SSOERP
- Review of related documents and their procedures
- Discussion and focus on any shortfalls of the OSS or crews in execution of the required actions and procedures and the SSOERP
- Discussion and documentation of any shortcomings and the SSOERP

Training shall be provided annually and-except for the initial training which will be held within one month following the completion of the SSOERP-shall precede the review and update of the SSMP by one month to provide time to review and incorporate changes based on his input.

2. Sanitation Field Crews

Fields staff shall also be trained on an annual basis on proper response procedures. Again this training shall precede the review and update of the SSMP by one month to provide time to review and incorporate any changes based on staff input. New sanitation staff is trained on an individual basis within one month of starting work.

The general training for field staff required by Section D.13.iv.d of the Sewer WDR requiring staff and contractors to be adequately trained will be developed as part of the SSMP. This will focus more on the routine maintenance activities and equipment used in exercising daily or typical duties.

VIII. Definitions

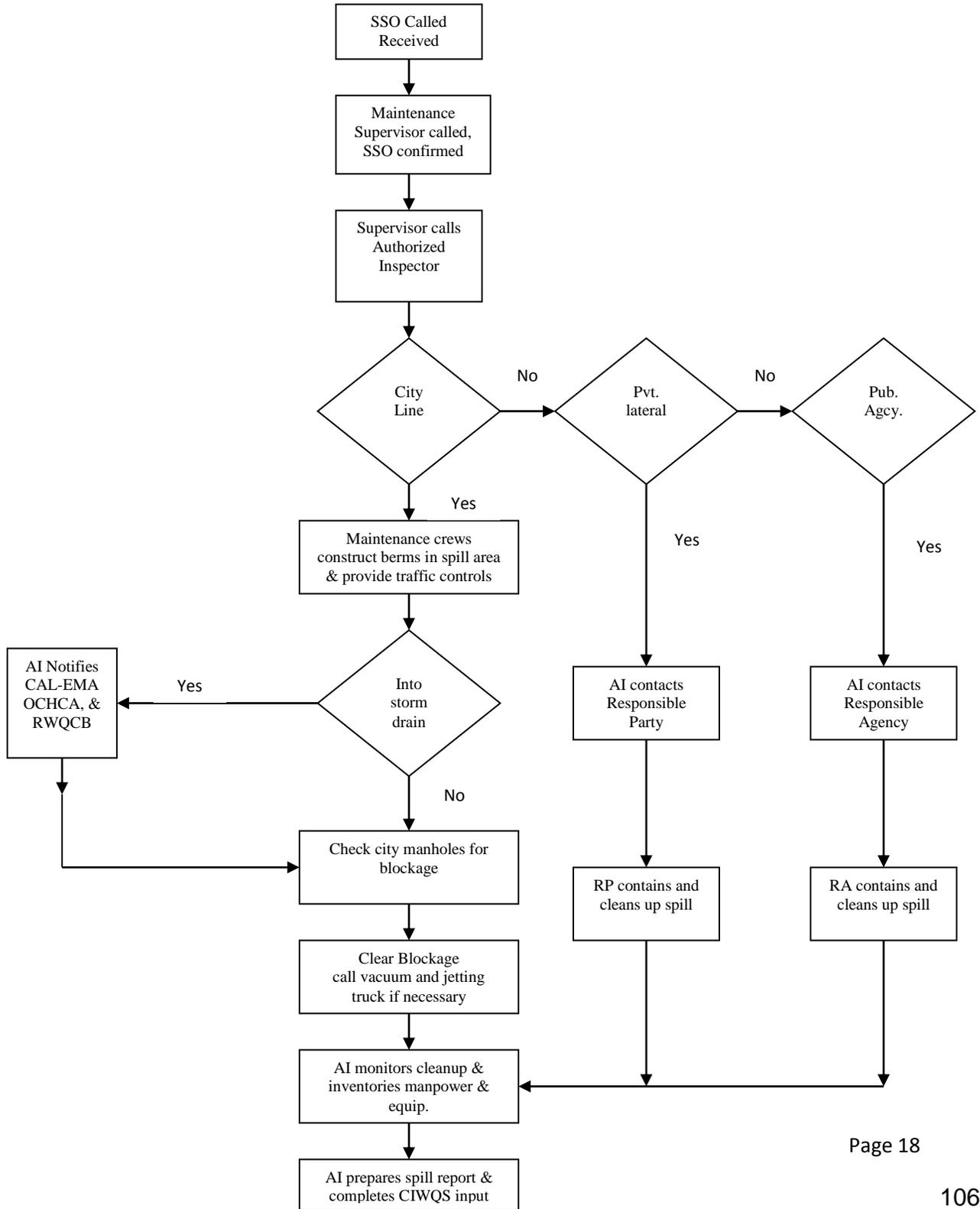
Sanitary Sewer Overflow - a sanitary sewer overflow (a.k.a. sewer spill, sanitary sewers spill, sewer overflow) is any overflow, spill, release, discharge or diversion of untreated or partially untreated from a sanitary sewer system. Sanitary sewer overflows include: (i) overflows or release of untreated or partially treated wastewater that reach waters of the United States; (ii) overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and (iii) wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer (not a building lateral). Wastewater backups into buildings caused by a blockage or other malfunction of the building lateral that is privately owned is a sanitary sewer overflow when sewage is discharged off a private property into streets, storm drains, or waters of the State.

Sanitary Sewer System - any system of pipes, pump stations, sewer lines, or other conveyances upstream of a wastewater treatment plant headworks used to collect and convey wastewater to the publicly owned treatment facility. Temporary storage and conveyance facilities (such as vaults, temporary piping, construction trenches, wet wells, impoundments, tanks, etc.) are considered to be part of the sanitary sewer system and discharges into these temporary storage facilities are not considered sanitary sewer overflows.

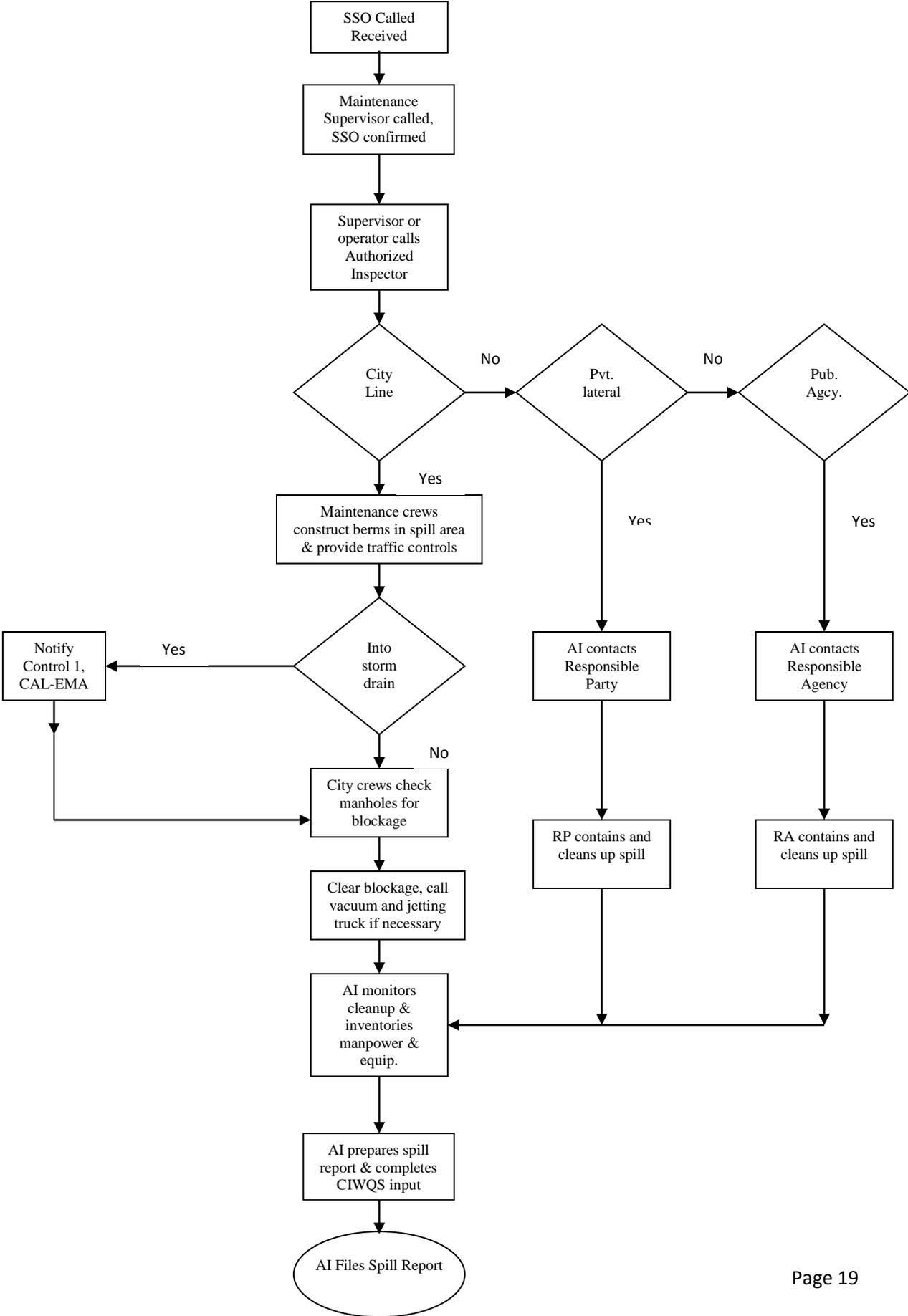
Onsite Supervisor - the onsite supervisor is an individual at a sewer spill who is of the highest rank within Orange Streets and Sanitation Division. This person is responsible for directing the operations, gathering information and ensuring that the SSOERP and SSOP are adhered to.

Authorized Inspector – the individual responsible for notifying regulatory agencies that an SSO has occurred. This person is also responsible for reporting the spill to the state online database and ensuring that the SSO affected area has been cleaned.

SSO Response During Normal Working Hours



SSO After Normal Working Hours





CITY OF ORANGE SPILL REPORT

Type of Spill	
<input type="checkbox"/>	Sanitary Sewer Overflow
<input type="checkbox"/>	Hazardous material
Other: _____	

Date of spill: _____ 20____ Reported by: _____ Phone: _____

Location: _____ GIS Coordinates: _____

Time reported: _____ am pm Estimated start time of spill: _____ am pm

Arrival time: _____ am pm Estimated stop time of spill: _____ am pm

Response Personnel: _____

Origin of spill: City sewer line County sewer line Private line Private property flowing into public street

If private ownership; name, address, & phone number of responsible party or property owner: _____

_____ Contact: _____

Est. total spill volume: _____ Est. total volume recovered: _____ Photos taken of the spill? Yes No

Method of volume estimation: _____

Did the spill enter a: Catch basin/ storm drain? Yes No Storm channel? Yes No

If yes, est. volume: _____

Receiving water: N/A Santa Ana River Santiago Creek Handy Creek County Channel Other: _____

Cause of spill: Grease Roots Broken line Rain inflow Vandalism: _____ Other: _____

Date of clean up: _____ 20____ Time completed: _____ am pm Method of disinfection: _____

Containment: Earth/ Sand berm Sandbags Seal Catch Basin Other: _____

Cleanup Action taken: _____

Action to Prevent Recurrence: _____

OTHER AGENCIES NOTIFIED: Check all that apply

<input type="checkbox"/>	OTHER AGENCIES NOTIFIED: Check all that apply	<u>Date & Time Notified</u>	<u>Contact Person/Additional Info</u>
<input type="checkbox"/>	CONTROL ONE (714) 628-7008	_____	_____
<input type="checkbox"/>	OCHCA - (714) 433-6419 Fax (714) 433-6481	_____	_____
<input type="checkbox"/>	RWQCB - (951) 782-4130 Fax (951) 781-6288	_____	_____
<input type="checkbox"/>	OCPW - (714) 955-0600 Fax (714) 955-0639	_____	_____
<input type="checkbox"/>	OCSD - (714) 593-7025 Fax (714) 962-2591	_____	_____
<input type="checkbox"/>	DFG - (916) 445-0045 Fax (916) 323-0774	_____	_____
<input type="checkbox"/>	Cal EMA - (800) 852-7550 Fax (916) 845-8910	_____	_____

Control # _____

Form Completed By: _____ Phone: _____ Fax: _____



CITY OF ORANGE SPILL VOLUME ESTIMATION SHEET

Spill Volume Method of Estimation (check appropriate box and provide appropriate information for method used below)

San Diego Manhole Flow Rate Chart CWEA Ruler Vent or Pick Holes Eyeball estimate Measured volume

Spill Start Time: _____ Spill End Time: _____

San Diego Manhole Flow Rate Chart - Describe what picture used and how the determination made, i.e. measured height, how far from spill, etc.

CWEA Ruler - Describe what picture used and how the determination made, i.e. measured height, how far from spill, etc.

Vent or Pick Holes - Identify vent hole diameter, number holes, height, where measured, etc.

Eyeball Estimate – Describe how estimated (spill area, number of 5 gallon buckets, etc.)

Measured Volume – Describe area measured, depth of wastewater and its location, provide sketch below.



Agenda Item

City Council

Item #: 5.1.

9/8/2020

File #: 20-094

TO: Honorable Mayor and Members of the City Council

FROM: Rick Otto, City Manager

1. SUBJECT

Resolution Opposing Proposition 15 (Monaco).

2. SUMMARY

Discussion on a Resolution opposing Proposition 15.

3. RECOMMENDED ACTION

Direction on Resolution opposing Proposition 15.

4. FISCAL IMPACT

None.

5. STRATEGIC PLAN GOALS

Not applicable.

6. DISCUSSION AND BACKGROUND

Not applicable.

7. ATTACHMENTS

- OC Tax Prop 13 Factsheet
- OC Tax Letter to Council
- Draft Resolution Opposing Proposition 15



Agenda Item

City Council

Item #: 5.1.

9/8/2020

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TO: Honorable Mayor and Members of the City Council

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2. SUMMARY

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3. RECOMMENDED ACTION

Direction on Resolution opposing Proposition 15.

4. FISCAL IMPACT

None.

5. STRATEGIC PLAN GOALS

Not applicable.

6. DISCUSSION AND BACKGROUND

Not applicable.

7. ATTACHMENTS

- OC Tax Prop 13 Factsheet
- OC Tax Letter to Council
- Draft Resolution Opposing Proposition 15

PROPOSITION 13

PROTECTING THE RIGHTS OF CALIFORNIA HOMEOWNERS

WHAT IS PROPOSITION 13?

In 1978, California voters approved the People's Initiative to Limit Property Taxation, or "Proposition 13". Prop 13 was the outcome of a revolt of California property owners against the roller-coaster tax increases and provided stability for homeowners. Because of Prop 13, the initial tax rate is set at 1% with annual increases capped at 2%. There is also a two-thirds vote requirement of both the people and the legislature to increase local and statewide taxes.

Every homeowner in CA, regardless of when they purchased their home, is **protected** under Prop 13.



THREATS TO PROPOSITION 13

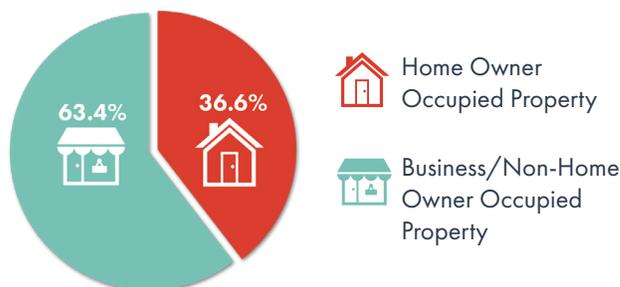
PROPOSITION 15

"Increases funding for public schools, community colleges, and local government service by changing tax assessment of commercial and industrial property. Initiative Constitutional Amendment."

THE SPLIT-ROLL INITIATIVE:

1. Will cause fewer jobs and reduce wages
2. Will raise prices for good & services
3. Will magnify the housing crisis
4. Will leave homeowners vulnerable to losing their Prop 13 protection.
5. Will increase the cost to do business in a state ranked as one of the worst in the nation.

THE DISTRIBUTION OF CALIFORNIA'S PROPERTY TAX BASE



Businesses currently pay the **largest share** of property tax under Prop 13 (2016-17).

ABOUT OC TAX

Founded in 1986, the Orange County Taxpayers Association is a non-partisan, non-profit organization with a mission to ensure taxes and tax-supported programs are fair, understandable, cost-effective and good for the economy.

www.OCTax.org

P.O. Box 5881, Orange CA 92863

@OCTaxpayers

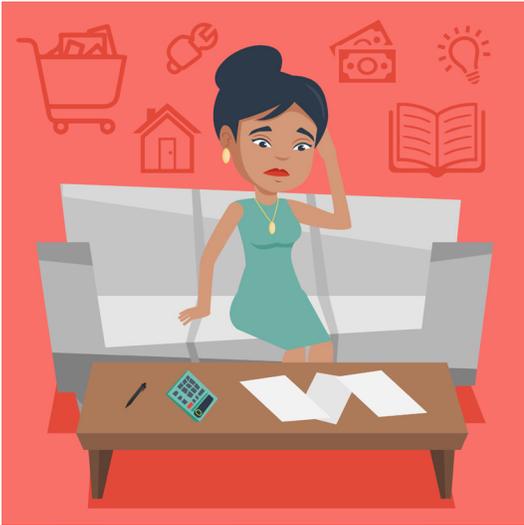
PROP ^{\$}**13**

OCTAX[®]
Orange County Taxpayers Assoc.

1077

BUSINESSES CAN'T SURVIVE ANOTHER HIT

As the impacts of COVID-19 rippled throughout the country, our local business community has suffered catastrophic losses. Unable to survive the economic burdens, many small businesses were forced to close their doors for good. As businesses continue to struggle, unemployment numbers remain staggering.



CALIFORNIA UNEMPLOYMENT

2,885,300 (APRIL 2020)

California's unemployment is **higher** than the national average

ORANGE COUNTY UNEMPLOYMENT CLAIMS

165,200 (JAN-APRIL 2020)

That's a **354%** increase in **4 months!**

A strong business environment is **CRITICAL** to improve unemployment. Jobs depend on it.

TWISTED LOGIC

Proponents claim Proposition 15 will help fund local schools and governments by taxing an already struggling business community. However, Governor Newsoms' draft 20-21 FY budget allocates over \$84 billion dollars for K-12 education: **AN ALL-TIME HIGH!** With \$900 million for educator recruitment and training.

THE GOVERNOR HAS ALSO KEPT EXPENSIVE PET PROJECTS AND GOVERNMENT PORK, INCLUDING:

1. **\$4.2 billion:** Bullet Train
2. **Up to 2%:** Raises for retired State government officials
3. **\$40 million:** Earmarked San Diego parks & rail
4. **\$3 million:** Dog Park in Rancho Cucamonga
5. **\$2.5 million:** New Elevator in Los Angeles



Visit OCTax.org for membership information, news articles and OCTax's position on tax and public policy issues.

   @OCTaxpayers

PROP  **13**

OCTAX OCTax.org
Orange County Taxpayers Association

1078

August 3, 2020

Hon. Mark Murphy, Mayor
City of Orange
300 E. Chapman Ave.
Orange, CA 92866

Mayor Murphy and Members of the Orange City Council:

In 1978, California voters approved the People's Initiative to Limit Property Taxation, or "Proposition 13". Prop 13 was the outcome of a revolt of California property owners against the roller-coaster tax increases and provided stability for homeowners and business owners.

As the impacts of COVID-19 rippled throughout the country, the business community has suffered catastrophic losses. Unable to survive the economic burdens, many small businesses were forced to close their doors for good. As businesses continue to struggle, unemployment numbers remain staggering. The business community is CRITICAL to improve unemployment. You can't have a job without one.

The Split Roll- 2020 Ballot Initiative: Proposition 15 will cause fewer jobs and reduce wages, raise prices for goods and services, magnify the housing crisis, increase the cost to do business in California, and will leave homeowners vulnerable to the complete elimination of Proposition 13 protections. **Proposition 15 is a \$10-\$12 BILLION tax increase on every Californian at a time we cannot afford it.**

The Orange County Taxpayers Association asks that your City Council join with us in opposing the Split Roll Initiative "Prop 15" on this November's ballot by passing a resolution in opposition.

Please let us know if we can be of any further assistance

Sincerely,



Carolyn Cavecche
President and CEO
Orange County Taxpayers Association

Cc: Hon. Mike Alvarez, Mayor Pro Tem
Hon. Kim Nichols, Council Member
Hon. Chip Monaco, Council Member
Rick Otto, City Manager

WHEREAS, On June 6, 1978, Proposition 13, officially titled the “People’s Initiative to Limit Property Taxation,” was overwhelmingly approved by California’s voters, reducing property tax rates on homes, businesses and farms, and capping the rate of tax increases in the future; and

WHEREAS, On the same ballot, voters rejected Proposition 8, which proposed a “split-roll” property tax that for the first time in California history would have allowed the government to discriminate against property owners based on the type of property owned; and

WHEREAS, Prior to Proposition 13, rapidly rising inflation and subjective property assessments led to an inequitable property tax system that forced families to sell their homes and business owners to close their doors due to soaring property tax bills; and

WHEREAS, Proposition 13 provides certainty for taxpayers with respect to their property tax liability, eliminating the unpredictable year-to-year changes that occurred under the system it replaced; and

WHEREAS, Proposition 13 provides a stable revenue source for the government, in contrast to the volatile personal income tax, which California heavily relies upon for revenue; and

WHEREAS, Proposition 13 allows businesses to flourish and grow by providing a more stable business climate in the state; and

WHEREAS, With exponentially rising costs of living in the state of California, Proposition 13 makes it easier for families to achieve the American Dream of home and business ownership; and

WHEREAS, Property tax revenue in the state of California grew significantly following the passage of Proposition 13, with the 2019-20 assessors’ rolls reporting taxable property value of \$6.6trillion in the state, suggesting property tax revenue of at least \$72.5 billion, plus billions more for local levies used to repay bonds, including school bonds; and

WHEREAS, Assessed values increase under Proposition 13 due to changes in ownership, new construction, and an annual adjustment for inflation that is limited to 2% per year to protect property owners while still providing additional revenue for local governments; and

WHEREAS, Homeowners have been the biggest beneficiaries of Proposition 13, as their cumulative share of the total property tax burden has gone down more than 5% since its passage, from 41.84% in 1979-80 down to 36.65% in 2016-17; and

WHEREAS, Proposition 13 remains just as popular with voters today as it was when it was approved, with recent surveys citing that 65% of likely voters support Proposition 13; and

WHEREAS, Proposed alternatives to Proposition 13 that would increase property taxes on California businesses would harm the ability of employers to hire or retain California employees and lead to more businesses and jobs leaving the state; and

WHEREAS, Proposed alternatives to Proposition 13 could negatively affect renters, who would see their rents increase as landlords experienced higher operating costs and passed these costs down to their tenants; and

WHEREAS, Proponents of the “Schools and Communities First” tax increase initiative qualified for the November 2020 ballot seek to undermine and remove taxpayer protections provided by Proposition 13 by requiring businesses to pay higher property taxes than all other property owners; and

WHEREAS, The “split-roll” initiative would increase the cost of food by increasing property taxes on agricultural buildings and some crops; and

WHEREAS, The County Assessors’ Association found that the “split-roll” initiative would result in a net loss of revenue for some counties due to the cost of newly created exemptions for select property owners; and

WHEREAS, Assessors repeatedly have stated that the “split-roll” initiative would be impossible to implement given unavailability of data needed to administer the proposed exemptions, unavailability of qualified candidates to fill the approximately 900 new government positions that would be needed, and the limited timeframe set by the initiative; and

WHEREAS, Since the passage of Proposition 13, voters have rejected, by wide margins, changes that would have businesses pay property taxes at a higher rate than those imposed upon residential owners, as evidenced by the defeat of Proposition 167 in 1992; now, therefore, be it

Resolved, That in recognition of the benefits that Proposition 13 provides for all property owners, California’s economy and the residents of this community, (NAME) opposes the split-roll property tax increase, Proposition 15 on the November 3, 2020 ballot, and reaffirms its support for Proposition 13 for all property owners.



Agenda Item

City Council

Item #: 7.1.

9/8/2020

File #: 20-102

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Monica Espinoza, Human Resources Director

1. SUBJECT

A Resolution of the City Council of the City of Orange relating to the classification, compensation, and terms of employment of Executive Management and Senior Management employees. Resolution No. 11269.

2. SUMMARY

Resolution No. 11269 amends the compensation and terms of employment for the City's Top Management employees for the period of July 1, 2020, through June 30, 2021. Details of this agreement are provided under Section 6, "Discussion and Background" below.

3. RECOMMENDED ACTION

Approve Resolution No. 11269. A Resolution of the City Council of the City of Orange relating to the classification, compensation, and terms of employment of Executive Management and Senior Management employees and repealing Resolution No. 11175 and all amendments thereto.

4. FISCAL IMPACT

Originally, the budget for this item was \$506,000 of which \$370,000 is General Fund. The revised budget is \$77,000 of which \$56,000 is General Fund, resulting in a savings of \$429,000 overall and \$314,000 in the General Fund.

5. STRATEGIC PLAN GOALS

Goal 1: Provide for a safe community

a: Provide staffing and resources to deliver services that ensure public safety.

Goal 2: Be a fiscally healthy community

a: Expend fiscal resources responsibly.

6. DISCUSSION AND BACKGROUND

The City's Top Management employees are not formally recognized as an employee bargaining unit, but are covered by a City Council-adopted Resolution that provides for employee compensation and benefits. The Top Management Resolution covers the City's department heads, division managers, and other executive management-level employees. There are currently 67 employees covered by

this Resolution.

The proposed 2% salary increase and associated 2% increase in employee PERS contribution is consistent with recent amendments to agreements with other miscellaneous bargaining groups. The approval of this Resolution results in a cost savings of \$429,000 for FY 21.

If approved, the new Top Management Resolution will reflect the following provisions:

Provision	Description
Term of Resolution	July 1, 2020 through June 30, 2021.
Salary	Across the board base salary increase of two percent (2%) effective August 30, 2020. Monthly Salary Range Tables are attached as Appendices A and B.
Vacation Conversion	For Fiscal Year 2020-21 only, the vacation conversion shall be suspended except for those employees that will reach their vacation maximum accrual in the following pay period, in which case the employee shall be permitted to convert up to 50% of the vacation leave the employee would normally accrue in that fiscal year.
Health Insurance	Effective the first pay period starting in January 2020, the City's contribution toward medical insurance benefits per employee shall increase by \$120.00 per month to be commensurate with other management labor groups. New Medical Waiver Provision: 1) Employees who were members of Top Management on or before December 31, 2020, OR have a hire date prior to July 1, 2019 (with the exception of the Police Chief and Fire Chief), shall receive the amount designated in Section 22(B) towards the Flexible Benefit Plan. 2) Employees in the classifications of Police Chief or Fire Chief with a hire date prior to March 29, 2020, shall receive the amount designated in Section 22(B) towards the Flexible Benefit Plan. 3) For employees that do not meet the criteria of Sections 1 or 2 above, Executive Management shall receive \$750.00 per month, and members of Senior Management shall receive \$500.00 per month.
Long Term Disability Insurance	Increase Long Term Disability Insurance benefit to \$12,000.00 per month (from \$8,000.00) for Executive Management, and a maximum of \$8,000.00 per month (from \$6,000.00) for Senior Management employees.
Retirement Cost Sharing	Effective the pay period beginning August 30, 2020 through August 28, 2021, Top Management employees shall temporarily pay an additional two percent (2%) of pensionable compensation, on a pre-tax basis, towards the City contribution pursuant to the cost sharing arrangement set forth in California Government Code 20516(f).

Language Changes	Implement language clean-up to conform Resolution to current practices or agreements.
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7. ATTACHMENTS

- Resolution No. 11269



Agenda Item

City Council

Item #: 7.1.

9/8/2020

File #: 20-102

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Monica Espinoza, Human Resources Director

1. SUBJECT

A Resolution of the City Council of the City of Orange relating to the classification, compensation, and terms of employment of Executive Management and Senior Management employees. Resolution No. 11269.

2. SUMMARY

Resolution No. 11269 amends the compensation and terms of employment for the City's Top Management employees for the period of July 1, 2020, through June 30, 2021. Details of this agreement are provided under Section 6, "Discussion and Background" below.

3. RECOMMENDED ACTION

Approve Resolution No. 11269. A Resolution of the City Council of the City of Orange relating to the classification, compensation, and terms of employment of Executive Management and Senior Management employees and repealing Resolution No. 11175 and all amendments thereto.

4. FISCAL IMPACT

Originally, the budget for this item was \$506,000 of which \$370,000 is General Fund. The revised budget is \$77,000 of which \$56,000 is General Fund, resulting in a savings of \$429,000 overall and \$314,000 in the General Fund.

5. STRATEGIC PLAN GOALS

Goal 1: Provide for a safe community

a: Provide staffing and resources to deliver services that ensure public safety.

Goal 2: Be a fiscally healthy community

a: Expend fiscal resources responsibly.

6. DISCUSSION AND BACKGROUND

The City's Top Management employees are not formally recognized as an employee bargaining unit, but are covered by a City Council-adopted Resolution that provides for employee compensation and benefits. The Top Management Resolution covers the City's department heads, division managers, and other executive management-level employees. There are currently 67 employees covered by

this Resolution.

The proposed 2% salary increase and associated 2% increase in employee PERS contribution is consistent with recent amendments to agreements with other miscellaneous bargaining groups. The approval of this Resolution results in a cost savings of \$429,000 for FY 21.

If approved, the new Top Management Resolution will reflect the following provisions:

Provision	Description
Term of Resolution	July 1, 2020 through June 30, 2021.
Salary	Across the board base salary increase of two percent (2%) effective August 30, 2020. Monthly Salary Range Tables are attached as Appendices A and B.
Vacation Conversion	For Fiscal Year 2020-21 only, the vacation conversion shall be suspended except for those employees that will reach their vacation maximum accrual in the following pay period, in which case the employee shall be permitted to convert up to 50% of the vacation leave the employee would normally accrue in that fiscal year.
Health Insurance	Effective the first pay period starting in January 2020, the City's contribution toward medical insurance benefits per employee shall increase by \$120.00 per month to be commensurate with other management labor groups. New Medical Waiver Provision: 1) Employees who were members of Top Management on or before December 31, 2020, OR have a hire date prior to July 1, 2019 (with the exception of the Police Chief and Fire Chief), shall receive the amount designated in Section 22(B) towards the Flexible Benefit Plan. 2) Employees in the classifications of Police Chief or Fire Chief with a hire date prior to March 29, 2020, shall receive the amount designated in Section 22(B) towards the Flexible Benefit Plan. 3) For employees that do not meet the criteria of Sections 1 or 2 above, Executive Management shall receive \$750.00 per month, and members of Senior Management shall receive \$500.00 per month.
Long Term Disability Insurance	Increase Long Term Disability Insurance benefit to \$12,000.00 per month (from \$8,000.00) for Executive Management, and a maximum of \$8,000.00 per month (from \$6,000.00) for Senior Management employees.
Retirement Cost Sharing	Effective the pay period beginning August 30, 2020 through August 28, 2021, Top Management employees shall temporarily pay an additional two percent (2%) of pensionable compensation, on a pre-tax basis, towards the City contribution pursuant to the cost sharing arrangement set forth in California Government Code 20516(f).

Language Changes	Implement language clean-up to conform Resolution to current practices or agreements.
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7. ATTACHMENTS

- Resolution No. 11269

RESOLUTION NO. 11269

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ORANGE RELATING TO THE CLASSIFICATION, COMPENSATION, AND TERMS OF EMPLOYMENT OF EXECUTIVE MANAGEMENT AND SENIOR MANAGEMENT EMPLOYEES, AND REPEALING RESOLUTION NO. 11175 AND ALL AMENDMENTS THERETO.

WHEREAS, the employees covered by this Resolution constitute unrepresented management personnel; and

WHEREAS, the City Council has consulted with the City Manager concerning the proposed employment terms contained herein; and

WHEREAS, the City Council has determined that this Resolution shall set forth the wages, hours, and conditions of employment for the period of July 1, 2020 through June 30, 2021 for those management employees covered herein;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Orange hereby adopts the wages, hours, and conditions of employment for the period of July 1, 2020 through June 30, 2021 for Executive Management and Senior Management Employees contained in Exhibit A, as fully set forth herein.

ADOPTED this 8th day of September 2020.

Mark A. Murphy, Mayor, City of Orange

ATTEST:

Pamela Coleman, City Clerk, City of Orange

STATE OF CALIFORNIA)
COUNTY OF ORANGE)
CITY OF ORANGE)

I, PAMELA COLEMAN, City Clerk of the City of Orange, California, do hereby certify that the foregoing Resolution was duly and regularly adopted by the City Council of the City of Orange at a regular meeting thereof held on the 8th day of September 2020 by the following vote:

AYES:	COUNCIL MEMBERS:
NOES:	COUNCIL MEMBERS:
ABSENT:	COUNCIL MEMBERS:
ABSTAINED:	COUNCIL MEMBERS:

Pamela Coleman, City Clerk, City of Orange



Exhibit A

TOP MANAGEMENT RESOLUTION

JULY 1, 2020 THROUGH JUNE 30, 2021

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APPENDIX A	Executive Management Monthly Salary Ranges	Error! Book mark not define d.
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SECTION 1. BASIC COMPENSATION PLAN AND DEFINITIONS.

- A. A basic compensation plan is established for all Executive and Senior Management employees of the City of Orange who are now employed, or will in the future be employed in any of the classifications of employment listed in this Resolution and its Exhibits.
- B. Whenever the term "Department Head" is used, it shall be understood to include the City Manager and City Attorney when the personnel action affects a Department Head.
- C. Whenever the term "Top Management" is used, it shall be understood to include all covered employees within this Resolution.
- D. Whenever the term "Executive Management" is used, it shall be understood to include all classifications within Appendix A.
- E. Whenever the term "Senior Management" is used, it shall be understood to include all classifications within Appendix B.
- F. Except as amended by a written instrument formally approved by the City Council, the City Manager and City Attorney shall receive the fringe benefits that are afforded to Executive Management and shall have their compensation and terms of employment set forth herein.

SECTION 2. SALARY AND WAGE SCHEDULE.

The monthly salaries for employees covered by this Resolution are hereby incorporated, and listed in Appendices A and B.

The attached salary and wage schedules shall constitute the basic compensation plan consisting of six (6) steps or rates of pay in each range.

The City Manager reserves the right to grant an additional salary increase of up to five percent (5.0%) for any classifications described herein in Appendices A and B. Any such increases shall not exceed a total cost of one percent (1%) of payroll for Top Management employees.

The respective ranges shall be identified by number and the steps by the letters A to F inclusive. The minimum length of service required for advancement to the next higher step is provided in Sections 5 and 6.

SECTION 3. ADMINISTRATION OF BASIC COMPENSATION PLAN.

The compensation ranges and steps contained in the attached salary schedule are monthly compensation rates.

For all employees covered by this Resolution, the hourly rate of pay shall be the monthly rate multiplied by 12 divided by 2080 annual hours. In determining the hourly rate, compensation shall be calculated to the nearest one-half (1/2) cent.

Part-time employees who are scheduled to work an average of at least 20 hours per week on a year-round basis may be considered for advancement to the next higher step upon completion of 2080 hours of employment.

SECTION 4. BEGINNING RATES.

A new employee of the City shall be paid the rate shown in Step A in the range allocated to the class of employment for which the employee has been hired, except that on the request of the Department Head under whom the employee will serve, and with the authorization of the Human Resources Director, such employee may be placed in Steps B through F depending upon the employee's qualifications.

SECTION 5. SERVICE.

The word service, as used in this Resolution, shall be defined to mean continuous, full-time service in the employee's present classification, service in a higher classification, or service in a classification allocated to the same salary range and having generally similar duties and requirements.

A lapse of service by any employee for a period of time longer than thirty (30) days by reason of resignation or discharge eliminates the accumulated length of service time of such employee for the purpose of this Resolution. Employees re-entering the service of the City shall be considered as a new employee, except that the employee may and at the discretion of the City, be re-employed within one (1) year and placed in the same salary step in the appropriate compensation range as the employee was at the time of the separation of employment.

SECTION 6. ADVANCEMENT WITHIN SALARY RANGES.

The following regulations shall govern salary advancement:

- A. Merit Advancement. An employee shall be considered for advancement through the salary range upon completion of the minimum length of service. The effective date of such merit increase, if granted, shall be the first day of the next pay period following the completion of the length of service required for such advancement. Advancement through the salary ranges Steps A through F may be granted only for continuous, meritorious, and efficient service, and continued improvement by the employee in the effective performance of the duties of the position. Such merit advancement shall require the following:
 - 1) The Department Head shall file with the Human Resources Director a Personnel Action Form and a completed Performance Evaluation form recommending the granting or denial of the merit increase and supporting such recommendation with specific reasons therefore. If denied by the Human Resources Director, the reason for denial will be provided to the Department Head.
 - 2) Advancements through the pay ranges Step A through Step F, shall occur, if granted, in yearly increments.
 - 3) A lapse of service of thirty (30) continuous calendar days or more for any reason shall extend the due date for the merit performance evaluation by an equal number of days absent.

- B. Special Merit Advancement. When an employee demonstrates exceptional ability and proficiency in the performance of duties, the Department Head may recommend to the Human Resources Director that the employee be advanced to a higher pay step without regard to the minimum length of service requirements contained in this Resolution. With concurrence of the City Manager, the Human Resources Director may, on the basis of a Department Head's recommendation, approve and effect such an advancement.

SECTION 7. REDUCTION IN SALARY STEPS.

Any employee who is being paid on a salary step higher than Step A may be reduced by one (1) or more steps upon the recommendation of the Department Head with the approval of the Human Resources Director. Such reduction shall take place only after the employee has been notified of the reasons and has had an opportunity to respond. Procedure for such reduction shall follow the same procedure as outlined for merit advancements in Section 6, and such employee may be considered for re-advancement under the same provisions as contained in Subsection A of Section 6.

SECTION 8. BILINGUAL ASSIGNMENT.

Employees covered by this Resolution may be assigned by the Department Head, with approval of the Human Resources Director, to a bilingual assignment. The Department Head shall determine the number of bilingual assignment positions which are necessary based upon a demonstrable need and frequency of use. Employees on bilingual assignment shall receive an additional \$140.00 per month for the duration of the assignment. Employees receiving bilingual assignment compensation may be required to take and pass a proficiency test on an annual or as needed basis as determined by the Human Resources Department. No permanency or seniority may be obtained in a bilingual assignment and such assignment may be revoked at any time by the Human Resources Director or a duly authorized designee. This form of pay, also referred to as “Bilingual Premium”, shall be reported to CalPERS as special compensation, and is therefore compensation earnable for classic members pursuant to CalPERS Regulations, Section 571(a)(4), and pensionable compensation for new members and pursuant to CalPERS Regulations, Section 571.1(b)(3).

SECTION 9. LONGEVITY FOR SAFETY CHIEFS.

- A. In an effort to maintain equality with subordinate classifications, the Fire Chief shall be eligible for Longevity Pay as follows:

Years of Service	Monthly Incentive
15	\$200.00
20	\$400.00
25	\$600.00

- B. In an effort to maintain equality with subordinate classifications, the Police Chief shall be eligible for Longevity Pay as follows:

Years of Service	Monthly Incentive
15	\$200.00
20	\$400.00
25	\$650.00

- C. This form of pay, also referred to as “Longevity Pay”, shall be reported to CalPERS as special compensation, and is therefore compensation earnable for classic members pursuant to CalPERS Regulations, Section 571(a)(1), and pensionable compensation for new members pursuant to CalPERS Regulations, Section 571.1(b)(1).

SECTION 10. EDUCATIONAL INCENTIVE PROGRAM.

- A. Employees covered by this Resolution, other than the Police Chief and Fire Chief, with postgraduate degrees (i.e. Master's degree or higher) shall be eligible to receive \$500.00 per month.
- B. In an effort to maintain equality with subordinate classifications, the Fire Chief shall receive \$400.00 per month for a Bachelor's degree or \$600.00 per month for a Master's degree.
- C. In an effort to maintain equality with subordinate classifications, the Police Chief shall receive \$700.00 for a Bachelor's degree or \$950.00 per month for a Master's degree.
- D. This form of pay, also referred to as "Educational Pay", shall be reported to CalPERS as special compensation, and is therefore compensation earnable for Classic Members pursuant to CalPERS Regulations, Section 571(a)(2), and pensionable compensation for New Members pursuant to CalPERS Regulations, Section 571.1(b)(2).

SECTION 11. INCENTIVE PAY PLAN.

The City Manager may, for the employees covered by this Resolution, put into effect an incentive pay plan, the terms and conditions of which shall be at the City Manager's full discretion.

SECTION 12. PROMOTION.

When an employee is promoted to a position in a higher classification, the employee may be assigned to the step in the new salary range which provides for at least a five percent (5%) increase. With the approval of the Department Head and Human Resources Director, the employee may be placed in the step in the new salary range as will grant the employee an increase of at least one, but not more than three salary steps.

SECTION 13. DEMOTION.

When an employee is demoted to a position in a lower classification, the salary rate shall be fixed in the appropriate salary range for the lower classification in accordance with the following provisions:

- A. The salary rate shall be reduced by at least one (1) step.
- B. The new salary rate must be within the salary range for the classification to which the employee was demoted.

SECTION 14. REASSIGNMENT OF COMPENSATION RANGES.

Any employee who is employed in a classification which is assigned to a different pay range shall be retained in the same salary step in the new range as the employee previously held in the prior range, and shall retain credit for length of service in such step toward advancement to the next higher step; provided, however:

- A. That if such retention results in the advancement of more than one (1) step, the Human Resources Director may at the time of reassignment, place the employee in a step which will result in an increase of only one step.
- B. That if the reassignment is to a lower compensation range, the F step of which is lower than the existing rate of pay at the time of reassignment, the employee shall continue to be paid at

the existing rate of pay until such time as the position is reassigned to a compensation schedule which will allow for further salary advancement, or until such time as the employee is promoted to a position assigned to a higher compensation range.

- C. That if the reassignment is to a lower compensation range, the F step of which is higher than the existing rate of pay, the employee shall be placed in that step of the lower compensation range which is equivalent to the existing rate of pay, and shall retain credit for length of service previously acquired in such step toward advancement to the next higher step. If there is no equivalent step, the employee shall be placed in the step which is closest to, but not less than, the employee's current salary step.

SECTION 15. AT-WILL STATUS.

Members of Top Management serve at the pleasure of the City Manager, with the exception of those members within the City Attorney's Office who serve at the pleasure of the City Attorney. Consideration for advancement, reduction, demotion, termination, or reassignment shall be at the initiation of the City Manager or City Attorney, as applicable, and in accordance with the Orange Municipal Code. In addition, all employees covered by the Resolution are employed at-will and serve in accordance with Title 2 of the Orange Municipal Code.

SECTION 16. RESERVED.

This section is intentionally left blank.

SECTION 17. ADMINISTRATIVE LEAVE.

Employees covered by this Resolution are exempt from Fair Labor Standards Act overtime provisions as executive, administrative, and professional employees. This Resolution establishes a pay system which provides all covered employees with sick leave and other leave which covered employees use for purposes of public accountability. However, the City will provide paid administrative leave as follows:

- A. Regular full-time employees identified in Appendix A shall accrue 80 hours of administrative leave annually for continuous service;
- B. Regular full-time employees identified in Appendix B shall accrue 63 hours of administrative leave annually for continuous service;
- C. Employees hired after January 1st of each year shall receive a prorated portion of the administrative leave during their first calendar year of employment;
- D. The minimum charge to the employee's administrative leave account shall be one-quarter ($\frac{1}{4}$) hour, while additional actual absence of over one-quarter ($\frac{1}{4}$) hour shall be charged to the nearest one-half ($\frac{1}{2}$) hour;
- E. Usage of administrative leave shall be at the convenience of the City with the approval of the respective Department Head or City Manager;
- F. All administrative leave shall accrue January 1st of each year;
- G. Unused administrative leave at the end of the calendar year and upon retiring from City service and entering CalPERS as a retired annuitant shall be deposited in the employee's Retirement Health Savings Plan account as described in Section 24(C); and

H. Unused administrative leave upon separation for reasons other than retirement shall be forfeited.

SECTION 18. HOLIDAYS.

Employees covered by this Resolution shall receive the following nine (9)-hour paid holidays, except as provided in item 9 below:

- 1) January 1st (New Year's Day)
- 2) The third Monday in February (Presidents' Day)
- 3) Last Monday in May (Memorial Day)
- 4) July 4th (Independence Day)
- 5) First Monday in September (Labor Day)
- 6) November 11th (Veterans Day)
- 7) Fourth Thursday in November (Thanksgiving Day)
- 8) Fourth Friday in November (Day after Thanksgiving)
- 9) One-half day (4.5 hours) before Christmas if December 24th falls on a Monday through Thursday (Christmas Eve)
- 10) December 25th (Christmas Day)

A. Floating Holidays. In addition to the above, employees will have credited to their paid leave balance 22.5 floating holiday hours beginning January 1st of each year. Employees hired after January 1st of each year shall receive a prorated portion of the 22.5 floating holiday hours during their first calendar year of employment. The floating holiday hours shall be taken at the convenience of the City with the approval of the City Manager or the Department Head. Unused floating holiday hours at the end of the calendar year or upon separation from City service shall be deposited in the employee's Retirement Health Savings Plan account as described in Section 24(C).

B. Holidays on Certain Days of the Week. In the event any of the above holidays, except one-half day before Christmas, fall on a Sunday, the following day will be taken in lieu of the actual date on which the holiday falls. When any of the above holidays fall on a Saturday, except one-half day before Christmas, the preceding Friday will be taken in lieu of the actual date on which the holiday falls. When any of the above holidays falls on an employee's regularly scheduled day off during the week, except one-half day before Christmas, employees will be credited with nine (9) hours of holiday compensatory time. Accumulated holiday compensatory time must be used by the employee by June 30th of the same fiscal year in which it was accumulated. Unused holiday compensatory time shall be paid in cash to an employee upon separation of employment.

C. Eligibility to Receive Holiday Pay. In order to be eligible to receive holiday pay, an employee must have worked, or be deemed to have worked because of an approved absence, the employee's regularly scheduled day before and regularly scheduled day after the holiday. Newly hired employees are provided with and are eligible to use floating holiday and fixed holiday hours, according to the guidelines established in this Section, and/or with approval of the Human Resources Director.

D. Holidays During Vacation. Should one of the holidays listed above fall during an employee's vacation period while an employee is lawfully absent with pay, the employee shall receive holiday pay and no charge shall be made against the employee's accumulated vacation.

SECTION 19. VACATION.

A. Vacation Accrual. All full-time regular employees described herein accrue paid vacation in accordance with the following schedules.

1) For Executive Management, the following schedule shall apply:

Years of Service	Vacation Hours Per Year	Years of Service	Vacation Hours Per Year
1	144	16	208
2	149	17	212
3	154	18	216
4	159	19	220
5	164	20	224
6	170	21	228
7	172	22	232
8	176	23	236
9	180	24	240
10	184	25	244
11	188	26	248
12	192	27	252
13	196	28	256
14	200	29	260
15	204	30	264

2) For Senior Management, the following schedule shall apply:

Years of Service	Vacation Hours Per Year	Years of Service	Vacation Hours Per Year
1	104	16	188
2	114	17	192
3	124	18	196
4	134	19	200
5	144	20	204
6	148	21	208
7	152	22	212
8	156	23	216
9	160	24	220
10	164	25	224
11	168	26	228
12	172	27	232
13	176	28	236
14	180	29	240
15	184	30	244

- B. Vacation Usage and Accumulation. Vacation shall be taken at the convenience of the City with the approval of the Department Head. Where possible, such vacation should be taken annually and not accumulated from year to year. Employees shall not accumulate vacation in excess of the equivalent number of hours earned in the immediately preceding 24-month period. Employees with less than one (1) year's continuous service shall accrue vacation but may not use vacation until successful completion of one (1) year's continuous service, except with the approval of the City Manager, or in the event of a City Hall holiday closure, with approval of the Human Resources Director. Employees whose accumulated vacation reaches the above-defined limit shall receive no additional vacation accrual until such time as the accumulated vacation hours fall below the allowable limit.

- C. Vacation Conversion. An employee may convert up to 50% of their current annual vacation accrual into pay in lieu of time off with pay on an annual basis. An employee requesting such conversion must meet the eligibility requirements as set forth in Section 19(A)(1)(2) and may convert twice in a fiscal year, within the cap provisions stated above. Any exception to this provision requires the approval of the Human Resources Director.

For Fiscal Year 2020-21 only, the vacation conversion shall be suspended except for those employees that will reach their vacation maximum accrual in the following pay period, in which case the employee shall be permitted to convert up to 50% of the vacation leave the employee would normally accrue in that fiscal year.

- D. Vacation Payout Upon Termination. Employees who terminate their employment with the City shall be paid for all accrued vacation, if any, and the prorated portion of their final accrual. Prorated vacation shall be on the basis of one-twelfth (1/12) of the employee's annual vacation pay for each full month of service.

SECTION 20. PART-TIME, TEMPORARY, AND SEASONAL EMPLOYEES ELIGIBILITY FOR FRINGE BENEFITS.

- A. Definitions. Nothing contained herein shall guarantee to any employee a specified number of hours per day or days per week or weeks per year or months per year of work.
 - 1) Regular part-time employees shall be those employees scheduled in the budget to work 20 or more hours per week on a year-round basis (52 weeks minus approved leave).
 - 2) Temporary part-time employees shall be those employees scheduled in the budget to work less than 20 hours per week on a year-round basis (52 weeks minus approved leave).
 - 3) Seasonal employees shall be those employees who are scheduled in the budget to work on less than a year-round basis regardless of hours worked.

- B. Entitlement to Fringe Benefits Based Upon Proration of Hours. Regular part-time employees shall receive fringe benefits in proportion to the number of hours an employee is scheduled to work to the normal 40-hour week on an annual basis.

The annual schedule for all eligible part-time employees shall be the schedule which is included in the City's approved budget or a schedule which is designated by Management at the commencement of the employee's employment with the City. This formula of proration shall apply to holiday pay, vacation, sick leave, flexible benefit contribution, disability insurance contribution, money purchase retirement plan, and CalPERS retirement contribution. Regular part-time employees may receive step increases provided they have performed 2080 hours of service.

- C. Temporary and seasonal employees shall be entitled to receive no fringe benefits provided for in the resolution or in any resolution of the City unless otherwise required by law.

SECTION 21. LEAVES OF ABSENCE.

- A. Leave of Absence Without Pay. For all regular employees as described herein, the following Leave Without Pay procedure shall apply:

- 1) After all available leave benefits, including vacation, administrative leave, floating holiday, compensatory time, sick leave, and other leave benefits have been completely used, a regular employee, not under suspension, may make written application to the Department Head for leave without pay or benefits. No such leave will be considered absent a written application from the employee requesting leave.
- 2) If the Department Head and the Human Resources Director agree that such leave is merited and in the interest of the City, leave may be granted for a period not to exceed six (6) months following the date of expiration of all other allowable leave benefits. The employee shall not be continued "in service" as that term is defined in this Resolution.
- 3) No employment or fringe benefits such as sick leave, vacation, health insurance, retirement, or any other benefits shall accrue to any employee on leave of absence without pay except as denoted under Section 21(I). During such leave in excess of five (5) working days, no seniority shall be accumulated.
- 4) Subject to and consistent with the conditions of the group health, life or disability plan, coverage may be continued during a leave, provided direct payment of the total premium by the employee is made through and as prescribed by the Payroll Division. The City will pay up to six (6) months of the Flexible Benefit Plan contribution for employees who are on long term disability leave.
- 5) At the end of any approved leave, if the employee desires additional leave, written application must be made through the Department Head to the Human Resources Director at least ten (10) days before the end of the approved leave, stating the reasons why the additional leave is required and why it would be in the best interests of the City to grant such leave of absence. If such additional leave is merited and would still preserve the best interests of the City, the Human Resources Director may approve such extension of the leave of absence for a period up to, but not to exceed, an additional six (6) months.

- 6) If the employee does not return to work prior to or at the end of such leave of absence or extension of leave of absence, the City shall consider that the employee has abandoned their employment with the City and shall be terminated.
- 7) An employee on leave of absence must give the City at least seven (7) days' written notice of their intent to return to work prior to returning to work.
- 8) Any employee who engages in outside employment during said leave of absence without prior notification and approval of the Human Resources Director and Department Head may be subject to termination.
- 9) Any employee who falsifies the reason for the request for said leave of absence may be terminated.
- 10) Such leave shall be granted on the same basis for pregnancy, childbirth, and other medically related conditions, except that such an employee shall retain their seniority rights.
- 11) Forms setting forth the benefits available or such other pertinent information shall be maintained for distribution in the Human Resources Department.
- 12) The City Manager will allow an employee to take a leave of absence without pay during a City Hall holiday closure without having to exhaust all accrued leave benefits on the books. During said closure, employees will not see a reduction in benefits, including no loss of eligibility for holiday pay, if Leave Without Pay hours are used during the closure (i.e. the day after Christmas and/or working day before the New Year's day.)

B. Jury Duty and Services as Witness for City. When required to serve on a jury, all employees shall be provided with paid time off for a period of actual service required on the jury, provided all jury fees paid to the individual employee, less allowed automobile expenses, are turned over to the City. Once an employee has completed jury service, the employee must provide the Certificate of Jury Service to the immediate supervisor to qualify for jury duty compensation. If an employee is called as a witness on behalf of the City, the employee shall receive their normal pay for the time spent by the employee serving as a witness for the City. An employee shall be required to pay any witness fees that accrue to the employee for witness service to the City as a condition of receiving normal pay while serving as a witness for the City. Any exceptions to this provision must meet the approval of the Human Resources Director.

C. Military Leave of Absence. If an employee is required to take military training two (2) weeks or more each year, the employee shall be entitled to military leave of absence under the provisions of State law, found in applicable sections of the Military and Veterans' Code. An employee must provide a copy of the military orders to the Human Resources Department to qualify for a military leave of absence.

D. Sick Leave. Sick leave with pay shall be allowed, credited, and accumulated in accordance with the following:

- 1) For employees working a regular 40-hour week, eight (8) hours of sick leave will accrue for each month of continuous service.
- 2) All non-benefitted employees shall receive sick leave as required by State law.
- 3) Sick leave will be charged at the rate of one-quarter ($\frac{1}{4}$) hour for each one-quarter ($\frac{1}{4}$) hour an employee is absent.
- 4) Any employee eligible for sick leave with pay may use such leave for the following reasons:
 - (a) Medical and dental office appointments during work hours when authorized by the Department Head or a duly authorized designee; and/or
 - (b) Personal illness or physical incapacity resulting from causes beyond the employee's control, including pregnancy, childbirth, and other medically related conditions.
- 5) Sick Leave Application. Sick leave may be applied only to absence caused by illness or injury of an employee and may not extend to absence caused by illness or injury of a member of the employee's family except as provided for in Subsection E below.
- 6) Sick Leave Charged. In any instance involving use of a fraction of a day's sick leave, the minimum charged to the employee's sick leave account shall be one-quarter ($\frac{1}{4}$) hour, while additional actual absence of over one-quarter ($\frac{1}{4}$) hour shall be charged to the nearest one-half ($\frac{1}{2}$) hour. Sick leave shall only be used for the purposes stated and the Department Head shall be responsible for control of employee abuse of the sick leave privilege.

Employees may, upon prior notice and in the complete discretion of the Department Head, be required to furnish a certificate issued by a licensed physician or nurse or other satisfactory written evidence of any subsequent illness.

- 7) Sick Leave Payout Program. Unused sick leave shall be paid off according to the following:
 - (a) All sick leave accrued prior to January 1, 1992 shall fall under the following payout formula:
 - i. Accumulated sick leave balances as of December 31, 1991 shall be set aside in a designated sick leave account and no further accumulation will be placed in this bank. This accumulated sick leave will be available for the employee's use according to the provisions outlined in Section D(2), (3), and (4).
 - ii. Upon retiring from City service and entering the CalPERS as a retired annuitant, an employee shall receive pay for 50% of all accrued sick leave hours. The cash value of this unused sick leave

payout will be deposited into the employee's Retirement Health Savings Plan account, as described in Section 24(C).

- iii. Upon separation from City service for reasons other than retirement with CalPERS, an employee shall receive no pay for the first 60 days of accrued sick leave (0 to 480 hours), but shall receive 25% pay for the first 30 days of accrued sick leave after the first 60 days of accrued sick leave (481 to 720 hours), and 50% of all accrued sick leave thereafter (721 hours and up).
 - iv. Upon the death of an employee while employed by the City, 100% of all accrued sick leave benefits accrued prior to January 1, 1992 shall be paid to the beneficiary of the deceased employee. Payment will be made when proper authorization for payment is received from the estate of the decedent employee.
- (b) All sick leave accrued after December 31, 1991, shall be placed in a new accrual bank and have no maximum accrual amount. Any hours accumulated in this bank shall be eligible for the following payout program:
- i. Employees with sick leave usage of 0.0 to 27.0 hours per payroll calendar year will have the option to convert 40 hours of their unused sick leave to vacation in the first pay period of the following year.
 - ii. Employees with sick leave usage of 27.25 to 36.0 hours per payroll calendar year may convert 30 hours of unused sick leave to vacation the following year.
 - iii. Employees must have a minimum balance of 180 hours of sick leave, combining both sick leave banks, available after conversion. In addition, no hours will be converted to vacation if said conversion places the employee's vacation bank over the maximum allowable accrual. Conversion of sick leave to vacation shall occur in the first pay period of January based upon sick leave usage during the previous payroll calendar year.
 - iv. Any sick leave converted to vacation shall be subject to the provisions described in Section 19. The employee must file a sick leave payout designation form each year, if eligible for the conversion of unused sick leave to vacation. If no designation form is filed, the hours will automatically remain in the employee's new sick leave accumulation account. Employees shall still be subject to the maximum vacation accrual at any given time equivalent to 24 months' worth of accrued hours. Any request to convert which exceeds the maximum vacation accrual allotted shall not be converted to vacation, and shall remain in the employee's sick leave bank.

- v. Upon retirement from employment with the City and entering the CalPERS as a retired annuitant, an employee with a minimum of five (5) years of continuous service to the City shall receive pay for 50% of all unused sick leave hours. The cash value of this unused sick leave payout will be deposited into the employee's Retirement Health Savings Plan account, as described in Section 24(C).
 - vi. Upon separation of employment from the City for any reason, other than retirement as noted in the preceding paragraph, for sick leave hours accumulated after December 31, 1991, an employee shall receive no pay for the first 100 hours (0 to 100 hours) of accrued sick leave, but shall receive 25% pay for up to the next 100 hours, (101 to 200 hours) of accrued sick leave, and 50% pay of any remaining sick leave (201 to 352 hours).
 - vii. Upon the death of an employee while employed by the City, 100% of all accrued sick leave benefits up to 352 hours shall be paid to the beneficiary of the deceased employee. Payment will be made when proper authorization for payment is received from the estate of the decedent employee.
 - viii. Employees promoted to Top Management shall have all their sick leave hours placed into the new sick leave accrual bank.
- E. Family Leave. In accordance with the California Family Sick Leave and Paid Sick Leave Acts, an employee is allowed up to forty eight (48) hours of family leave per calendar year for family illness which shall be charged against the employee's accumulated sick leave. Family as used in this subsection is limited to any relation by blood, marriage or adoption who is a member of the employee's household (under the same roof); and any parent, substitute parent, parent-in-law, spouse, registered domestic partner, child, brother, sister, grandchild or grandparent of the employee, regardless of residence. Part-time benefited employees are allowed to use up to one-half of their annual accrual of sick leave for family leave purposes.
- F. Bereavement Leave. Regular full-time employees shall be entitled to take up to three (3) days of paid bereavement leave per incident on the following terms and conditions:
- 1) Bereavement leave may only be used upon the death or critical illness where death appears to be imminent of the employee's immediate family. "Immediate family" as used in this subsection, shall be limited to any relation by blood, marriage or adoption, who is a member of the employee's household (living at the same address) and any parent, legal guardian, parent-in-law, brother-in-law, sister-in-law, grandparent, grandchild, aunt, uncle, spouse, registered domestic partner, child, brother, or sister of the employee regardless of residence.
 - 2) Days of absence due to bereavement leave shall not exceed three (3) working days per incident and shall not be deducted from the employee's accumulated sick leave. An employee on bereavement leave shall inform the immediate supervisor of the fact and the reasons therefore as soon as possible. Failure to inform the immediate

supervisor, within a reasonable period of time, may be cause for denial of bereavement leave with pay for the period of absence.

G. Workers' Compensation Leave for Safety Employees. For the classifications of Fire Chief and Police Chief, salary continuance, including Labor Code Section 4850 leave, will be provided in accordance to current State Workers' Compensation laws and regulations.

H. Workers' Compensation Leave for Non-Safety Employees. For the remaining classifications described in Appendices A and B herein, Workers' Compensation leave shall be granted as follows:

- 1) A regular employee shall be granted temporary disability leave in accordance with the current State Workers' Compensation laws and regulations. When a City employee is entitled to receive temporary disability payments, the City will contribute additional compensation to allow the employee to receive 100% of their regular rate of pay, or provide full salary continuance, for the first 365 days starting from the date of injury. Temporary disability leave in excess of 365 days will be provided subject to current State Workers' Compensation laws and regulations.
- 2) Should it be determined by the employee's doctor, or an agreed doctor by both parties, or an Administrative Law Judge through the Workers' Compensation Appeals Board that an employee's illness or injury did not arise in the course of the employee's employment with the City and/or that the employee is not temporarily incapacitated, then the employee's accrued, or if insufficient, future sick leave, shall be charged to reimburse the City for any payments made to the employee pursuant to above.
- 3) An employee receiving benefits pursuant to Workers' Compensation Temporary Disability will continue to receive the City's contribution to the employee's medical, dental, vision and other applicable insurances. All authorized deductions will continue as though the employee is on regular work status. If the employee has exhausted Temporary Disability benefits, the employee shall be responsible for paying the full premium for the employee's medical, dental, vision, and other applicable insurances.
- 4) Temporary Disability leave shall expire when the first of any of the following conditions occur:
 - (a) The employee is able to return to work and assume the duties of the regular position.
 - (b) The employee is able to return to work to another position designated by the City.
 - (c) The day before the employee is retired or separated for disability. The employee's "retirement date" shall be determined by CalPERS.

- 5) Before a work-related injury, an employee may elect to pre-designate a qualified medical provider if done in accordance with Workers' Compensation laws and regulations.

I. Family Care and Medical Leave (FCML). State and Federal laws require the City to provide family and medical care leave for eligible employees. The following provisions set forth employees' and employer's rights and obligations with respect to such leave. Rights and obligations which are not specifically set forth below are set forth in the Department of Labor regulations implementing the Federal Family and Medical Leave Act of 1993 (FMLA) and the regulations of the California Fair Employment and Housing Commission implementing the California Family Rights Act (CFRA) (Government Code Section 12945.2). Unless otherwise provided, "Leave" under this article shall mean leave pursuant to the FMLA and CFRA. An employee's request for leave is subject to review and final approval of the Human Resources Director.

- 1) Amount of Leave. Eligible employees are entitled to a total of 12 work weeks of leave during any 12-month period. An employee's entitlement to leave for the birth or placement of a child for adoption or foster care expires 12 months after the birth or placement.

The 12-month period for calculating leave entitlement will be a "rolling period" measured backward from the date leave is taken and continues with each additional leave day taken. Thus, whenever an employee requests leave, the City will look back over the previous 12-month period to determine how much leave has been used in determining how much leave a member is entitled to.

- 2) Use of Other Accrued Leaves While on Leave. If an employee requests leave for any reason permitted under the law, the employee must exhaust all accrued leaves (except sick leave) in connection with the leave. This includes vacation, holiday, and other compensatory accruals. If an employee requests leave for the employee's own serious health condition, in addition to exhausting accrued leave, the employee must also exhaust sick leave. The exhaustion of accrued leave will run concurrently with the Family Care and Medical Leave.

- 3) Required Forms. Employees must fill out required forms, available in the Human Resources Department, including: Request for Family or Medical Leave; Medical Certification; Authorization for Payroll Deductions for benefit plan coverages (if applicable); and Fitness-for-Duty to return from leave.

SECTION 22. HEALTH INSURANCE.

The City contracts with CalPERS to make available those health insurance benefits provided under the Public Employees' Medical and Hospital Care Act (PEMHCA).

- A. Retired Annuitant. The City shall contribute toward the payment of premiums under the CalPERS Health Benefits Plan to each eligible retired annuitant of CalPERS to the extent required by law, a contribution of \$139.00 per month (\$143.00 for 2021). This contribution shall be adjusted annually on January 1st to the amount set by the CalPERS Board of Administration.

- B. Flexible Benefits Plan. The City shall provide a Section 125 Flexible Benefits Plan for active full-time and part-time eligible employees and pay the following monthly amounts to provide funds for optional health plans, dental plans, vision plans, health care reimbursement, dependent care, or cash as established by the Internal Revenue Service. The following amounts include the minimum amount required under PEMCHA, which is \$139.00 per month (\$143.00 for 2021). This contribution shall be adjusted annually on January 1st to the amount set by the CalPERS Board of Administration.

Effective Date	Executive Management	Senior Management
January 1, 2020	\$1,995.00	\$1,685.00
January 1, 2021	\$2,115.00	\$1,805.00

- C. Any amounts in excess of the amount designated in Section 22(B) necessary to maintain benefits under any benefits plan selected by the employee shall be borne by the employee.
- D. An employee cannot be enrolled in the CalPERS Health Benefits Plan if a spouse is enrolled in the City or enrolled in an agency with CalPERS health, unless the employee (or the spouse) is enrolled without being covered as a family member. Additionally, an employee may choose not to be enrolled in the Health Benefits Plan. If an employee chooses to not be enrolled in the health plan, the employee must provide proof, as determined by the Human Resources Director, that comparable medical insurance is in full force and effect. Based on determination that insurance is in full force and effect, eligible employees shall receive the amount designated below.
- 1) Employees who were members of Top Management on or before December 31, 2020, OR have a hire date prior to July 1, 2019 (with the exception of the Police Chief and Fire Chief), shall receive the amount designated in Section 22(B) towards the Flexible Benefit Plan.
 - 2) Employees in the classifications of Police Chief or Fire Chief with a hire date prior to March 29, 2020, shall receive the amount designated in Section 22(B) towards the Flexible Benefit Plan.
 - 3) For employees that do not meet the criteria of Sections 1 or 2 above, Executive Management shall receive \$750.00 per month, and members of Senior Management shall receive \$500.00 per month.

In the event the employee loses eligibility (with documentation), the employee must enroll in the CalPERS Health Benefits Plan pursuant to their rules and regulations. Failure to do so within sixty (60) days, shall result in the City seeking reimbursement of said contributions.

SECTION 23. OTHER INSURANCES.

- A. Life Insurance.

- 1) For employees described herein in Appendix A, the City shall contribute the full premium towards a \$150,000.00 life insurance benefit.

- 2) For employees described herein in Appendix B, the City shall contribute the full premium towards a \$75,000.00 life insurance benefit.
- B. Disability Insurance. The City shall provide a long term disability plan with a long term disability benefit of two-thirds of salary, after a 60-day elimination period, to a maximum of \$12,000.00 per month for employees described herein in Appendix A, and a maximum of \$8,000.00 per month for employees described herein in Appendix B.
- C. Medicare Insurance. The City shall pay for the employee's portion of the contribution for Medicare coverage for all employees hired after March 31, 1986.

SECTION 24. RETIREMENT.

- A. The City participates in the California Public Employees' Retirement System (CalPERS). This participation shall include, but is not limited to, the following retirement benefits:

- 1) Miscellaneous Retirement Formula – New Members. Miscellaneous employees who are New Members of CalPERS as defined by California Government Code Section 7522.04(f) are subject to the 2% @ age 62 retirement formula as set forth in California Government Code Section 7522.20. These New Members are subject to the three (3) year final compensation measurement period as set forth in California Government Code Section 7522.32. These New Members shall contribute half of normal cost of retirement as determined by CalPERS from their pensionable compensation, on a pre-tax basis, as set forth in California Government Code Section 7522.30. In all other respects, New Members shall be subject to the terms and requirements of Public Employees' Pension Reform Act (PEPRA).

Effective the pay period beginning August 30, 2020 through August 28, 2021, New Members shall temporarily pay an additional two percent (2%) of pensionable compensation, on a pre-tax basis, towards the City contribution pursuant to the cost sharing arrangement set forth in California Government Code 20516(f).

- 2) Miscellaneous Retirement Formula – Classic Members. Miscellaneous employees who are not defined as New Members as outlined in Subsection 1 above are defined as Classic Members of CalPERS and are subject to the 2.7% @ age 55 retirement formula as set forth in Section 21354.5 of the California Government Code. These Classic Members are subject to the one (1) year final compensation measurement period set forth in California Government Code Section 20042. These Classic Members shall contribute 8% of their compensation earnable, on a pre-tax basis.

Effective the pay period beginning August 30, 2020 through August 28, 2021, these Classic Members shall temporarily pay an additional two percent (2%) of compensation earnable, on a pre-tax basis, towards the City contribution pursuant to the cost sharing arrangement set forth in California Government Code 20516(f).

- 3) Safety Retirement Formula – New Members. Safety employees who are New Members of CalPERS as defined by California Government Code Section 7522.04(f) are subject to the 2.7% @ age 57 retirement formula as set forth in

California Government Code Section 7522.25(d). These New Members are subject to the three (3) year final compensation measurement period set forth in California Government Code Section 7522.32. These New Members shall contribute fifty percent of normal cost of retirement as determined by CalPERS from their pensionable compensation, on a pre-tax basis, as set forth in California Government Code Section 7522.30(c). In all other respects, New Members shall be subject to the terms and requirements of PEPRA.

- 4) Safety Retirement Formula – Classic Members. Safety employees who are not defined as New Members as outlined in Subsection 3 above are defined as Classic Members of CalPERS and are subject to the 3% @ age 50 retirement formula as set forth in Section 21362.2 of the California Government Code. These Classic Members are subject to the one (1) year final compensation measurement period as set forth in California Government Code Section 20042. These Classic Members shall contribute 9% of their compensation earnable, on a pre-tax basis.

Effective the pay period beginning August 30, 2020 through August 28, 2021, these Classic Members shall temporarily pay an additional two percent (2%) of compensation earnable, on a pre-tax basis, towards the City contribution pursuant to the cost sharing arrangement set forth in California Government Code 20516(f).

- 5) 1959 CalPERS Survivor Benefit. The City provides the 1959 CalPERS Survivor Benefit at the Fourth Level Option (California Government Code Section 21574) for all covered employees. Employees shall pay their \$2.00 monthly contribution through payroll deduction. The City shall pay the employer portion subject to the following limit: in the event the employer portion exceeds \$6.00 monthly, employees shall pay any portion of the employer portion that exceeds \$6.00 monthly.

B. Money Purchase Retirement Plan. The City provides a Money Purchase Retirement Plan for employees covered by this resolution. The City shall contribute an amount equal to three percent (3%) of the employees' base salary as shown in Appendices A and B toward an IRS Section 401(a) account. In lieu of this City provided benefit, the employee may elect to have added to the employee's base salary an additional three percent (3%), however this three percent (3%) is not reported to CalPERS as pensionable compensation. This election can be made only upon initial employment and is irrevocable.

C. Retirement Health Savings Plan. Effective October 1, 2002, the City Council approved a Retirement Health Savings Plan for employees covered by this Resolution. Effective January 1, 2008, all Top Management employees are required to participate in the plan by making the following tax-deferred contributions to the plan:

- 1) The cash value of the employee's unused floating holiday hours at the end of each calendar year or upon separation from City service;
- 2) The cash value of the employee's unused administrative leave balance at the end of each calendar year or upon retirement from City service and entering CalPERS as a retired annuitant; and

- 3) The full cash value of the employee's unused sick leave payout upon retirement from City service (i.e., 50% of all unused sick leave hours for qualified employees) and entering CalPERS as a retired annuitant.

SECTION 25. OTHER FRINGE BENEFITS.

A. Medical Maintenance Examination Program. An annual medical examination shall be provided for all covered employees. The content and extent of the examination of each individual shall be determined by the physician in charge and shall be tailored to the individual's particular needs. Each employee may choose to have said examination performed by the physician of their choice or the City's designated medical provider. Employees in Appendices A and B will be reimbursed per fiscal year, upon submitting proof of such examination, the following amounts toward the cost of an annual physical examination:

Executive Management	\$850.00
Senior Management	\$550.00

Employees may receive up to \$495.00 per fiscal year (of the \$850.00 listed above for Executive Management) and \$395.00 per fiscal year (of the \$550.00 listed above for Senior Management) towards reimbursement for items 1, 2 and/or 3 below. Requests for the items below must be approved, prior to purchase or participation, by the Human Resources Director.

- 1) Membership in a health/fitness club.
- 2) Participation in a weight loss/stop smoking/wellness/fitness program.
- 3) Fitness equipment (home gym equipment).

The City will not reimburse employees for any of the above listed activities for family/dependent health related expenses.

B. Educational Assistance. The City will reimburse employees for the cost of tuition, textbooks, parking fees, and health fees required for approved community college and college courses, as well as job-required licensing, testing, renewal, and registration fees. An approved course is one designated to directly improve the knowledge of the employee relative to their specific job, and must be approved by the Department Head and the Human Resources Director prior to registration. Full reimbursement up to the amount specified below will be provided based upon completion of the approved course(s) with a final grade of C or better.

Educational assistance payments to an employee shall not exceed \$1,500.00 in any one fiscal year and the employee must still be employed by the City when the course is completed.

The City agrees to allow reimbursement to Executive Management up to \$1,000.00, and Senior Management up to \$800.00 of the \$1,500.00 allotted per fiscal year for activities which aid in their professional development. Reimbursable activities include the following:

- 1) Attendance at job-related professional conferences and seminars;
- 2) Payment of membership dues in community and professional organizations; and
- 3) Purchase of job-related professional journals, books, and other written materials which further their knowledge and improve their effectiveness in their duties.

Participation and/or purchase must be approved in advance by the Department Head and the Human Resources Director.

The above reimbursable activities are made to recognize and encourage staff to pursue educational and public relations oriented activities beyond those normally budgeted for them by their departments and in which they are directed to participate. Approved activities are those which may be expected to further their knowledge of their jobs and the Orange community and which contribute to their improved effectiveness.

Individual departments may continue to budget funds for staff attendance at professional conferences and seminars, for payment of professional membership dues, and for the purchase of books, journals, and related written materials which enhance the staff's knowledge.

- C. Uniforms. The City shall pay and report to CalPERS the following values for uniform expenses: \$800.00 per year for the Fire Chief, \$800.00 per year for the Police Chief, and \$400.00 per year for the Emergency Medical Services Manager. This form of pay, also referred to as "Uniform Allowance", shall be reported to CalPERS as special compensation, and is therefore compensation earnable for Classic Members pursuant to CalPERS Regulations, Section 571(a)(5). This uniform expenditure will not be reported to CalPERS as pensionable compensation for New Members hired on or after January 1, 2013, as defined by PEPRA.
- D. Rideshare Incentive Program. An employee may receive \$30.00 per month and eight (8) hours compensatory time every six (6) months for carpooling, using public transportation, biking, walking, or other approved modes of transportation to and from the work-site. To qualify for these incentives, an employee must use one of the above forms of transportation 70% of commuting time.
- E. Technology Stipend. In lieu of being provided a City-issued cell phone pursuant to Section 1.63 of the City's Administrative Policy Manual, designated employees shall receive \$50.00 per month as reimbursement for any and all cost related to the purchase and use of a cell phone for City-related business. For purposes of this section, designated employees are those that the Department Head have determined are required to carry cell phones so that they may be contacted when they are away from their office phone or computer.

SECTION 26. DIRECT DEPOSIT.

All employees hired after January 1, 2017 must participate in the City's direct paycheck deposit program.

SECTION 27. TRAVEL EXPENSE ALLOWED.

- A. Mileage Reimbursement. Expense claims for the use of private automobiles must be authorized by the Department Head, and submitted to the Accounts Payable Division of the Finance Department for reimbursement. Such use, where mileage is reimbursed, will be reimbursed at the rate per mile allowed under the current IRS regulations.
- B. Out-of-City Travel. If the estimated expense of contemplated travel outside of the City is too great to expect the employee to finance the trip and be reimbursed upon the employee's return,

the City Manager may authorize advance payment of the estimated amount of the travel expense to the employee.

- C. Economy class airfare will be considered standard for out-of-town travel.
- D. Use of personal cars for out-of-City trips, within the State, may be approved by the City Manager when use of commercial transportation is not available or practical. If an employee prefers to use a personal car, the employee may be reimbursed mileage expenses as long as the expenses do not exceed the amount of the cost of the commercial transportation.
- E. Transportation and Expense Charges. Expenses for air, rail, or public transportation will be allowed whenever such transportation is necessary for conduct of City business. In addition, the following expenses and charges will be allowed, whenever necessary, for the conduct of City business.
 - 1) Expenses will be allowed for adequate lodging. Hotel accommodations shall be appropriate to the purpose of the trip and must be approved by the Department Head.
 - 2) Telephone charges will be allowed for official calls.
 - 3) Expenses for meals will be reimbursed according to the City's Administrative Policy 4.13.

SECTION 28. GRIEVANCE PROCEDURE.

Any employee covered by this Resolution who wishes to file a grievance should follow the procedures outlined in the City's Employee Handbook.

SECTION 29. EFFECTIVE DATES.

This Resolution and exhibits hereto shall be effective as of July 1, 2020 and shall continue in full force and effect until June 30, 2021 unless otherwise amended.

APPENDIX A

EXECUTIVE MANAGEMENT
MONTHLY SALARY RANGES

EFFECTIVE JULY 7, 2019

3.0% Across the Board Salary Increase

CLASSIFICATION TITLE	RANGE	STEP A	STEP B	STEP C	STEP D	STEP E	STEP F
Administrative Services Director	710	12305	12934	13592	14286	15015	15780
Assistant City Manager	721	12999	13664	14359	15092	15862	16670
Chief Clerk	628	8175	8593	9029	9491	9975	10483
City Attorney	744	14579	15325	16104	16927	17790	18697
Community Development Director	698	11590	12183	12802	13456	14143	14864
Community Services Director	693	11305	11883	12487	13125	13794	14498
Finance Director	693	11305	11883	12487	13125	13794	14498
Fire Chief	737	14079	14799	15551	16346	17179	18055
Human Resources Director	693	11305	11883	12487	13125	13794	14498
Library Services Director	679	10543	11082	11645	12240	12864	13520
Police Chief	742	14435	15173	15944	16759	17613	18511
Public Works Director	710	12305	12934	13592	14286	15015	15780

EFFECTIVE AUGUST 30, 2020

2.0% Across the Board Salary Increase

CLASSIFICATION TITLE	RANGE	STEP A	STEP B	STEP C	STEP D	STEP E	STEP F
Administrative Services Director	714	12553	13195	13866	14574	15318	16098
Assistant City Manager	725	13261	13939	14648	15396	16181	17006
Chief Clerk	632	8340	8766	9211	9682	10176	10694
Community Development Director	702	11824	12429	13060	13728	14428	15163
Community Services Director	697	11533	12122	12739	13389	14072	14790
Finance Director	697	11533	12122	12739	13389	14072	14790
Fire Chief	741	14363	15097	15865	16675	17526	18419
Human Resources Director	697	11533	12122	12739	13389	14072	14790
Library Services Director	683	10755	11305	11880	12486	13123	13792
Police Chief	746	14726	15478	16265	17096	17968	18884
Public Works Director	714	12553	13195	13866	14574	15318	16098

**Classification of City Attorney was removed from table.*

APPENDIX B

SENIOR MANAGEMENT
MONTHLY SALARY RANGES

EFFECTIVE JULY 7, 2019

3.0% Across the Board Salary Increase

CLASSIFICATION TITLE	RANGE	STEP A	STEP B	STEP C	STEP D	STEP E	STEP F
Accounting Manager	608	7399	7778	8172	8590	9028	9488
Administrative Analyst I	538	5219	5485	5765	6059	6368	6692
Administrative Analyst II	558	5766	6060	6369	6694	7035	7394
Assistant City Attorney I	664	9782	10283	10806	11357	11937	12545
Assistant City Attorney II	674	10283	10809	11359	11938	12547	13187
Assistant Community Devel. Director	672	10181	10701	11245	11820	12423	13056
Assistant Community Services Director	659	9541	10030	10539	11077	11643	12236
Assistant Field Services Manager	639	8636	9078	9539	10026	10538	11075
Assistant Finance Director	659	9541	10030	10539	11077	11643	12236
Assistant Human Resources Director	659	9541	10030	10539	11077	11643	12236
Assistant Library Services Director	618	7778	8175	8590	9029	9490	9974
Assistant Public Works Director	684	10809	11361	11939	12549	13189	13861
Assistant to City Manager	595	6935	7289	7659	8050	8461	8892
Assistant Water Manager	639	8636	9078	9539	10026	10538	11075
Budget Officer	598	7039	7399	7775	8172	8589	9026
Budget Manager	608	7399	7778	8172	8590	9028	9488
Chief Building Official	659	9541	10030	10539	11077	11643	12236
Crime Analyst	556	5709	6000	6306	6628	6966	7321
Deputy City Clerk	560	5824	6121	6433	6761	7106	7468
Deputy City Manager	659	9541	10030	10539	11077	11643	12236
Deputy Public Works Director	674	10283	10809	11359	11938	12547	13187
Economic Development Manager	659	9541	10030	10539	11077	11643	12236
Economic Development Project Manager	608	7399	7778	8172	8590	9028	9488
Emergency Medical Services Manager	623	7974	8381	8807	9257	9730	10225
Employee Benefits Analyst	551	5569	5852	6151	6464	6794	7141
Equipment Maint. Superintendent	611	7510	7895	8296	8719	9164	9631
Executive Assistant	505	4427	4652	4890	5139	5401	5677
Field Services Manager	659	9541	10030	10539	11077	11643	12236
Finance Manager	590	6764	7109	7470	7852	8253	8673
Finance Supervisor	570	6121	6434	6762	7107	7469	7850
Financial Analyst	562	5882	6182	6498	6829	7177	7543
Housing Manager	608	7399	7778	8172	8590	9028	9488
Human Resources Analyst I	543	5351	5623	5910	6212	6528	6861
Human Resources Analyst II	570	6121	6434	6762	7107	7469	7850
Human Resources Manager	633	8381	8810	9258	9730	10227	10748

APPENDIX B (CONTINUED)

SENIOR MANAGEMENT
MONTHLY SALARY RANGES

CLASSIFICATION TITLE	RANGE	STEP A	STEP B	STEP C	STEP D	STEP E	STEP F
Information Technology Manager	659	9541	10030	10539	11077	11643	12236
Information Technology Project Manager	639	8636	9078	9539	10026	10538	11075
Intergovernmental & Comm Affairs Mgr	650	9123	9590	10077	10591	11132	11699
Internal Audit Manager	608	7399	7778	8172	8590	9028	9488
Investment/Revenue Officer	578	6371	6696	7037	7396	7773	8170
Manager of Trans Svcs/City Traffic Eng	659	9541	10030	10539	11077	11643	12236
Network/Security Analyst	589	6730	7074	7433	7813	8212	8630
Parks and Facilities Manager	639	8636	9078	9539	10026	10538	11075
Payroll Manager	598	7039	7399	7775	8172	8589	9026
Planning Manager	659	9541	10030	10539	11077	11643	12236
Principal Civil Engineer	639	8636	9078	9539	10026	10538	11075
Principal Planner	628	8175	8593	9029	9491	9975	10483
Public Affairs & Information Manager	608	7399	7778	8172	8590	9028	9488
Public Works Administrative Manager	608	7399	7778	8172	8590	9028	9488
Purchasing Officer	590	6764	7109	7470	7852	8253	8673
Recreation Services Manager	629	8216	8636	9074	9538	10025	10535
Risk Management Analyst	541	5297	5568	5851	6150	6463	6793
Risk Manager	643	8810	9261	9731	10228	10750	11298
Senior Administrative Analyst	588	6696	7039	7397	7774	8171	8588
Senior Assistant City Attorney	694	11362	11942	12550	13191	13863	14570
Senior Econ Development Project Mgr	634	8423	8854	9304	9779	10278	10802
Senior Executive Assistant	541	5297	5568	5851	6150	6463	6793
Senior Housing Manager	634	8423	8854	9304	9779	10278	10802
Senior Human Resources Analyst	600	7110	7473	7853	8254	8675	9116
Senior Library Manager	598	7039	7399	7775	8172	8589	9026
Systems Analyst	589	6730	7074	7433	7813	8212	8630
Water Manager	659	9541	10030	10539	11077	11643	12236

APPENDIX B (CONTINUED)

SENIOR MANAGEMENT
MONTHLY SALARY RANGES

EFFECTIVE AUGUST 30, 2020

2.0% Across the Board Salary Increase

CLASSIFICATION TITLE	RANGE	STEP A	STEP B	STEP C	STEP D	STEP E	STEP F
Accounting Manager	612	7548	7934	8337	8763	9210	9679
Administrative Analyst I	542	5324	5595	5881	6181	6496	6827
Administrative Analyst II	562	5882	6182	6498	6829	7177	7543
Assistant City Attorney I	668	9980	10490	11023	11586	12178	12798
Assistant City Attorney II	678	10490	11026	11587	12179	12800	13453
Assistant Community Devel. Director	676	10386	10917	11472	12058	12673	13319
Assistant Community Services Director	663	9734	10232	10752	11300	11878	12482
Assistant Field Services Manager	643	8810	9261	9731	10228	10750	11298
Assistant Finance Director	663	9734	10232	10752	11300	11878	12482
Assistant Human Resources Director	663	9734	10232	10752	11300	11878	12482
Assistant Library Services Director	622	7934	8340	8763	9211	9681	10174
Assistant Public Works Director	688	11027	11590	12180	12802	13455	14140
Assistant to City Manager	599	7074	7436	7814	8213	8632	9071
Assistant Water Manager	643	8810	9261	9731	10228	10750	11298
Budget Officer	602	7181	7548	7931	8336	8762	9208
Budget Manager	612	7548	7934	8337	8763	9210	9679
Chief Building Official	663	9734	10232	10752	11300	11878	12482
Crime Analyst	560	5824	6121	6433	6761	7106	7468
Deputy City Clerk	564	5941	6244	6563	6897	7249	7619
Deputy City Manager	663	9734	10232	10752	11300	11878	12482
Deputy Public Works Director	678	10490	11026	11587	12179	12800	13453
Economic Development Manager	663	9734	10232	10752	11300	11878	12482
Economic Development Project Manager	612	7548	7934	8337	8763	9210	9679
Emergency Medical Services Manager	627	8134	8550	8985	9443	9926	10431
Employee Benefits Analyst	555	5680	5970	6274	6595	6930	7284
Equipment Maint. Superintendent	615	7662	8054	8463	8895	9349	9825
Executive Assistant	509	4516	4746	4988	5243	5510	5791
Field Services Manager	663	9734	10232	10752	11300	11878	12482
Finance Manager	594	6900	7253	7621	8010	8419	8848
Finance Supervisor	574	6245	6563	6898	7250	7620	8008
Financial Analyst	566	6001	6307	6629	6966	7322	7695
Housing Manager	612	7548	7934	8337	8763	9210	9679
Human Resources Analyst I	547	5458	5737	6029	6337	6660	7000
Human Resources Analyst II	574	6245	6563	6898	7250	7620	8008
Human Resources Manager	637	8550	8988	9444	9926	10433	10965

APPENDIX B (CONTINUED)

SENIOR MANAGEMENT
MONTHLY SALARY RANGES

CLASSIFICATION TITLE	RANGE	STEP A	STEP B	STEP C	STEP D	STEP E	STEP F
Information Technology Manager	663	9734	10232	10752	11300	11878	12482
Information Technology Project Manager	643	8810	9261	9731	10228	10750	11298
Intergovernmental & Comm Affairs Mgr	654	9307	9783	10280	10805	11357	11934
Internal Audit Manager	612	7548	7934	8337	8763	9210	9679
Investment/Revenue Officer	582	6499	6831	7179	7545	7930	8335
Manager of Trans Svcs/City Traffic Eng	663	9734	10232	10752	11300	11878	12482
Network/Security Analyst	593	6865	7217	7583	7971	8378	8804
Parks and Facilities Manager	643	8810	9261	9731	10228	10750	11298
Payroll Manager	602	7181	7548	7931	8336	8762	9208
Planning Manager	663	9734	10232	10752	11300	11878	12482
Principal Civil Engineer	643	8810	9261	9731	10228	10750	11298
Principal Planner	632	8340	8766	9211	9682	10176	10694
Public Affairs & Information Manager	612	7548	7934	8337	8763	9210	9679
Public Works Administrative Manager	612	7548	7934	8337	8763	9210	9679
Purchasing Officer	594	6900	7253	7621	8010	8419	8848
Recreation Services Manager	633	8381	8810	9258	9730	10227	10748
Risk Management Analyst	545	5404	5680	5969	6274	6594	6930
Risk Manager	647	8987	9447	9927	10434	10967	11525
Senior Administrative Analyst	592	6831	7181	7545	7931	8336	8760
Senior Assistant City Attorney	698	11590	12183	12802	13456	14143	14864
Senior Econ Development Project Mgr	638	8593	9033	9491	9976	10485	11020
Senior Executive Assistant	545	5404	5680	5969	6274	6594	6930
Senior Housing Manager	638	8593	9033	9491	9976	10485	11020
Senior Human Resources Analyst	604	7253	7624	8011	8420	8850	9300
Senior Library Manager	602	7181	7548	7931	8336	8762	9208
Systems Analyst	593	6865	7217	7583	7971	8378	8804
Water Manager	663	9734	10232	10752	11300	11878	12482



Agenda Item

City Council

Item #: 8.1.

9/8/2020

File #: 20-080

TO: Honorable Mayor and Members of the City Council

FROM: Rick Otto, City Manager

1. SUBJECT

Review of the Orange Plaza Paseo (Closure of the 100 blocks of north and south Glassell).

2. SUMMARY

On July 1, 2020, the Governor issued an executive order that prohibited restaurants from operating indoor dining spaces. In response, at their Special Meeting of July 2, 2020, the City Council directed the closure of the 100 blocks of north and south Glassell so that the restaurants in the Plaza area could provide outdoor dining to their customers. With the continuation of the executive order, the City Council approved an extension of the Paseo through September 13th at the July 28th City Council meeting.

3. RECOMMENDED ACTION

1. Continue the closure of the 100 blocks of north and south Glassell to at least Sunday, November 15, 2020.
2. Agendize a review of the closure at the November 10, 2020, Regular City Council meeting.

4. FISCAL IMPACT

The fiscal impact to the City of implementing and operating the closure is minimal. However, the positive fiscal impact to the restaurants in the Plaza area has been significant.

5. STRATEGIC PLAN GOALS

- Goal 1: Be a fiscally healthy community
- d. Effectively manage and develop City assets

6. DISCUSSION AND BACKGROUND

On July 1, 2020, the Governor issued an executive order that prohibited restaurants from operating indoor dining spaces due to the number of COVID-19 positive cases in California. In response, at their Special Meeting of July 2, 2020, the City Council directed the closure of the 100 blocks of north and south Glassell so that restaurants in the Plaza area could provide outdoor dining to their customers.

In coordinating the closure, City staff worked closely with the Plaza area restaurants and merchants as well as the Chamber of Commerce, the Orange County Health Department, and the State Department of the Alcohol Beverage Control. The restaurants and merchants were assigned areas on Glassell in front of their businesses in which they could place tables and chairs or merchandise. A

fire lane was delineated, and signage was installed promoting the closure as well as advising patrons of operating rules (social distancing, no outside alcohol, alcohol in designated areas, etc). In addition, restaurants and retail businesses along the 100 and 200 blocks of east and west Chapman were offered the parking spaces in front of their businesses for dining and shopping opportunities. Participating merchants were issued a temporary outdoor dining/retail permit. The closure started on Wednesday, July 8th and it was implemented at a minimal cost to the City.

Dubbed the Orange Plaza Paseo, the closure continues to be very successful. Restaurants and many merchants have reported an increase in sales since the launch of the Paseo. The City has received numerous compliments from residents, visitors, and other public agencies, significant positive media coverage, and very few complaints regarding the closure. While the majority of restaurants and merchants have expressed their appreciation and continued support for the closure, two merchants on Glassell have notified the City that the closure has negatively impacted their sales and have requested the re-opening of Glassell.

The success of the Paseo has been a partnership between the City and the downtown businesses. The City continues to actively ensure the Paseo is kept clean and safe, while the businesses have been excellent in managing their operations within the closure. We remain in close contact with the businesses to quickly address any issues as well as look for ways to improve the patron experience with open communication and being flexible with conditions that promote all businesses in the downtown area.

On August 28th, the Governor revealed the State's Blueprint for a Safer Economy which delegates each county into a tiered system. Presently Orange County is expected to advance to the Red Tier (we're currently in Purple, the most restrictive) which allows for some indoor business operations. While Orange County will soon resume indoor dining, it is anticipated that limitations on capacity will continue to remain in place through the end of 2020. With that and the overwhelmingly positive response, staff is recommending the extension of the Paseo through at least November 15th. City Council may also consider extending the Paseo through December 31st however, the City will need to examine the addition of safety enhancements, such as lighting, due to the end of daylight saving on November 1st. If City Council elects to extend the Paseo through November 15th, staff will return to City Council at the November 10th regular City Council meeting with another update.

7. ATTACHMENTS

- None



Agenda Item

City Council

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7. ATTACHMENTS

- None



Agenda Item

City Council

Item #: 9.1.

9/8/2020

File #: 20-126

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Gary A. Sheatz, City Attorney

1. SUBJECT

Introduction and first reading of an Ordinance of the City Council of the City of Orange Amending Title 2, Chapter 2.08 of the Orange Municipal Code Relating to City Council Compensation. Ordinance No. 14-20. (Continued from June 9, 2020)

2. SUMMARY

The subject ordinance updates Title 2 of the Orange Municipal Code. If adopted the ordinance provides for City Council member salary compensation of \$600 per month, as determined by state law.

3. RECOMMENDED ACTION

Introduce and approve Ordinance No. 14-20 for First Reading.

4. FISCAL IMPACT

The total expenditure for Ordinance No. 14-20 is \$50,400 the first year, potentially increasing by 5% per year thereafter, if amended by ordinance, and will be funded through General Fund (100).

5. STRATEGIC PLAN GOALS

This action does not correlate to any of the adopted strategic plan goals; however, updates or amendments to the Orange Municipal Code reflecting current or future policies or practices are often required.

6. DISCUSSION AND BACKGROUND

In November, 2011, the City Council eliminated salary, health and retirement benefits for the Mayor and City Council members. Most citizens are likely unaware that their elected officials serve without any form of compensation whatsoever. In Orange County, only elected officials in the cities of Orange, Tustin and Villa Park serve without compensation.

As part of the transition from an at-large electoral system to a by-district electoral system, questions arose regarding City Council compensation. When citizens were informed that no compensation was provided to the Mayor or City Council members, several members of the public indicated that, given the time commitment required of a Council representative, the lack of compensation could be a significant financial barrier to serving as an elected official.

Ordinance No. 14-20 was originally introduced on June 9, 2020, to re-establish City Council monthly compensation. The City Council deliberated extensively on the item, however, unanimously voted to continue consideration of the matter to the September City Council meeting.

This ordinance is re-introduced, as directed by City Council, and has not been substantively changed since it was originally presented for consideration in June.

The proposed ordinance amendment is summarized as follows:

Delete Orange Municipal Code Chapter 2.08. in its entirety and adopt new Chapter 2.08.

The proposed ordinance would re-establish salary compensation for the Mayor and City Council members. City Council salary compensation is determined by the Government Code. In cities with a population between 75,000 and 150,000, like Orange, salary is set by statute at \$600 per month. This amount may increase by 5% each year, however, an ordinance amendment reflecting the new salary amount must be adopted by City Council. If approved, salary compensation would be offered to the Mayor and City Council members following the November 3, 2020 general municipal election. It should be noted that a council member may waive any or all compensation permitted or allowed by this ordinance.

At this time no other compensation is proposed. However, in surveying other cities in Orange County, most provide health benefits to the City Council equal to those received by top management employees in the city. In addition, many cities provide a car allowance in recognition of the amount of local travel the City Council position requires.

Pursuant to Government Code Section 36936, the adoption of this ordinance requires a majority vote of the total membership of the City Council.

7. ATTACHMENTS

- Ordinance No. 14-20



Agenda Item

City Council

Item #: 9.1.

9/8/2020

File #: 20-126

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THRU: Rick Otto, City Manager

FROM: Gary A. Sheatz, City Attorney

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Pursuant to Government Code Section 36936, the adoption of this ordinance requires a majority vote of the total membership of the City Council.

7. ATTACHMENTS

- Ordinance No. 14-20

ORDINANCE NO. 14-20

**AN ORDINANCE OF THE CITY COUNCIL OF
THE CITY OF ORANGE AMENDING TITLE 2,
CHAPTER 2.08 OF THE ORANGE MUNICIPAL
CODE RELATING TO CITY COUNCIL
COMPENSATION.**

WHEREAS, in November, 2011, the City Council adopted an ordinance eliminating all salary, health and retirement benefits for the Mayor and City Council members, which applied prospectively, to all future Mayors and City Council members; and

WHEREAS, at the general municipal election in November 2020, the City of Orange will be transitioning from an at-large electoral system to a by-district electoral system; and

WHEREAS, during the process for the formation of the by-district electoral system members of the public inquired about the compensation offered City Council members; and

WHEREAS, the lack of salary or compensation offered to City Council members often dissuades interest or ability for citizens to serve as elected officials; and

WHEREAS, Government Code Section 36516 provides that a city council may enact an ordinance providing that each member of the city council receive a salary based on the population of the city; and

WHEREAS, in cities like Orange, with a population between 75,000 and 150,000, the salary is set by statute at \$600 per month; and

WHEREAS, in accordance with state law, the salary benefits apply to each member of city council who begins a new term of office after the effective date of the ordinance; and

WHEREAS, a city council member may waive any or all of the compensation permitted by this ordinance.

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF ORANGE DOES
HEREBY ORDAIN AS FOLLOWS:**

SECTION I:

The Ordinance is not a project under the California Environmental Quality Act (CEQA) per State CEQA Guidelines Section 15378, because it involves general City policy and procedure making actions.

SECTION II:

Title 2, Chapter 2.08 of the Orange Municipal Code, “City Council, Mayor and Redevelopment Agency Compensation”, is hereby deleted in its entirety and replaced with Chapter 2.08, “City Council Compensation”, which shall read as follows:

Chapter 2.08 – City Council Compensation.

2.08.010 - Authority.

The authority for the City Council to receive salary benefits is set forth in Government Code Section 36516.

2.08.020 – Compensation.

Pursuant to California Government Code Section 36516 (a) (2) (D), the compensation for City Council members shall be \$600.00 per month. Such compensation shall be payable at the same time salaries are paid to other officers and employees of the city.

2.08.030 – Prospective Application.

Notwithstanding the provisions contained in California Government Code Section 36516.5, salary benefits shall apply to a member of the City Council who begins a new term in office as a member of the City Council after the adoption of this ordinance.

SECTION III:

Prospective Application. The revisions contained in this ordinance shall be applied prospectively, following the November 3, 2020, general municipal election.

SECTION IV:

To the extent required to implement the provisions of this Ordinance, City staff is directed to modify any Administrative Policies in conflict herewith and return to the City Council for any City Council approvals deemed necessary.

SECTION V:

If any section, subdivision, paragraph, sentence, clause or phrase of this Ordinance is for any reason held to be invalid or unconstitutional, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council hereby declares that it would have passed this Ordinance, and each section, subdivision, paragraph, sentence, clause and phrase thereof, irrespective of the fact that any one (or more) section, subdivision, paragraph, sentence, clause or phrase had been declared invalid or unconstitutional.

SECTION VI:

The City Clerk is hereby directed to certify the adoption of this Ordinance and cause a summary of the same to be published as required by law. This Ordinance shall take effect thirty (30) days from the date of adoption.

ADOPTED this _____ day of _____, 2020.

Mark A. Murphy, Mayor, City of Orange

ATTEST:

Pamela Coleman, City Clerk, City of Orange

STATE OF CALIFORNIA)
COUNTY OF ORANGE)
CITY OF ORANGE)

I, PAMELA COLEMAN, City Clerk of the City of Orange, California, do hereby certify that the foregoing Ordinance was introduced at the regular meeting of the City Council held on the ___ day of _____, 2020, and thereafter at the regular meeting of said City Council duly held on the ___ day of _____, 2020 was duly passed and adopted by the following vote, to wit:

AYES: COUNCILMEMBERS:
NOES: COUNCILMEMBERS:
ABSENT: COUNCILMEMBERS:
ABSTAIN: COUNCILMEMBERS:

Pamela Coleman, City Clerk, City of Orange



Agenda Item

City Council

Item #: 11.1.

9/8/2020

File #: 20-073

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: William Crouch, Community Development Director

1. SUBJECT

Public Hearing to consider Fire Station No. 1 and Headquarters; Mitigated Negative Declaration No. 1862-18, Zone Change No. 1301-20, Design Review No. 5008-20, and Tentative Parcel Map No. 0016-20

2. SUMMARY

The City of Orange is proposing to build a new 16,574 square foot Fire Station No. 1 building and attached 11,353 square foot Fire Headquarters office at 105 S. Water Street, an associated parking lot across the street at 180 S. Water Street, and to utilize an existing 3,780 on-site building, currently used by the Water Division for reserve apparatus. The project site is zoned as Office Professional (O-P) and Single Family Residential (R-1-6). The project proposes a zone change of the Fire Station No. 1 and Headquarters site to Public Institution (P-I) to better reflect the existing nature of the land uses in the neighborhood, and to ensure the proposed project is consistent with the General Plan. A parcel map is proposed to consolidate underlying parcels.

3. RECOMMENDED ACTION

1. Approve Resolution No. 11264. A resolution of the City Council of the City of Orange adopting mitigated negative declaration No. 1862-18 for the Fire Station No. 1 and Headquarters project;
2. Introduce and approve Ordinance No. 16-20 for First Reading. An ordinance of the City Council of the City of Orange approving zone change No. 1301-20 to change the zoning of property located at 105 and 125 S. Water Street from Office Professional (O-P) and Single Family Residential, 6,000 Sq. Ft. (R-1-6) to public institution (P-1) to better reflect the existing nature of the land uses in the neighborhood and to ensure that the Fire Station No. 1 project is consistent with the General Plan, and;
3. Approve Resolution No. 11267. A resolution of the City Council of the City of Orange approving Design Review No. 5008-20 and Tentative Parcel Map No. 0016-20 for the construction of Fire Station No. 1 and Headquarters located at 105 S. Water Street and the associated parking lot located at 180 S. Water Street.

4. FISCAL IMPACT

The total expenditure for this project is \$31.0 million and will be funded in Fire Station No. 1 (20400) through Reimbursable Capital Projects (550).

5. STRATEGIC PLAN GOALS

Goal 1: Provide for a safe community

a: Provide staffing and resources to deliver services that ensure public safety.

Goal 1: Provide for a safe community

b: Provide and maintain infrastructure necessary to ensure the safety of the public.

6. DISCUSSION AND BACKGROUND

The City intends to replace existing Fire Station No. 1 and Headquarters, located at 176 S. Grand Street, by the construction of a new facility at 105 S. Water Street with a support parking lot at 180 S. Water Street.

Fire Station No. 1 will be approximately 16,574 square feet, plus an attached two-story Headquarters which will include approximately 11,353 square feet of space (27,927 square feet total). The two-story Headquarters building would be 30 feet eight inches in height, with its exhaust tower structure reaching a height of 33 feet three inches. The apparatus room for Fire Station No. 1 would be 24 feet in height. Interior rooms/components of Fire Station No. 1 and Headquarters are as stated in the attached Planning Commission Staff Report and as detailed on the project plans.

The architecture of the Orange Fire Station No. 1 and Headquarters has been designed to reflect the Spanish Revival style found throughout the Old Towne Orange Historic District. The site perimeter will be landscaped with 44 trees and a variety of shrubs at appropriately regularly-spaced intervals. Additional discussion of architecture and landscaping is contained in the attached Design Review Staff Report.

A total of 80 parking spaces will be provided. Parking consists of 21 staff and five visitor spaces on the Fire Station No. 1 and Headquarters site and 54 staff parking spaces on the parcel located across Water Street to the west behind an automated security gate.

The existing storage building located on the site will be retrofitted and refurbished and will provide approximately 3,780 square feet of space to serve as Reserve Apparatus vehicle and disaster equipment storage.

The floor area ratio (FAR) of the fire station and headquarters site, combined with the existing contiguous water yard facilities is 0.38, which is within the 0.5 FAR limit of the Public Facilities and Institutions General Plan Land Use Designation.

Both the main project site and the parking site will have associated exterior surface lighting in the form of light poles and wall mounted fixtures and 6-foot high perimeter fencing, constructed of masonry and steel tubes.

The wall on the east side of the proposed staff parking lot that is located on the southeast corner of the Fire Station site will be a 7.7-foot high concrete masonry unit wall. This will also function as a sound wall and any doors installed in the wall will be solid doors with self-closing hinges. Additionally, as a measure of sound proofing, a sound enclosure will be installed on the proposed emergency generator that is depicted in Figure 3 of the MND.

The proposed project will also include necessary utility upgrades including, but not limited to, sewer, stormwater, dry utilities and solid waste management.

A request for City Council authorization to advertise Fire Station No. 1 for construction bidding is on the September 08, 2020 City Council Agenda subsequent to this item. The Department of Public Works seeks to advertise a request for construction bids on September 10, 2020 with bids tentatively due on October 08, 2020. At the November 10, 2020 City Council meeting staff will present a summary of bids received and request authorization to award a contract. Construction is expected to begin January 2021 for a duration of 18 months, concluding in July 2022 when the Fire Station will be operational. A ground breaking ceremony will occur in late October 2020, which will consist of site clearing and partial demolition of the perimeter site wall granting construction access to the site.

Zone Change

The General Plan Land Use Element designation for this site is Public Facilities and Institutions (PFI). The project site is currently zoned as Office Professional (O-P) and Single Family Residential (R-1-6). The Project proposes a zone change of the Fire Station and Headquarters site to Public Institution (P-I) to better reflect the existing nature of the land uses in the neighborhood and to ensure that the proposed project is consistent with the General Plan PFI Land Use Designation in accordance with State Law. The Zone Change is shown in Attachments 3 and 4.

Tentative Parcel Map

There are multiple parcels that exist on the site and a Tentative Parcel Map is proposed to merge all the parcels into a single parcel. A Tentative Parcel Map has not been created at this time per the specifications of the Subdivision Map Act. A Tentative Parcel Map, to be approved by the Community Development Director, will be completed and recorded as a final map with the County prior to a building permit for the project. The map shown in Attachment 2 represents the parcels requiring consolidation under the future parcel map.

7. ATTACHMENTS

- City Council Resolution No. 11264 for Mitigated Negative Declaration No. 1862-18
- City Council Ordinance No. 16-20 for Zone Change No. 1301-20, Including Attached Existing and Proposed Zoning Exhibits
- Existing Zoning, Exhibit A to City Council Ordinance No. 16-20
- Proposed Zoning, Exhibit B to City Council Ordinance No. 16-20
- City Council Resolution No. 11277 for Design Review No. 5008-20 and Tentative Parcel Map No. 0016-20
- Vicinity Map
- Project Plans
- MND No. 1862-18, Including Response to Public Comments
- Appendix A of MND No. 1862-18, Air Quality, Energy, and Greenhouse Gas Emission Impact Analysis
- Appendix B of MND No. 1862-18, Geotechnical Investigation
- Appendix C of MND No. 1862-18, Priority Water Quality Management Plan

- Appendix D of MND No. 1862-18, Noise Impact Analysis
- Design Review Staff Report Dated April 15, 2020
- Community Development Director Design Review Recommendation Letter Dated April 22, 2020
- Planning Commission Staff Report Dated August 24, 2020
- Draft Planning Commission Meeting Minutes Dated August 24, 2020
- Planning Commission Resolution No. 20-20



Agenda Item

City Council

Item #: 11.1.

9/8/2020

File #: 20-073

TO: Honorable Mayor and Members of the City Council
THRU: Rick Otto, City Manager
FROM: William Crouch, Community Development Director

1. SUBJECT

Public Hearing to consider Fire Station No. 1 and Headquarters; Mitigated Negative Declaration No. 1862-18, Zone Change No. 1301-20, Design Review No. 5008-20, and Tentative Parcel Map No. 0016-20

2. SUMMARY

The City of Orange is proposing to build a new 16,574 square foot Fire Station No. 1 building and attached 11,353 square foot Fire Headquarters office at 105 S. Water Street, an associated parking lot across the street at 180 S. Water Street, and to utilize an existing 3,780 on-site building, currently used by the Water Division for reserve apparatus. The project site is zoned as Office Professional (O-P) and Single Family Residential (R-1-6). The project proposes a zone change of the Fire Station No. 1 and Headquarters site to Public Institution (P-I) to better reflect the existing nature of the land uses in the neighborhood, and to ensure the proposed project is consistent with the General Plan. A parcel map is proposed to consolidate underlying parcels.

3. RECOMMENDED ACTION

1. Approve Resolution No. 11264. A resolution of the City Council of the City of Orange adopting mitigated negative declaration No. 1862-18 for the Fire Station No. 1 and Headquarters project;
2. Introduce and approve Ordinance No. 16-20 for First Reading. An ordinance of the City Council of the City of Orange approving zone change No. 1301-20 to change the zoning of property located at 105 and 125 S. Water Street from Office Professional (O-P) and Single Family Residential, 6,000 Sq. Ft. (R-1-6) to public institution (P-1) to better reflect the existing nature of the land uses in the neighborhood and to ensure that the Fire Station No. 1 project is consistent with the General Plan, and;
3. Approve Resolution No. 11267. A resolution of the City Council of the City of Orange approving Design Review No. 5008-20 and Tentative Parcel Map No. 0016-20 for the construction of Fire Station No. 1 and Headquarters located at 105 S. Water Street and the associated parking lot located at 180 S. Water Street.

4. FISCAL IMPACT

The total expenditure for this project is \$31.0 million and will be funded in Fire Station No. 1 (20400) through Reimbursable Capital Projects (550).

5. STRATEGIC PLAN GOALS

Goal 1: Provide for a safe community

a: Provide staffing and resources to deliver services that ensure public safety.

Goal 1: Provide for a safe community

b: Provide and maintain infrastructure necessary to ensure the safety of the public.

6. DISCUSSION AND BACKGROUND

The City intends to replace existing Fire Station No. 1 and Headquarters, located at 176 S. Grand Street, by the construction of a new facility at 105 S. Water Street with a support parking lot at 180 S. Water Street.

Fire Station No. 1 will be approximately 16,574 square feet, plus an attached two-story Headquarters which will include approximately 11,353 square feet of space (27,927 square feet total). The two-story Headquarters building would be 30 feet eight inches in height, with its exhaust tower structure reaching a height of 33 feet three inches. The apparatus room for Fire Station No. 1 would be 24 feet in height. Interior rooms/components of Fire Station No. 1 and Headquarters are as stated in the attached Planning Commission Staff Report and as detailed on the project plans.

The architecture of the Orange Fire Station No. 1 and Headquarters has been designed to reflect the Spanish Revival style found throughout the Old Towne Orange Historic District. The site perimeter will be landscaped with 44 trees and a variety of shrubs at appropriately regularly-spaced intervals. Additional discussion of architecture and landscaping is contained in the attached Design Review Staff Report.

A total of 80 parking spaces will be provided. Parking consists of 21 staff and five visitor spaces on the Fire Station No. 1 and Headquarters site and 54 staff parking spaces on the parcel located across Water Street to the west behind an automated security gate.

The existing storage building located on the site will be retrofitted and refurbished and will provide approximately 3,780 square feet of space to serve as Reserve Apparatus vehicle and disaster equipment storage.

The floor area ratio (FAR) of the fire station and headquarters site, combined with the existing contiguous water yard facilities is 0.38, which is within the 0.5 FAR limit of the Public Facilities and Institutions General Plan Land Use Designation.

Both the main project site and the parking site will have associated exterior surface lighting in the form of light poles and wall mounted fixtures and 6-foot high perimeter fencing, constructed of masonry and steel tubes.

The wall on the east side of the proposed staff parking lot that is located on the southeast corner of the Fire Station site will be a 7.7-foot high concrete masonry unit wall. This will also function as a sound wall and any doors installed in the wall will be solid doors with self-closing hinges. Additionally, as a measure of sound proofing, a sound enclosure will be installed on the proposed emergency generator that is depicted in Figure 3 of the MND.

The proposed project will also include necessary utility upgrades including, but not limited to, sewer, stormwater, dry utilities and solid waste management.

A request for City Council authorization to advertise Fire Station No. 1 for construction bidding is on the September 08, 2020 City Council Agenda subsequent to this item. The Department of Public Works seeks to advertise a request for construction bids on September 10, 2020 with bids tentatively due on October 08, 2020. At the November 10, 2020 City Council meeting staff will present a summary of bids received and request authorization to award a contract. Construction is expected to begin January 2021 for a duration of 18 months, concluding in July 2022 when the Fire Station will be operational. A ground breaking ceremony will occur in late October 2020, which will consist of site clearing and partial demolition of the perimeter site wall granting construction access to the site.

Zone Change

The General Plan Land Use Element designation for this site is Public Facilities and Institutions (PFI). The project site is currently zoned as Office Professional (O-P) and Single Family Residential (R-1-6). The Project proposes a zone change of the Fire Station and Headquarters site to Public Institution (P-I) to better reflect the existing nature of the land uses in the neighborhood and to ensure that the proposed project is consistent with the General Plan PFI Land Use Designation in accordance with State Law. The Zone Change is shown in Attachments 3 and 4.

Tentative Parcel Map

There are multiple parcels that exist on the site and a Tentative Parcel Map is proposed to merge all the parcels into a single parcel. A Tentative Parcel Map has not been created at this time per the specifications of the Subdivision Map Act. A Tentative Parcel Map, to be approved by the Community Development Director, will be completed and recorded as a final map with the County prior to a building permit for the project. The map shown in Attachment 2 represents the parcels requiring consolidation under the future parcel map.

7. ATTACHMENTS

- City Council Resolution No. 11264 for Mitigated Negative Declaration No. 1862-18
- City Council Ordinance No. 16-20 for Zone Change No. 1301-20, Including Attached Existing and Proposed Zoning Exhibits
- Existing Zoning, Exhibit A to City Council Ordinance No. 16-20
- Proposed Zoning, Exhibit B to City Council Ordinance No. 16-20
- City Council Resolution No. 11277 for Design Review No. 5008-20 and Tentative Parcel Map No. 0016-20
- Vicinity Map
- Project Plans
- MND No. 1862-18, Including Response to Public Comments
- Appendix A of MND No. 1862-18, Air Quality, Energy, and Greenhouse Gas Emission Impact Analysis
- Appendix B of MND No. 1862-18, Geotechnical Investigation
- Appendix C of MND No. 1862-18, Priority Water Quality Management Plan

- Appendix D of MND No. 1862-18, Noise Impact Analysis
- Design Review Staff Report Dated April 15, 2020
- Community Development Director Design Review Recommendation Letter Dated April 22, 2020
- Planning Commission Staff Report Dated August 24, 2020
- Draft Planning Commission Meeting Minutes Dated August 24, 2020
- Planning Commission Resolution No. 20-20

RESOLUTION NO. 11264

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ORANGE APPROVING AND ADOPTING MITIGATED NEGATIVE DECLARATION NO. 1862-18, ASSOCIATED MITIGATION MONITORING AND REPORTING PROGRAM, AND RESPONSE TO PUBLIC COMMENTS FOR THE FIRE STATION NO. 1 AND HEADQUARTERS PROJECT LOCATED AT 105 S. WATER STREET AND THE ASSOCIATED PARKING LOT LOCATED AT 180 S. WATER STREET

APPLICANT: CITY OF ORANGE

WHEREAS, the City of Orange (the City) is a municipal corporation organized and existing under the laws of the State of California for the purpose of exercising governmental functions and powers; and

WHEREAS, Mitigated Negative Declaration No. 1862-18 was initiated and reviewed by the City of Orange and processed in the time and manner prescribed by state and local law; and

WHEREAS, Mitigated Negative Declaration No. 1862-18 was prepared to evaluate the physical environmental impacts of the project, in conformance with the provisions of the California Environmental Quality Act (CEQA) per State CEQA Guidelines Section 15070 and in conformance with the Local CEQA Guidelines. The Mitigated Negative Declaration finds that the project will have less than significant impacts to the environment, with the implementation of conditions and mitigation measures; and

WHEREAS, Community Development and Public Works Department Staff determined that the plans, technical studies, and content of the Mitigated Negative Declaration were satisfactory, and recommended Planning Commission approval on August 24, 2020, subject to the mitigation measures included in the Mitigated Negative Declaration; and

WHEREAS, the Planning Commission reviewed Mitigated Negative Declaration No. 1862-18 at its August 24, 2020 meeting, and recommended its approval and adoption subject to the mitigation measures included in the Mitigated Negative Declaration; and

WHEREAS, the City Council conducted a public hearing for purposes of considering Mitigated Negative Declaration No. 1862-18, and related Mitigation Monitoring and Reporting Program, and Response to Comments on September 8, 2020, in conjunction with Zone Change No. 1301-20, Design Review 5008-20, and Tentative Parcel Map No. 0016-20 for the purpose of constructing of Fire Station No. 1 and Headquarters at 105 S. Water Street including the associated parking lot at 180 S. Water Street on property described as follows:

105 SOUTH WATER STREET- LOTS 1 THROUGH 8, IN BLOCK B, OF THE JAMESON TRACT IN THE CITY OF ORANGE, COUNTY OF ORANGE AS RECORDED IN BOOK 13, PAGE 44 IN THE OFFICE OF THE RECORDER OF LOS ANGELES COUNTY, CALIFORNIA)

180 SOUTH WATER STREET- CHAPMAN TR LOT 2 BLK D PORS OF LOT TR 175 – APN No. 390-452-05

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Orange, on the basis of the facts set forth in the agenda report presented to it and testimony received at the meeting at which this matter was considered, as follows:

1. The City Council finds and determines that the foregoing recitals are true and correct.
2. Based upon its review of the comments received during the public review process and considering the testimony, documents, or other materials which constitute the record of proceedings upon which its decision was based, the City Council finds and determines that:
 - a. The Mitigated Negative Declaration was presented to this City Council and the members of the City Council have reviewed and considered the information contained therein prior to taking any action to approve the Project and any other actions, proceedings and matters related thereto;
 - b. There is no substantial evidence that the Project will have a significant effect on the environment, except as identified and considered in the Mitigated Negative Declaration, and the Mitigated Negative Declaration reflects the City's independent judgment and analysis;
 - c. Changes or alterations have been required in, or incorporated into, the Project which mitigate or avoid the significant environmental effects thereof, as identified in the MND;
 - d. It is neither necessary nor required that an environmental impact report be prepared for the Project described in the Mitigated Negative Declaration; and
 - e. The documents and other material which constitute the record of proceedings upon which its decision is based are on file with the City Clerk at 300 E. Chapman Avenue in the City of Orange.
3. The City Council hereby approves and adopts Mitigated Negative Declaration No. 1862-18, associated Mitigation Monitoring and Reporting Program, and Response to Comments, for the construction of Fire Station No. 1 and Headquarters at 105 S. Water Street including the associated parking lot at 180 S. Water Street (Exhibit A).
4. The officers and employees of the City are authorized and directed, jointly and severally, on behalf of the City to (a) file the original and duplicate copy of a Notice of Determination with the Clerk of the County of Orange in accordance with Section 21152 of the California Public Resources Code, and (2) pay to the Clerk of the County of Orange the fish and wildlife fee, the County's documentary handling fee (unless exempt), and any other fees

required under California Fish and Game Code Section 711.4(d)(2) and Section 753.5 of Title 14 of the California Code of Regulations concurrently with filing the Notice of Determination.

ADOPTED this ____ day of _____, 2020

Mark A. Murphy, Mayor, City of Orange

ATTEST:

Pamela Coleman, City Clerk, City of Orange

Date

STATE OF CALIFORNIA)
COUNTY OF ORANGE)
CITY OF ORANGE)

I, PAMELA COLEMAN, City Clerk of the City of Orange, California, do hereby certify that the foregoing Resolution was duly and regularly adopted by the City Council of the City of Orange at a regular meeting thereof held on the ____ day of _____, 2020, by the following vote:

AYES: COUNCILMEMBERS:
NOES: COUNCILMEMBERS:
ABSENT: COUNCILMEMBERS:
ABSTAIN: COUNCILMEMBERS:

Pamela Coleman, City Clerk, City of Orange

ORDINANCE NO. 16-20

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ORANGE APPROVING ZONE CHANGE NO. 1301-20, CHANGING THE ZONING DESIGNATION FROM OFFICE PROFESSIONAL (O-P) AND RESIDENTIAL SINGLE FAMILY, 6,000 SQ. FT. (R-1-6) TO PUBLIC INSTITUTION (P-I) FOR THE CONSTRUCTION OF FIRE STATION NO. 1 AND HEADQUARTERS LOCATED AT 105 S. WATER STREET

**ZONE CHANGE NO. 1301-20
APPLICANT: CITY OF ORANGE**

WHEREAS, the City Council has authority per Orange Municipal Code (OMC) Section 17.10.20 to take action on Zone Change No. 1301-20; and

WHEREAS, Zone Change No. 1301-20 was filed by the City of Orange in conjunction with its project application (the Project) in accordance with the provisions of the OMC; and

WHEREAS, Zone Change No. 1301-20 was processed in the time and manner prescribed by state and local law; and

WHEREAS, the Planning Commission conducted a duly advertised public hearing on August 24, 2020, at which time interested persons had an opportunity to testify either in support of or opposition to the Project, including Zone Change No. 1301-20 and recommended the City Council approve Zone Change No. 1301-20 and certify and adopt Mitigated Negative Declaration No. 1862-18, which was prepared to analyze the potentially significant environmental impacts of the Project, including Zone Change No 1301-20; and

WHEREAS, the City Council conducted a duly advertised public hearing on September 8, 2020, at which time interested persons had an opportunity to testify either in support of or opposition to the Project, including Zone Change No. 1301-20.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF ORANGE DOES ORDAIN AS FOLLOWS:

SECTION I:

The existing zoning of the subject property is depicted on the map attached hereto as Exhibit "A" and incorporated herein by reference. The Orange Municipal Code is amended in order to change the zoning classification by amending the zoning on the sites depicted on the map attached hereto as Exhibit "B" and incorporated herein by reference.

SECTION II:

The proposed zone change described in Section I is related to the public welfare, required by California Government Code Section 65860 and consistent with Mitigated Negative Declaration No. 1862-18, and prepared in accordance with the California Environmental Quality Act (CEQA). The proposed zone change is adequately described and thoroughly analyzed and reflects the independent judgement and analysis of the City Council for purposes of CEQA.

SECTION III:

The proposed zone change will make the Project zoning consistent with the existing Public Facilities Max. 0.5 FAR and Institutions Max 2.0 FAR (PFI) General Plan Land Use Element Designation by changing the zoning for the Fire Station No. 1 and Headquarters portion of the Project site from Office Professional (O-P) and Single Family Residential 6,000 sq. ft. (R-1-6) to Public Institution (P-I), as required by law.

SECTION IV:

Should any section, subsection, clause, or provision of this Ordinance for any reason be held to be invalid or unconstitutional, such invalidity or unconstitutionality shall not affect the validity or constitutionality of the remaining portions of this Ordinance; it being hereby expressly declared that this Ordinance, and each section, subsection, sentence, clause and phrase hereof would have been prepared, proposed, approved and ratified irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases be declared invalid or unconstitutional.

SECTION V:

The City Clerk is hereby directed to certify the adoption of this Ordinance and cause a summary of the same to be published as required by law. This Ordinance shall take effect thirty (30) days from the date of adoption.

ADOPTED this ____ day of _____, 2020.

Mark A. Murphy, Mayor, City of Orange

ATTEST:

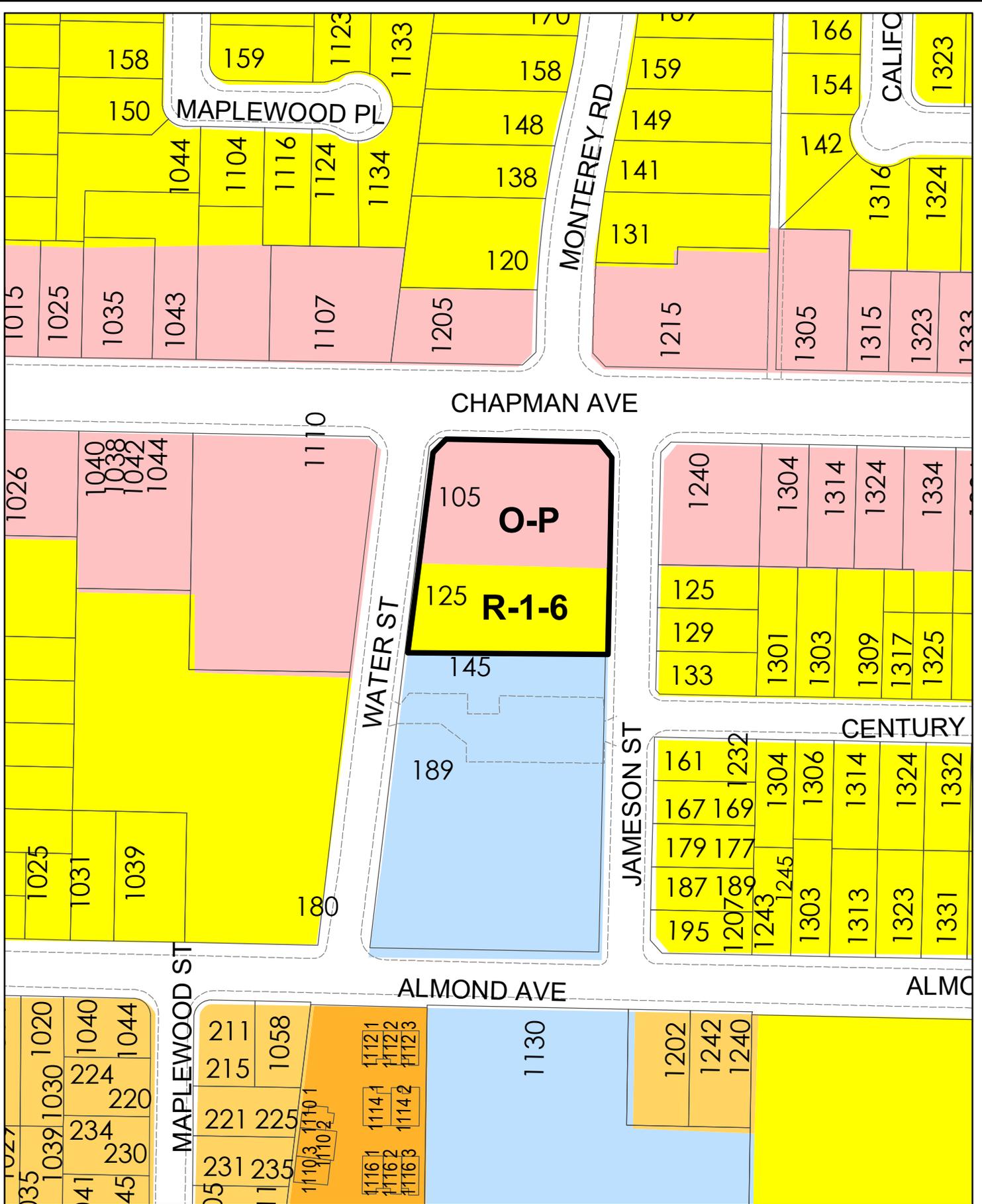
Pamela Coleman, City Clerk, City of Orange

STATE OF CALIFORNIA)
COUNTY OF ORANGE)
CITY OF ORANGE)

I, PAMELA COLEMAN, City Clerk of the City of Orange, California, do hereby certify that the foregoing Ordinance was introduced at the regular meeting of the City Council held on the ___ day of _____, 2020, and thereafter at the regular meeting of said City Council duly held on the ___ day of _____, 2020, was duly passed and adopted by the following vote, to wit:

AYES: COUNCILMEMBERS:
NOES: COUNCILMEMBERS:
ABSENT: COUNCILMEMBERS:
ABSTAIN: COUNCILMEMBERS:

Pamela Coleman, City Clerk, City of Orange



LEGEND



Project Site

Zoning Classification

105-125 S Water St

Existing = (O-P) Office Professional &
(R-1-6) Single Family Residential



July, 29th 2020

RESOLUTION NO. 11267

**A RESOLUTION OF THE CITY COUNCIL OF
THE CITY OF ORANGE APPROVING DESIGN
REVIEW NO. 5008-20 AND TENTATIVE PARCEL
MAP NO. 0016-20 FOR THE CONSTRUCTION OF
FIRE STATION NO. 1 AND HEADQUARTERS
LOCATED AT 105 S. WATER STREET AND THE
ASSOCIATED PARKING LOT LOCATED AT 180
S. WATER STREET**

APPLICANT: CITY OF ORANGE

WHEREAS, Mitigated Negative Declaration No. 1862-18, Zone Change No. 1301-20, Design Review 5008-20, and Tentative Parcel Map No. 0016-20 were processed by the City in accordance with the provisions of the City of the Orange Municipal Code; and

WHEREAS, an application for Mitigated Negative Declaration No. 1862-18, Zone Change No. 1301-20, Design Review 5008-20, and Tentative Parcel Map No. 0016-20 was processed in the time and manner prescribed by state and local law; and

WHEREAS, Mitigated Negative Declaration No. 1862-18 was prepared to evaluate the physical environmental impacts of the project, in conformance with the provisions of the California Environmental Quality Act (CEQA) per State CEQA Guidelines Section 15070 and in conformance with the Local CEQA Guidelines. The Mitigated Negative Declaration finds that the project will have less than significant impacts to the environment, with the implementation of conditions and mitigation measures; and,

WHEREAS, on February 19, 2020, the City Streamlined Multi-Disciplinary Accelerated Review Team reviewed the project and recommended that the project proceed; and

WHEREAS, on April 22, 2020, the Community Development Director recommended that the project be approved for Design Review based on an understanding that the Department of Public Works will work with applicable City Departments to address the considerations identified in the Design Review staff report; and

WHEREAS, at its August 24, 2020, public hearing, the Planning Commission recommended that the City Council approve Mitigated Negative Declaration No. 1862-18, Zone Change No. 1301-20, Design Review 5008-20, and Tentative Parcel Map No. 0016-20 for the construction of Fire Station No. 1 and Headquarters located at 105 S. Water Street including the associated parking lot at 180 S. Water Street; and

WHEREAS, at its September 8, 2020, public hearing, the City Council of the City of Orange adopted Mitigated Negative Declaration No. 1862-18 by Resolution No. 11264; and,

WHEREAS, at its September 8, 2020, public hearing, the City Council of the City of Orange approved Zone Change No. 1301-20 by Ordinance No. 16-20; and

WHEREAS, the City Council of the City of Orange conducted a duly advertised public hearing on September 8, 2020, to consider the Project on the property described as follows:

105 SOUTH WATER STREET- LOTS 1 THROUGH 8, IN BLOCK B, OF THE JAMESON TRACT IN THE CITY OF ORANGE, COUNTY OF ORANGE AS RECORDED IN BOOK 13, PAGE 44 IN THE OFFICE OF THE RECORDER OF LOS ANGELES COUNTY, CALIFORNIA)

180 SOUTH WATER STREET- CHAPMAN TR LOT 2 BLK D PORS OF LOT TR 175 – APN No. 390-452-05

NOW, THEREFORE, BE IT RESOLVED that the City Council hereby approves Design Review 5008-20, and Tentative Parcel Map No. 0016-20 based on the following findings:

SECTION 1 – ENVIRONMENTAL REVIEW

Mitigated Negative Declaration No. 1862-18 was prepared to evaluate the physical environmental impacts of the project, in conformance with the provisions of the California Environmental Quality Act (CEQA) per State CEQA Guidelines Section 15070 and in conformance with the Local CEQA Guidelines. The City Council finds that Mitigated Negative Declaration No. 1862-18 and associated Mitigation Monitoring and Reporting Program and Response to Comments as addressed in Resolution No. 11264 contains an adequate assessment of the potential environmental impacts of the proposed project. The City Council finds that the project will have less than significant impacts to the environment, with the implementation of mitigation measures included in Mitigated Negative Declaration No. 1862-18.

SECTION 2 – FINDINGS

General Plan

1. *The project must be consistent with the goals and policies stated within the City’s General Plan.*

The General Plan contains Land Use Element policies 6.1 and 6.2 which encourage good urban design and reducing land use conflicts between residential and non-residential uses which the project accomplishes through such features as minimized height, perimeter walls and fencing, and ample landscaping. The project also is consistent with Safety Element Goals 3.0 and 6.0 in that the project will assist in protecting lives and property from urban and wildland fires, will provide up to date infrastructure, and will enable the City to provide public safety services of the highest quality. The project is also consistent with Noise Element Goal 1.0 in that a noise attenuating wall and enclosure is provided to maintain noise thresholds for the surroundings. The project is consistent with Urban Design Element Goals 3.0 and 6.0 in that the project design promotes the appearance of the site with the new fire station and headquarters building in way that provides a contemporary interpretation of historic buildings in nearby Old Towne, demarks a primary entry route into Old Towne, and furthers the announcement of this public-services-concentrated area of the City where the Water Yard, Library, and City Hall are all within half a mile or less of each other. Hence, the project promotes contextually appropriate infill development on a currently vacant lot. In addition, the project will provide design compatibility with the

surroundings through the use of compatible architecture, materials, fencing, landscaping and enhancement of an existing storage building. Therefore, the project is consistent with General Plan goals and policies.

Major Site Plan

1. *The project design is compatible with surrounding development and neighborhoods.*

The project has been reviewed by staff and designed in a manner compatible with height, massing, architecture and landscaping that integrate with the project surroundings for the public benefit. The architecture of the Orange Fire Station No. 1 and Headquarters has been designed to reflect the Spanish Revival style found throughout the Old Towne Orange Historic District. The two-story building will have an offset massing that steps back from the street as the building increases in height. The roof will be a combination of flat parapet areas flanked by low-sloped mansards. Concrete roofing tiles, designed to simulate clay, will be used on all sloped roof areas. The west side will feature a second-story arcade element and a heavy-timber pergola to help break up the massing. Window and door openings, with charcoal gray frames, will occur symmetrically at exterior planes, at regular intervals. The exterior finish is primarily composed of a smooth, cream-colored stucco, terracotta-colored brick veneer and cast concrete panels. Decorative wrought iron details, period style lighting, and a small tower element at the main entrance will help complete the historic styling. Parking to support the project will be provided on and adjacent to the Fire Station and Headquarters and fencing and landscaping will be used to diminish any significant appearance of mass or view of parking areas.

2. *The project conforms to City development standards and any applicable special design guidelines or specific plan requirements.*

The project design and construction has occurred under City staff oversight to meet City needs and specifications in relation to fire prevention, fire suppression, emergency response, area context, and site design. Pursuant to Government Code sections 53090(a) and 53091(a) the City is not required to strictly comply with its zoning ordinances. Hence the Zoning Code's height limitation of 32 feet, the tree count calculation of the Landscape Design Guidelines, and the 6-foot wall height limitation do not apply to this project. Instead, the project has been reviewed by staff and designed in a manner compatible with height, massing, architecture and landscaping that integrate with the project surroundings for the public benefit. There are no special design guidelines nor a specific plan for this site.

3. *The project provides for safe and adequate vehicular and pedestrian circulation, both on- and off-site.*

The project provides for emergency vehicle exiting onto Chapman Avenue and re-entry via Water Street. Employee and visitor parking is accessible off of Water Street. Pedestrian access occurs via existing sidewalks on Chapman Avenue and Water Street with safe crossing at the Chapman Avenue and Water Street corners. Notification striping and signage will be utilized to notify vehicular and pedestrian traffic of emergency response vehicle exiting onto Chapman Avenue.

4. *City services are available and adequate to serve the project.*

The project is infill development located in an urban area where all wet and dry utilities, pedestrian and vehicular circulation, and City services are available. The Fire Station and Headquarters building itself are a City service.

5. *The project has been designed to fully mitigate or substantially minimize adverse environmental effects.*

Mitigated Negative Declaration No. 1862-18 was prepared for the project and includes mitigation measures adopted for the purpose of reducing potentially significant impacts to nesting birds, cultural resources, Native American cultural resources, and paleontological deposits to less than significant levels.

Design Review

1. *In the Old Towne Historic District, the proposed work conforms to the prescriptive standards and design criteria referenced and/or recommended by the DRC or other reviewing body for the project (OMC 17.10.070.F.1).*

This project site is not within the Old Towne Historic District; therefore, this finding does not apply.

2. *In any National Register Historic District, the proposed work complies with the Secretary of the Interior's standards and guidelines (OMC 17.10.070.F.2).*

This project site is not within the National Register Historic District; therefore, this finding does not apply.

3. *The project design upholds community aesthetics through the use of an internally consistent, integrated design theme and is consistent with all adopted specific plans, applicable design standards, and their required findings (OMC 17.10.070.F.3).*

The project is respectful of the area community aesthetics and sensitive to the gateway corridor to Old Towne in that it utilizes architectural elements appropriate to a fire station and headquarters office. Several of the building materials are characteristic of corridor buildings including the use of plaster walls, brick façade, hip roof forms, and architectural detailing. The height of the building is minimized to that needed to support apparatus bays and crew occupancy, and office needs. The second story component is stepped back from the first story level and a public entry point is focused under a tower feature. The building provides architectural interest via indentations in architectural plane. Architectural elements are alternated and intertwined. Windows are regularly-spaced. Landscaping is provided around the perimeter of the sites and includes an adequate setback with trees that soften views to the building and parking lots. The building is sited between three streets which further reduces any impacts of mass to adjacent properties. Repurposing of the existing storage building will ensure that no greater visual mass will occur than exists for that building now and planned improvements would enhance the appearance.

There is no specific plan or applicable design standards applicable to this property.

4. *For infill residential development, as specified in the City of Orange Infill Residential Design Guidelines, the new structure(s) or addition are compatible with the scale,*

massing, orientation, and articulation of the surrounding development and will preserve or enhance existing neighborhood character (OMC 17.10.070.F.4).

This project is not an infill residential development subject to the City's *Infill Residential Design Guidelines*; therefore, this finding does not apply.

Tentative Parcel Map

1. *The proposed map is consistent with applicable general and specific plans as specified in Government Code Section 65451.*

This finding is met as described in the General Plan Consistency finding. There is no specific plan for this site.

2. *The design or improvement of the proposed subdivision is consistent with applicable general and specific plans.*

This finding is met as described in the General Plan Consistency finding. There is no specific plan for this site.

3. *The site is physically suitable for the type of development.*

The site is flat with no topographical obstructions, or subsurface conditions that would hinder construction and the site maintains direct access to the public right-of-way where all utilities necessary to serve the project are located.

4. *The site is physically suitable for the proposed density of development.*

The site combined with the Water Yard facilities maintains a 0.38 Floor Area Ratio (FAR), which is less than the 0.5 FAR maximum allowed by the General Plan Land Use Element. All the necessary Fire Station and administrative Headquarters offices and apparatus bays are easily accommodated on the site in a manner that is compatible with the surrounding area through the use of minimalized height, stepbacks, indentation in building plane, and hip or flat roof usage.

5. *The design of the subdivision or the proposed improvements are not likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.*

The subdivision is merely for parcel consolidation. There is no significant habitat on the site other than trees. There are no other significant habitats that would result in substantial injury to fish or wildlife or their habitat as a result of the subdivision. Rather, the fire suppression support that the fire station would provide would likely preserve habitat. Biological mitigation measures from Mitigated Negative Declaration No. 1862-18 reduce potential construction impacts to nesting birds to less than significant levels.

6. *The design of the subdivision or type of improvements is not likely to cause serious public health problems.*

Fire Station No. 1 would respond to public and individual health threats. Hence no public health problems are anticipated, rather public health enhancement is anticipated.

7. *The design of the subdivision or the type of improvements will not conflict with easements, acquired by the public at large, for access through or use of, property within the proposed subdivision.*

The site has a wall or fence barrier around it. The public does not use the site for access. Existing vehicular and pedestrian access will remain along the Chapman Avenue, Water Street, and Jameson Street rights-of-way.

SECTION 3– MITIGATION MEASURES

BE IT FURTHER RESOLVED that the following mitigation measures are imposed with project approval:

BIO-1: Nesting Birds. If Project clearing and construction must occur during the avian nesting season (February 1 to September 1), a survey for active nests must be conducted by a qualified biologist no more than three days prior to the activities to determine the presence/absence, location, and status of any active nests on or adjacent to the Project site. If no active nests are discovered or identified, no further mitigation is required. In the event that active nests are discovered on site, a suitable buffer determined by the qualified biologist should be established around such active nests. Buffers typically have a minimum width of 300 feet (500 feet for raptors). No ground-disturbing activities shall occur within this buffer until the biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest. Limits of construction to avoid a nest site shall be established in the field by a qualified biologist with flagging and stakes or construction fencing. Construction personnel shall be instructed regarding the ecological sensitivity of the fenced area. The results of the survey shall be documented and filed with the Community Development Director within five days after the survey.

CUL-1 In the event a potentially significant cultural resource is encountered during earthwork activities, as determined by the foreperson, qualified Native American Monitor, or any City official, all subsurface construction activities within a 100-foot radius of the find shall cease and workers shall avoid altering the materials until a qualified archaeologist who meets the Secretary of Interior’s Professional Qualification Standards for archaeology has evaluated the situation. The City of Orange Public Works Department shall include a standard inadvertent discovery clause in the construction contract to inform contractors of this requirement. Any resources found during construction activities shall expeditiously be recorded on appropriate Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA criteria by a qualified archaeologist. Potentially significant cultural resources consist of but are not limited to stone, bone, glass, ceramics, wood, or shell artifacts, or features including hearths, structural remains, or historic dumpsites. If the resource is determined to be significant under CEQA Guidelines Section 15064.5, the qualified archaeologist shall expeditiously prepare and implement a research design and archaeological data recovery plan that will capture those categories of data for which the site is significant in accordance with Section 15064.5 of the CEQA Guidelines. The archaeologist shall also expeditiously perform appropriate technical analyses, prepare a comprehensive report complete with methods, results, and recommendations, and provide for the permanent curation or repatriation of the recovered resources in cooperation with the designated most likely descendant as

needed. The report shall be submitted to the City of Orange Community Development Department, the South Central Coastal Information Center, and the State Historic Preservation Office (SHPO), if required.

GEO-1 In the event a previously unrecorded paleontological deposit is encountered during construction; all activity shall cease in the vicinity of the find and be redirected elsewhere, and the City shall be immediately informed of the discovery. A paleontologist shall be retained by the City to make recommendations on the treatment of the deposits. The recommendations shall be developed in accordance with applicable provisions of Public Resources Code Section 21083.2 and State CEQA Guidelines 15126.4. The City shall be consulted on the treatment of the deposits. The City shall follow all recommendations made by the paleontologist. The deposits shall not be disturbed or removed until the appropriate treatment has been recommended by the paleontologist and approved by the City. No construction activity in the vicinity of the find, the boundary of which shall be determined by the paleontologist, may resume until the recommendations for treatment of the deposits have been implemented. If applicable, the final report containing site forms, site significance, and mitigation measures shall be submitted to the Community Development Department when finalized. The final written report shall be submitted to the appropriate regional paleontological Information Center within three months after work has been completed.

TCR-1: Prior to the commencement of any ground disturbing activity at the project site, the project applicant shall retain a Native American Monitor approved by the Gabrieleno Band of Mission Indians-Kizh Nation – the tribe that consulted on this project pursuant to Assembly Bill A52 (the “Tribe” or the “Consulting Tribe”). The monitor will have experience working with a qualified archaeologist, as defined in the Secretary of the Interior’s Professional Qualifications Standards, and/or education or professional training in a related field, such as anthropology, archaeology or ethnology. A copy of the executed contract shall be submitted to the City of Orange Community Development Department prior to the issuance of any permit necessary to commence a ground-disturbing activity. The on-site monitoring shall commence when ground-disturbing activities begin and shall end when the project site ground-disturbing activities are completed, or when the Native American Monitor has indicated that the site has a low potential for impacting Tribal Cultural Resources, whichever occurs first.

Ground disturbing activities are defined as activities that may include, but are not limited to, pavement removal, potholing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the project area. The Tribal Monitor will complete daily monitoring logs that will provide descriptions of the day’s activities, including construction activities, locations, soil, and any cultural materials identified. Upon discovery of any Tribal Cultural Resources, construction activities shall cease in the immediate vicinity of the find (not less than the surrounding 100 feet) until the find can be assessed.

All Tribal Cultural Resources unearthed by project activities shall be evaluated by the qualified archaeologist and Tribal monitor approved by the Consulting Tribe. If the resources are determined to be Native American in origin, the Consulting Tribe will retain it/them in the form and/or manner the Tribe deems appropriate, for educational, cultural and/or historic purposes. If human remains and/or grave goods are discovered or recognized at the Project Site, all ground disturbance shall immediately cease, and the county coroner shall be notified per Public Resources Code Section 5097.98, and Health & Safety Code Section 7050.5. Human remains and grave/burial goods shall be treated alike per California Public Resources Code Section 5097.98(d)(1) and (2).

Work may continue on other parts of the Project Site while evaluation and, if necessary, mitigation takes place in accordance with CEQA Guidelines Section 15064.5(f). If the resource is determined by the qualified archaeologist and tribal monitor to be a non-Native American resource the applicant would be required to implement MM CUL-1.

ADOPTED this ____ day of _____, 2020

Mark A Murphy, Mayor, City of Orange

ATTEST:

Pamela Coleman, City Clerk, City of Orange

STATE OF CALIFORNIA)
COUNTY OF ORANGE)
CITY OF ORANGE)

I, PAMELA COLEMAN, City Clerk of the City of Orange, California, do hereby certify that the foregoing Resolution was duly and regularly adopted by the City Council of the City of Orange at a regular meeting thereof held on the ____ day of _____, 2020, by the following vote:

AYES: COUNCILMEMBERS:
NOES: COUNCILMEMBERS:
ABSENT: COUNCILMEMBERS:
ABSTAIN: COUNCILMEMBERS:

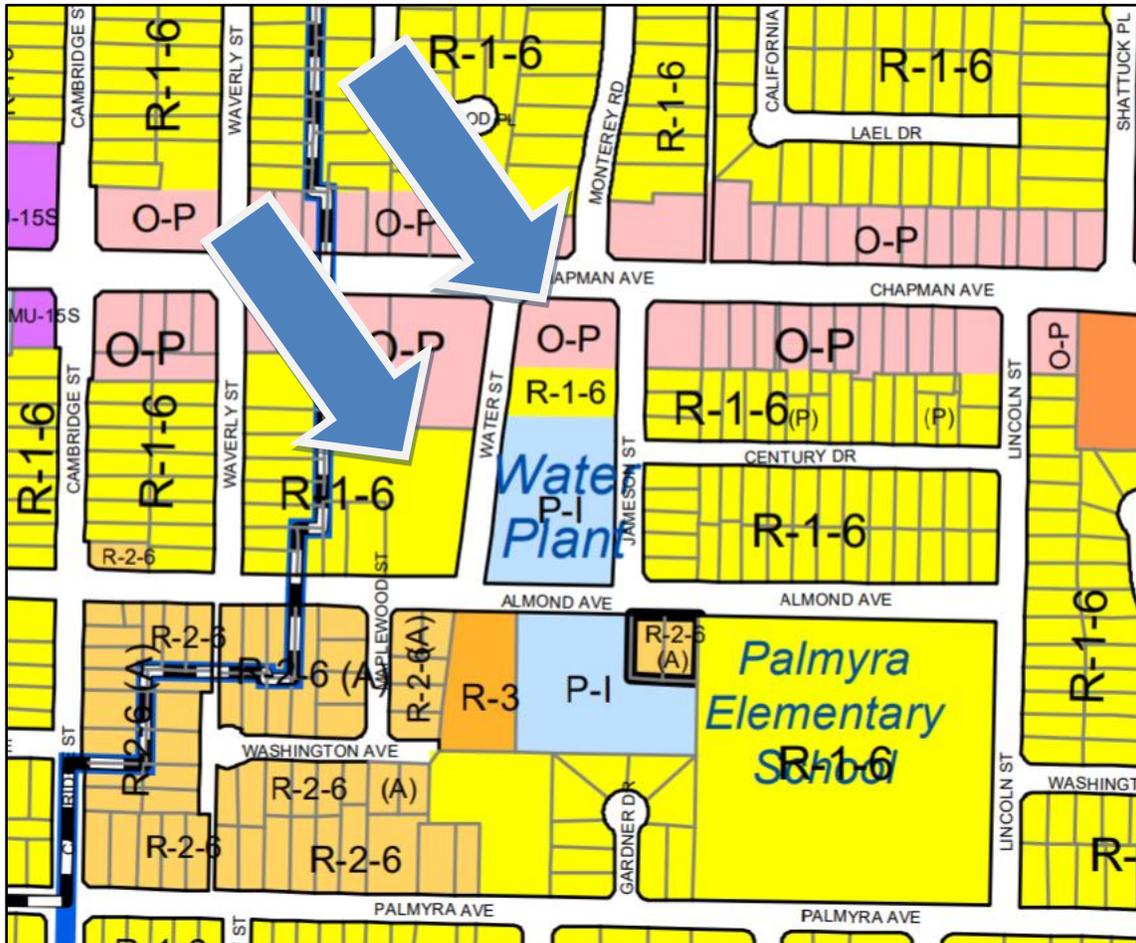
Pamela Coleman, City Clerk, City of Orange

Vicinity Map

Fire Station No. 1 and Headquarters

105 and 180 S. Water Street

Mitigated Negative Declaration No. ENV 1862-18, Zone Change No. 1301-20,
Design Review No. 5008-20, and Tentative Parcel Map No. 0016-20



CITY OF ORANGE
COMMUNITY DEVELOPMENT DEPARTMENT



PROPOSED SITE PLAN

03/31/2020

SITE AREA: ±1.24 AC



SCALE: 1" = 20'-0"



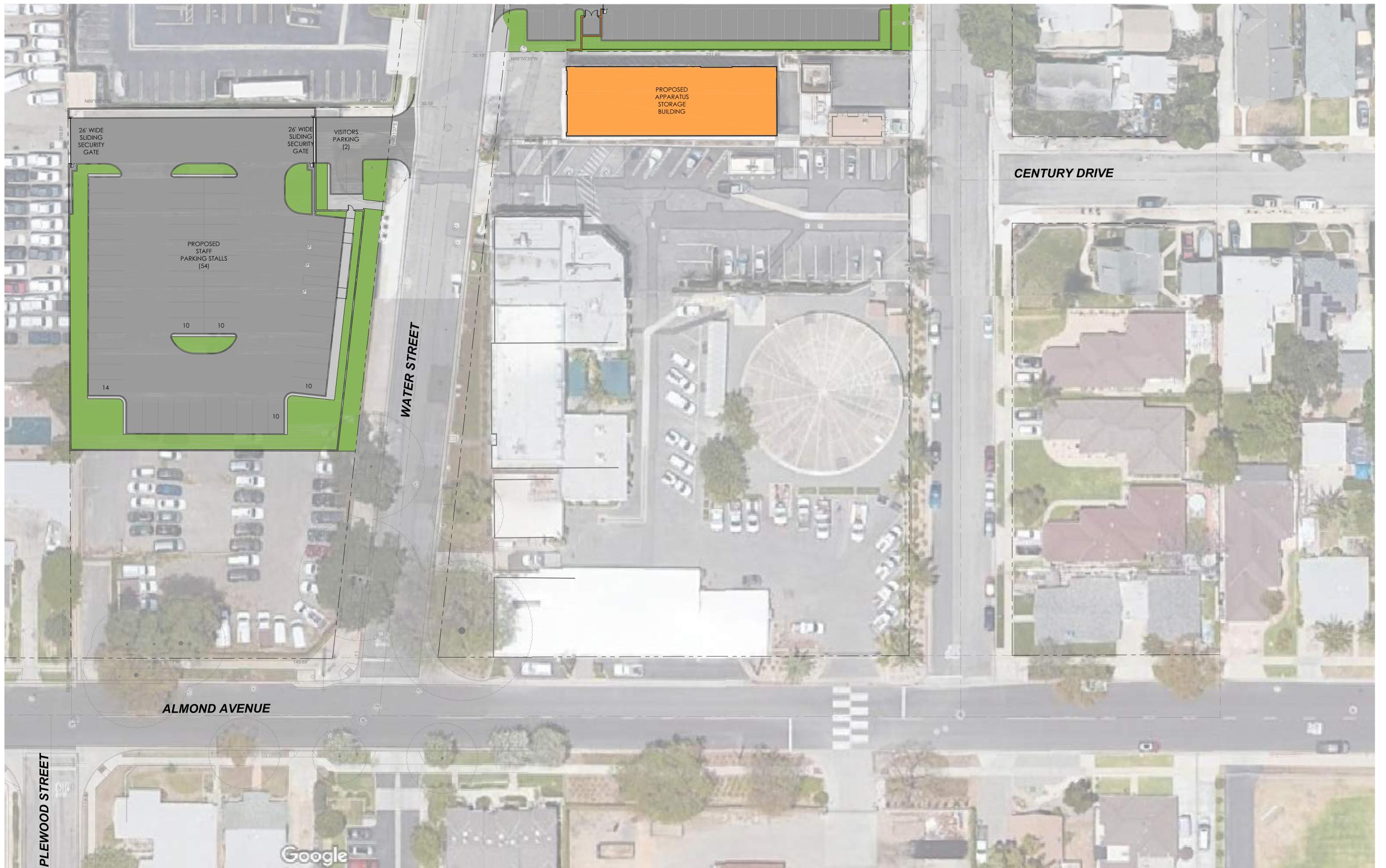
TRUE NORTH PROJECT NORTH

SITE PLAN - OPTION 1

FIRE STATION 1 - HEADQUARTERS

CITY OF ORANGE FIRE DEPARTMENT
 105 SOUTH WATER STREET
 ORANGE, CA





PROPOSED SITE PLAN 03/31/2020 SITE AREA: ±0.798 AC





 TRUE NORTH PROJECT NORTH
SITE PLAN - PARKING

FIRE STATION 1 - HEADQUARTERS

CITY OF ORANGE FIRE DEPARTMENT
105 SOUTH WATER STREET
ORANGE, CA





NORTH ELEVATION



EAST ELEVATION

PROPOSED ELEVATIONS 03/31/2020

SCALE: N.T.S.

PROPOSED ELEVATIONS

FIRE STATION 1 - HEADQUARTERS

CITY OF ORANGE FIRE DEPARTMENT
105 SOUTH WATER STREET
ORANGE, CA





SOUTH ELEVATION



WEST ELEVATION

PROPOSED ELEVATIONS 03/31/2020

SCALE: N.T.S.

PROPOSED ELEVATIONS

FIRE STATION 1 - HEADQUARTERS

CITY OF ORANGE FIRE DEPARTMENT
105 SOUTH WATER STREET
ORANGE, CA





NORTHWEST VIEW



NORTH VIEW



NORTHEAST VIEW



SOUTHEAST VIEW



SOUTHWEST VIEW

PROPOSED VIEWS

03/31/2020

SCALE: N.T.S.

PROPOSED VIEWS

FIRE STATION 1 - HEADQUARTERS

CITY OF ORANGE FIRE DEPARTMENT
105 SOUTH WATER STREET
ORANGE, CA

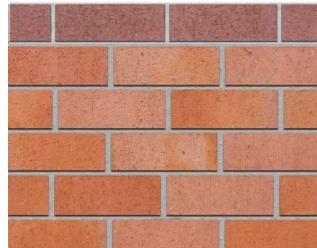




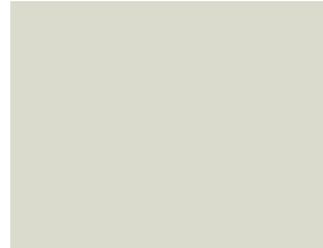
NORTHWEST VIEW



(1) CONCRETE TILE ROOF:
Eagle Roofing Capistrano "Dark Terracota"



(2) BRICK VENEER:
Pacific Clay "USC Blend" w/ "Red Brick" Accent



(3) EXTERIOR PLASTER:
La Habra "Oak Grain" Smooth Finish



(4) PRECAST CONCRETE:
Valori "Mocha" Light Sandblast



(5) EXTERIOR TRIM:
Dunn Edwards "Charcoal Sketch" DET628



(6) GLAZING:
Vitro Glass "Solexia"

PROPOSED MATERIALS

03/31/2020

SCALE: N.T.S.

PROPOSED MATERIALS

FIRE STATION 1 - HEADQUARTERS

CITY OF ORANGE FIRE DEPARTMENT
105 SOUTH WATER STREET
ORANGE, CA



PLANTING LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
TREES			
	ARCHONTOPHOENIX ALEXANDRAE	KING PALM	15' BT
	LOPHOSTEMON CONFERTUS	BRISBANE BOX	24" BOX
	KOELREUTERIA PANICULATA	GOLDENRAIN TREE	24" BOX
	LAGERSTROEMIA INDICA x FAURIEI 'NATCHEZ'	NATCHEZ CRAPE MYRTLE (MULTI TRUNK)	24" BOX
	LOPHOSTEMON CONFERTUS	BRISBANE BOX	24" BOX
	MAGNOLIA G. 'ST. MARY'	ST. MARY SOUTHERN MAGNOLIA	24" BOX
SHRUBS / PERIMETER / SCREEN & OTHER AREA			
	• ABELIA ED. GOUCHER	PINK ABELIA	5 GAL.
	• LIGUSTRUM TEXANUM	WAXLEAF PRIVET	5 GAL.
	• PHOTINIA X 'FRASER'	FRASER PHOTINIA	5 GAL.
	• XYLOSMA C. COMPACTA	COMPACT XYLOSMA	5 GAL.
	• PITTOSPORUM T. VARIEGATA	MOCK ORANGE	5 GAL.
	• RHAPHIOLEPIS L. 'PINK LADY'	INDIAN HAWTHORN	5 GAL.
	• PITTOSPORUM TENU-FOLIUM 'SILVER SHEEN'	SILVER SHEEN KOHUHU	5 GAL.
	• PODOCARPUS M. 'CRYSTAL BLUE'	BLUE ICE YELLOWWOOD	5 GAL.
	• PRUNUS C. 'TITE N BRITE'	BRIGHT N TIGHT CAROLINA LAUREL	5 GAL.
ACCENT			
	• DIETES BICOLOR	YELLOW WILD IRIS	5 GAL.
	• PHORMIUM HYBRID	NEW ZEALAND FLAX	5 GAL.
	• DIANELLA T. 'YELLOW STRIPE'	FLAX LILY	5 GAL.
	• DIANELLA 'LITTLE REV'	LITTLE REV DIANELLA	5 GAL.
	• NANDINA DOMESTICA 'GULF STREAM'	HEAVENLY BAMBOO	5 GAL.
	• CARISSA M. 'BOXWOOD BEAUTY'	CARISSA BOXWOOD BEAUTY	5 GAL.
	• RHAPHIOLEPIS I. SPECIES	INDIAN HAWTHORN	5 GAL.
	• AGAPANTHUS AFRICANUS	AFRICAN LILY	5 GAL.
GROUNDCOVER / SHRUB MASS			
	• CARISSA SPECIES	CARISSA	1 GAL. / 5 GAL.
	• DIANELLA 'LITTLE REV'	LITTLE REV DIANELLA	1 GAL. / 5 GAL.
	• TRACHELOSPERMUM JASMINOIDES	STAR JASMINE	1 GAL. / 5 GAL.
	• FESTUCA 'ELIJAH BLUE'	BLUE FESCUE	1 GAL.

Design Approach

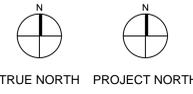
- The overall landscape will be designed to enhance the appearance of the building and to provide a cohesive project identity for the Fire Station 1 Headquarters Facility.
- Our design approach will focus on sustainability, all from the standpoint of low water use, low energy consumption and low maintenance.
- Landscape will be designed to demonstrate water conservation principles by using drought tolerant and native/adaptive species appropriate to the local climates.
- The proposed landscape palette will provide visual interest, color, appropriate screen and shade in addition to their minimal maintenance requirements.
- All irrigation design, equipment and standards selected to be in compliance with City of Orange irrigation requirements and the California AB1881 Water Efficient Landscape Ordinance and subsequent updates.
- Drip irrigation will be proposed in all planting areas.



PROPOSED SITE PLAN 03/26/2020 SITE AREA: ±1.24 AC
 SCALE: 1" = 20'-0"

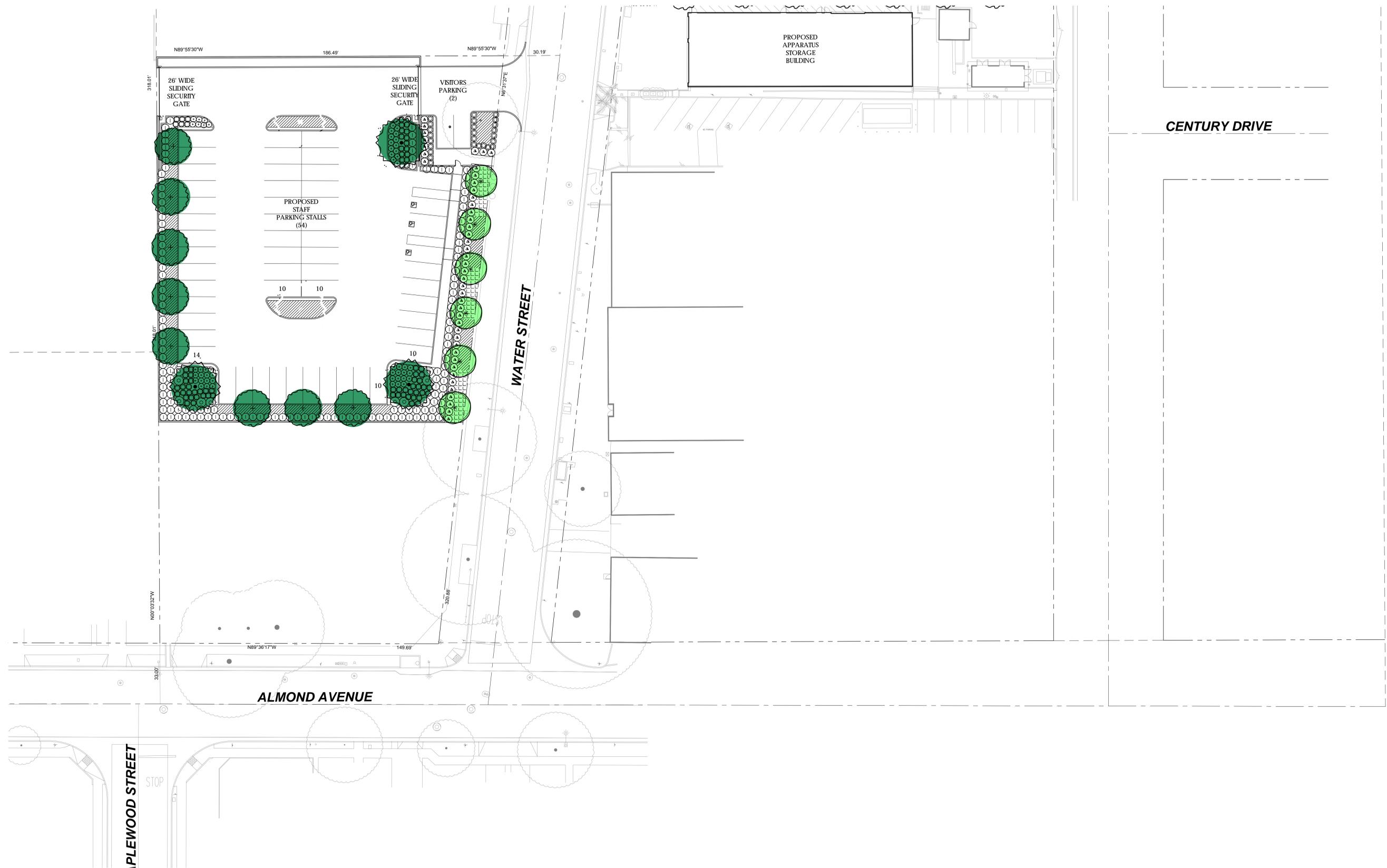
FIRE STATION 1 - HEADQUARTERS

CORNERSTONE STUDIOS, INC.
 6931 E Santa Ana Blvd. Santa Ana, CA 92701
 714.973.2200 Voice 714.973.0903 Fax

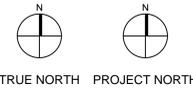


LANDSCAPE CONCEPT PLAN - SITE PLAN

CITY OF ORANGE FIRE DEPARTMENT
 105 SOUTH WATER STREET
 ORANGE, CA



CORNERSTONE STUDIOS, INC.
 951 E Santa Ana Blvd. 714.973.2200 Voice
 Santa Ana, CA 92701 714.973.0503 Fax
 LANDSCAPE ARCHITECTURE • URBAN DESIGN • PLANNING • RESOURCE ANALYSIS



LANDSCAPE CONCEPT PLAN - SITE PARKING

FIRE STATION 1 - HEADQUARTERS

CITY OF ORANGE FIRE DEPARTMENT
 105 SOUTH WATER STREET
 ORANGE, CA

PROPOSED SITE PLAN 03/26/2020 SITE AREA: ±0.798 AC
 SCALE: 1" = 20'-0"



TENTATIVE PARCEL MAP

105 SOUTH WATER STREET, ORANGE, CA



SCALE: 1"=100'

PREPARED BY:
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(909) 305-2395
07-30-2020 MSL JN 19010C

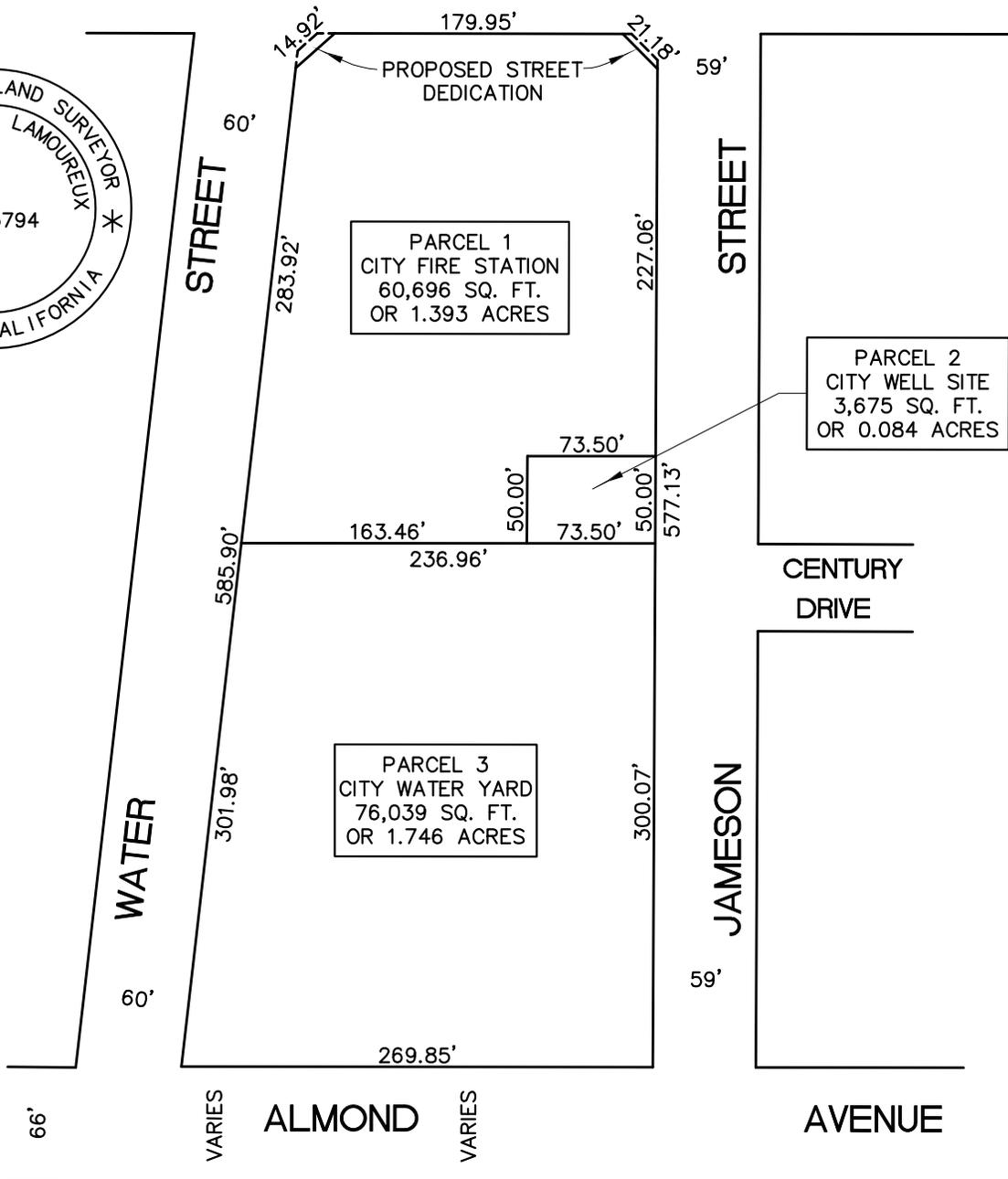
PREPARED FOR:
CITY OF ORANGE
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edlopez@cityoforange.org
(714) 744-5527

MONTEREY
ROAD

CHAPMAN

86'

AVENUE



**ORANGE FIRE STATION NO. 1 &
HEADQUARTERS PROJECT
ORANGE, CA**

FINAL MITIGATED NEGATIVE DECLARATION NO. 1862-18



Lead Agency:

City of Orange

Community Development Department • Planning Division

300 East Chapman Avenue

Orange, CA 92866-1591

(714) 744 7220

(714) 744 7222 (Fax)

www.cityoforange.org

Prepared by:



CHAMBERS GROUP, INC.

5 Hutton Centre Drive, Suite 750

Santa Ana, CA 92707

Date:

August 2020

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Appendix A Air Quality, Energy, and Greenhouse Gas Emissions Impact Analysis
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Appendix C Water Quality Management Plan
Appendix D Noise Impact Analysis

MITIGATED NEGATIVE DECLARATION NO. 1862-18

Project Title:

Orange Fire Station No. 1 and Headquarters Project

Reference Application Numbers:

MND No. ENV 1862-18
Zone Change No. 1301-20
Tentative Parcel Map No. 0016-20

Lead Agency:

City of Orange
300 E. Chapman Avenue
Orange, CA 92866

Contact Person and Telephone No.:

Eduardo Lopez, P.E., T.E.,
Senior Civil Engineer
(714) 744-5527

Project Proponent and Address:

Orange City Fire Department
176 S. Grand Street
Orange, CA 92866

Contact Person and Telephone No.:

Robert Stefano
Deputy Chief of Operations
Orange City Fire
949.533.2049

Project Location:

The main Project site is located at 105 S. Water Street at the intersection of Chapman Avenue and Water Street. The associated parking lot is sited diagonally across the southwestern corner of the Project site, across Water Street (parking site).

Existing General Plan Designation:

Public Facilities and Institutions (PFI)

Existing Zoning Classification:

Office Professional (O-P) and Single
Family Residential (R-1-6)

1.0 INTRODUCTION

The City of Orange's current Fire Headquarters, located at 176 S. Grand Street Orange, CA 92866, serves as both Fire Headquarters and Fire Station No. 1, and provides service to the southern portion of the City bounded by Struck Avenue on the north, southerly City limits on the south, Batavia Avenue on the west and State Route 55 Freeway on the east. This Fire Headquarters and Fire Station No. 1 building was originally constructed in 1969, and over the years the fire department's staff has outgrown the current Fire Headquarters.

The City of Orange is proposing a new Fire Station No. 1, Fire Headquarters, and associated parking lot to replace the current aging and undersized station (Proposed Project). The Proposed Project site is comprised of both the main Project site housing the new fire station and headquarters, as well as the site of the proposed parking lot across Water Street. The new building for the Fire Station No. 1 and Headquarters will be sited on a City-owned lot at 105 S. Water Street (main Project site), which is located approximately 0.6 mile east from its existing location. The new building would be larger than the current facility including larger facilities for the Fire Station No. 1 operations, as well as larger administration and training areas for the Fire Headquarters. The associated parking lot is sited diagonally across the southwestern corner of the Project site, across Water Street (parking site).

The City has prepared this Initial Study/Mitigation Negative Declaration (IS/MND) to address and disclose the potential environmental effects of project implementation in compliance with the California Environmental Quality Act of 1970 (CEQA) and the Guidelines for the Implementation of the California Environmental Quality Act (CEQA Guidelines), Section 15000 et seq.

Consistent with CEQA Guidelines Section 15071, this IS/MND includes a description of the Proposed Project, an evaluation of the potential environmental impacts, and findings from the environmental review. This IS/MND evaluates the potential environmental impacts that may result from implementation of the Proposed Project. The City is the Lead Agency under CEQA, and its City Council is responsible for the adoption of the environmental analysis and approval of the Project.

On June 25, 2020 the City distributed the Draft IS/MND for the Orange County Fire Station Project to public agencies and the general public. In accordance with the California Environmental Quality Act (CEQA) Section 21091 and State CEQA Guidelines Section 15073, a 30-day public review period for the Draft IS/MND was provided from June 25, 2020 to July 27, 2020. The Draft IS/MND and supporting attachments were available for review by the general public at the following locations:

- Orange City Hall, Offices of the City Clerk and Community Development Department, 300 East Chapman Avenue, Orange, CA 92866
- City of Orange, Community Development Department, Planning Division Website: <https://www.cityoforange.org/292/Project-NoticesRelated-Environmental-Doc>

2.0 REVISIONS TO INFORMATION PRESENTED IN THE DRAFT IS/MND

Introduction

On June 25, 2020, the City of Orange circulated the Draft IS/MND (State Clearinghouse No. 2020060566) for a 30-day public review period to responsible and trustee agencies and interested parties. Since issuance of the Draft IS/MND, the City has submitted modifications to the Proposed Project. Potential impacts resulting from modifications to the Project are discussed herein. As presented within this section, these revisions represent modifications to the previously analyzed project description. The revisions do not change the conclusions presented in the Draft IS/MND and the revisions would not create any new significant impacts or the need for additional mitigation.

Modifications to the Previously Analyzed Project

Based on questions and comments received from nearby residents, the Project Description has been revised as follows:

Staff and visitor vehicles would access the Fire Station No. 1 and Headquarters site off of Water Street. The Project facility would also have a gated staff parking and unsecured visitor parking accessible from Water Street. The parking site, located across Water Street from the main Project site, would have a secured entrance on Water Street, facing the Proposed Project site. In addition, a secured ingress/egress point would be provided on the western edge of the parking lot. The western ingress/egress access will feed into the empty lot to the west of the Parking site. There are currently no plans for this empty lot; it is currently leased to store car dealership vehicles; this may or may not continue in the future. The staff and visitors, using the associated parking lot, would make a pedestrian crossing over Water Street to gain access to the Fire Station No. 1 and Headquarters site. However, due to the residential and business nature of the land uses along Water Street, a vehicular speed limit of 25 mph and the street not being a busy thoroughfare, the Project does not assume a requirement for a signaled crosswalk.

To provide additional details on the construction activities, the following revision has been made:

Construction Activities:

Once the Proposed Project has been approved by the City, Project construction activities could begin in January 2021 and take approximately 19 months. The site is currently graded with little to no vegetation on site. The construction staging area will be located in the parking lot site.

In Section 4 of the Environmental Checklist, mitigation measure Bio-1 has been revised as follows based on a comment received from the California Department of Fish and Wildlife (CDFW):

Bio-1: Nesting Birds. If Project clearing and construction must occur during the avian nesting season (February 1 to September 1), a survey for active nests must be conducted by a qualified biologist ~~one to two weeks~~ no more than three days prior to the activities to determine the presence/absence, location, and status of any active nests on or adjacent to the Project site. If no active nests are discovered or identified, no further mitigation is required. In the event that active nests are discovered on site, a suitable buffer determined by the qualified biologist (~~e.g., 30 to 50 feet for passerines~~) should be established around such active nests. Buffers typically have a minimum width of 300 feet (500 feet for raptors). No ground-disturbing activities shall occur within this buffer until the biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest. Limits of construction to avoid a nest site shall be established in the field by a qualified biologist with flagging and stakes or construction fencing. Construction personnel shall be instructed regarding the ecological sensitivity of the fenced area. The results of the survey shall be documented and filed with the Community Development Director within five days after the survey.

Impacts Resulting from Modifications to the Project

No new impacts would result from the modifications to the MND noted above.

3.0 RESPONSE TO COMMENTS

The following is a list of the persons, firms, or agencies that submitted comments on the Draft IS/MND during the public review period:

Comment Letter No.	Individual, Organization, Agency	Letter Dated
1	Mary Anne Skorpanich	July 3, 2020
2	California Department of Fish and Wildlife	July 15, 2020
3	Mike Aims (phone call)	July 1, 2020
4	City of Irvine	July 23, 2020
5	Daniel Slater	July 30, 2020

The number designations in the responses are correlated to the bracketed and identified portions of the comment letter.

----- Original message -----

From: mary anne skorpanich <skorpanich@icloud.com>

Date: 7/3/20 1:17 PM (GMT-08:00)

To: Eduardo Lopez <edlopez@cityoforange.org>

Subject: Questions on NOI for fire station

1-1

Hello Mr. Lopez, on pages 15-16 of the MND there are four elevations shown but only two are labeled. Could you please confirm that page 15 shows the north and east elevations and page 16 the south and west elevations?

1-2

What is the age of the storage building on the fire station-HQ site?

No mention is made of what appears to be a historic building on the adjacent Water Department property. What is the age of this structure?

1-3

Based on the site plan it appears that only the southwest portion of the parking lot on Water Street is part of this project, leaving the northwest portion as a parcel without ingress and egress. Is this parcel City-owned and are there any plans for this property? What is the zoning and GP designation for this property?

1-4

Has the City analyzed sightlines from the proposed building to surrounding properties?

Thank you, Mary Anne

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Response to Comment Letter No. 1

Ms. Mary Anne Skorpanich
July 3, 2020

Response to Comment 1-1:

Thank you for your comment. Yes, Figure 5 is intended to show the North elevation in the top image and the East elevation in the bottom image, while Figure 6 is intended to show the South elevation in the top image and the West elevation in the bottom image. These directional notations have been added to Figure 5 and Figure 6, below.

Response to Comment 1-2:

The existing storage structure onsite was constructed in the early 1960's, over 60 years ago. Since it has exhausted its lifespan the current building is intended to be retrofitted for Fire Department use. Due to the type and condition of the structure, the storage building was not considered a historic structure eligible for listing.

The Proposed Project will not impact the adjacent Water District property. A review of the City of Orange General Plan Cultural Resources and Historic Preservation Element found that no designated historic properties were located in the immediate vicinity of the Project site. The Water District was constructed prior to 1922, with the northerly section of the Water District being constructed in approximately 1975. Some of the Water District buildings may be eligible for designation as an inventoried structure as part of a future survey, as would other structures located in the area. However, the Proposed Project would not impact any buildings on the Water District property and the buildings are not part of a collective overlay district.

Response to Comment 1-3:

Of the two parking areas along Water Street south of Chapman Avenue, the northern portion is associated with the office structure on the corner of Water Street and Chapman Avenue. This lot has existing ingress and egress along Water Street as well as ingress and egress along Chapman Avenue.

The portion of the site plan indicated as the site of the Parking lot for Fire Station No.1 and Headquarters will have it's own ingress and egress along Water Street, as well as an ingress and egress area to the West. The western ingress/egress access will feed into the empty lot to the west of the Parking site. There are currently no plans for this empty lot; it is currently leased to store car dealership vehicles; this may or may not continue in the future. The property to the northwest of the Parking lot site is zoned Residential (R-1-6) and has and land use designation of Low Density Residential (LDR) (2-6 DU/AC).

Response to Comment 1-4:

The City has not specifically analyzed sightlines from the proposed building to the surrounding properties. Analysis was provided in Section 1 of the Checklist of Environmental Impact Issues that discusses Aesthetics. Although the new Fire Station No.1 and Headquarters has the potential to block views from the nearby residents and businesses across the currently vacant site, the site is proposed to be developed with a structure in substantial conformance with height limitations of the zoning district and consistent with architectural elements and roof forms of surrounding uses. The project also utilizes landscaping and perimeter walls or fences for site screening. No scenic viewpoints are located in the Project vicinity.

From: [Eduardo Lopez](#)
To: [Meghan Gibson](#)
Cc: [Kelley Needham](#)
Subject: FW: Orange Fire Station No. 1 & Headquarters Project (SCH# 2020060566)
Date: Wednesday, July 15, 2020 4:06:00 PM

Meghan,
Please see comment below for your reference
Thank you,

Eduardo Lopez, P.E., T.E.

Senior Civil Engineer

City of Orange

Public Works Engineering & Construction Management

Direct: (714) 744-5527 | www.cityoforange.org

From: Lane, Jessie@Wildlife <Jessie.Lane@Wildlife.ca.gov>
Sent: Wednesday, July 15, 2020 3:25 PM
To: Eduardo Lopez <edlopez@cityoforange.org>
Cc: Turner, Jennifer@Wildlife <Jennifer.Turner@wildlife.ca.gov>
Subject: Orange Fire Station No. 1 & Headquarters Project (SCH# 2020060566)

Dear Mr. Lopez,

The California Department of Fish and Wildlife (CDFW) has reviewed the Mitigated Negative Declaration dated June 2020, for the Orange Fire Station No. 1 & Headquarters Project. CDFW is a Trustee Agency and a Responsible Agency pursuant to the California Environmental Quality Act (CEQA; §§ 15386 and 15281, respectively) and is responsible for ensuring appropriate conservation of the state's biological resources, including rare, threatened, and endangered plant and animal species, pursuant to the California Endangered Species Act (Fish and Game Code § 2050 *et seq.*) and other sections of the Fish and Game Code (1600 *et seq.*). CDFW also administers the Natural Community Conservation Planning (NCCP) program.

Mitigation Measure BIO-1 proposed in the MND (p. 41) indicates that preconstruction nesting bird surveys will be conducted by a qualified biologist one to two weeks prior to clearing and construction activities. That timeframe is inadequate to identify nesting bird presence in the Project area because it allows the possibility for birds to locate onsite and potentially establish nests. Pre-construction surveys should be conducted as close to the time of potential disruption as possible, no more than 3 days from the start of construction. We recommend that the Mitigation Measure incorporates the following language:

If Project clearing and construction must occur during the avian nesting season (February 1 to September 1), a survey for active nests must be conducted by a qualified biologist no more than three days prior to the activities to determine the presence/absence, location, and status of any active nests on or adjacent to the Project site. If no active nests are discovered or identified, no further

2-1

2-1 cont

mitigation is required. In the event that active nests are discovered on site, a suitable buffer determined by the qualified biologist should be established around such active nests; Buffers typically have a minimum width of 300 feet (500 feet for raptors). No ground-disturbing activities shall occur within this buffer until the biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest. Limits of construction to avoid a nest site shall be established in the field by a qualified biologist with flagging and stakes or construction fencing. Construction personnel shall be instructed regarding the ecological sensitivity of the fenced area. The results of the survey shall be documented and filed with the Community Development Director within five days after the survey.

We appreciate the opportunity to comment on the MND for this project. Should you have any questions pertaining to biological resources or regarding this email, please contact CDFW for additional coordination.

Thank you,

Jessie Lane

Environmental Scientist
California Department of Fish and Wildlife
South Coast Region, Habitat Conservation Planning
3883 Ruffin Road
San Diego, CA 92123

Phone (858) 636-3159

E-mail correspondence, along with any attachments, may be subject to the California Public Records Act; and as such may be subject to public disclosure unless otherwise exempt under the Act.

Response to Comment Letter No. 2

Jessie Lane
South Coast Region, Habitat Conservation Planning
California Department of Fish and Wildlife
July 15, 2020

Response to Comment 2-1:

Thank you for providing your comments on the MND. We have revised mitigation measure Bio-1 per your request, as is noted in Section 2.0. As suggested, the mitigation measure has been revised to state:

Bio-1: Nesting Birds. If Project clearing and construction must occur during the avian nesting season (February 1 to September 1), a survey for active nests must be conducted by a qualified biologist ~~one to two weeks~~ no more than three days prior to the activities to determine the presence/absence, location, and status of any active nests on or adjacent to the Project site. If no active nests are discovered or identified, no further mitigation is required. In the event that active nests are discovered on site, a suitable buffer determined by the qualified biologist (~~e.g., 30 to 50 feet for passerines~~) should be established around such active nests. Buffers typically have a minimum width of 300 feet (500 feet for raptors). No ground-disturbing activities shall occur within this buffer until the biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest. Limits of construction to avoid a nest site shall be established in the field by a qualified biologist with flagging and stakes or construction fencing. Construction personnel shall be instructed regarding the ecological sensitivity of the fenced area. The results of the survey shall be documented and filed with the Community Development Director within five days after the survey.

Comment #3 -Mike Aims (via phone)

Comment 3-1:

Eduardo Lopez received a phone call from Mike Aims with a question regarding the Proposed Project. Mike Aims, a nearby resident asked what was to be done with the portion of the site to the west of the proposed parking lot abutting the property line.

Response to Comment Letter No. 3

Response to Comment 3-1:

Thank you for providing your comments on the MND. As Eduardo noted in the phone conversation, the Proposed Project would not improve or alter the portion of the lot to the west of the proposed parking lot, along the property line. There are currently no plans for this empty lot; it is currently leased to store car dealership vehicles; this may or may not continue in the future.



July 20, 2020

Mr. Eduardo Lopez
City of Orange
Public Works Department
300 East Chapman Avenue
Orange, CA 92866

Subject: Interagency Review -- Zone Change 1301-20, Mitigated Negative Declaration No. 1862-18, and Tentative Parcel Map No. 0016-20 for Orange Fire Station No. 1 and Headquarters Project

Dear Mr. Lopez:

4-1 The City of Irvine is in receipt of a Zone Change, Mitigated Negative Declaration, and a Tentative Parcel Map for Orange Fire Station No. 1. The project site is located at 105 S. Water Street in the City of Orange. The project consists of constructing a new 16,574 square foot fire station and 11,353 square foot, two-story, headquarters building. To accomplish this, the project proposes a zone change to amend the zoning designation from Office Professional (O-P) and Single Family Res. 6,000 (R-1-6) to Public Institution (P-I) and a tentative parcel map to merge lots into one single property.

4-2 City staff has completed its review and has no comments. If you have any questions, you may contact me at 949-724-6364 or at jequina@cityofirvine.org.

Sincerely,

Justin Equina
Associate Planner

cc: Kerwin Lau, Manager of Planning Services
Marika Poynter, Principal Planner

Response to Comment Letter No. 4

Justin Equina
City of Irvine
July 23, 2020

Response to Comment 4-1:

Thank you for your comment. This comment outlines the Proposed Project details.

Response to Comment 4-2:

The City of Orange notes that the City of Irvine does not have any comments. No further response is required.

From: Daniel Slater <danslater@danslater.com>
Sent: Thursday, July 30, 2020 4:33 PM
To: Eduardo Lopez <edlopez@cityoforange.org>
Subject: Orange Fire Station #1

Dear Eduardo,

5-1

Thanks so much for your time today catching me up on this project. [REDACTED]
[REDACTED]
[REDACTED]

5-2

I'm excited about this project and have been looking forward to it for a long time. I very much like the design elements and scale, and I feel it will be a good fit for the neighborhood.

5-3

I only have 1 suggestion that I feel will make it even more compatible with the single family nature of the east side of the main fire station site (Jameson Street, where I have owned a property for over 35 years and actually lived there for several years). When the Water Department landscaped the southern half of the block that faces Jameson St., they wisely noted that there was no need for a sidewalk and fully landscaped the space with drought tolerant plants. It has looked nice for many years!

Upon reviewing the Orange Fire Station plans, I see that there is only a wall abutting the east side of the project (no pedestrian ingress or egress), with all pedestrian traffic oriented toward Water Street. It would be nice to continue the same or similar landscaping along the project area with NO SIDEWALK. It would create a better and "softer" look. I also feel that placing more landscaping and less access to the wall will be a deterrent for graffiti.

Thanks again, Eduardo.

Respectfully, _____

Dan Slater

Orange Realty, Inc.

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

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Response to Comment Letter No. 5

Dan Slater
July 30, 2020

Response to Comment 5-1:

Thank you for submitting your comment letter for this Project.

Response to Comment 5-2:

This comment notes support for the Project, we appreciate the input.

Response to Comment 5-3:

Thank you for your comments on the design of the Project. The Proposed Project would keep the sidewalk as shown on the plans, as it is an existing feature. The Project will include replacing the entire stretch of sidewalk along the easterly property line. Per the General Plan, under Circulation and Mobility, Goal 1.0, Policy 1.6 states, "Maintain and repair roadways and sidewalks as necessary to improve circulation and safety."

The existing sidewalk is needed for circulation and safety at the proposed facility. Individuals will be able to park on that side of Jameson Street to access the station and the sidewalk is needed for part of the egress for the building. The plans include 5 feet of landscaping from the curb face to the sidewalk, then 5 feet of sidewalk, followed by 10 feet of landscaping to the building face or wall.

4.0 MITIGATION MONITORING AND REPORTING PLAN

The California Environmental Quality Act (CEQA) requires that when a public agency completes an environmental document which includes measures to mitigate or avoid significant environmental effects, the public agency must adopt a reporting or monitoring plan. This requirement ensures that environmental impacts found to be significant will be mitigated. The reporting or monitoring plan must be designed to ensure compliance during project implementation (Public Resources Code Section 21081.6).

In compliance with Public Resources Code Section 21081.6, Table 1, Mitigation Monitoring and Reporting Checklist, has been prepared for the proposed Orange Fire Station Project. This Mitigation Monitoring and Reporting Checklist is intended to provide verification that all applicable mitigation measures relative to significant environmental impacts are monitored and reported. Monitoring will include: 1) verification that each mitigation measure has been implemented; 2) recordation of the actions taken to implement each mitigation measure; and 3) retention of records in the City's Orange Fire Station No. 1 Project file.

This Mitigation Monitoring and Reporting Program (MMRP) delineates responsibilities for monitoring the Project, but also allows the City flexibility and discretion in determining how best to monitor implementation. Monitoring procedures will vary according to the type of mitigation measure. Adequate monitoring consists of demonstrating that monitoring procedures took place and that mitigation measures were implemented. This includes the review of all monitoring reports, enforcement actions, and document disposition, unless otherwise noted in the Mitigation Monitoring and Reporting Checklist (Table 1). If an adopted mitigation measure is not being properly implemented, the designated monitoring personnel shall require corrective actions to ensure adequate implementation.

Reporting consists of establishing a record that a mitigation measure is being implemented, and generally involves the following steps:

- The City distributes reporting forms to the appropriate entities for verification of compliance.
- Departments/agencies with reporting responsibilities will review the Initial Study/Mitigated
- Negative Declaration, which provides general background information on the reasons for including specified mitigation measures.
- Problems or exceptions to compliance will be addressed to the City as appropriate.
- Periodic meetings may be held during project implementation to report on compliance of mitigation measures.
- Responsible parties provide the City with verification that monitoring has been conducted and ensure, as applicable, that mitigation measures have been implemented. Monitoring compliance may be documented through existing review and approval programs such as field inspection reports and plan review.
- The City prepares a reporting form periodically during the construction phase and an annual report summarizing all project mitigation monitoring efforts.
- Appropriate mitigation measures will be included in construction documents and/or conditions of permits/approvals.

Minor changes to the MMRP, if required, would be made in accordance with CEQA and would be permitted after further review and approval by the City. Such changes could include reassignment of monitoring and reporting responsibilities, plan redesign to make any appropriate improvements, and/or modification, substitution or deletion of mitigation measures subject to conditions described in CEQA Guidelines Section 15162. No change will be permitted unless the MMRP continues to satisfy the requirements of Public Resources Code Section 21081.6.

TABLE 1: MITIGATION MONITORING AND REPORTING CHECKLIST

No.	Mitigation Measure	Time Frame and Responsible Party for Implementation	Time Frame and Responsible Party for Monitoring	Verification of Compliance		
				Initials	Date	Remarks
Biological Resources						
BIO-1	Nesting Birds. If Project clearing and construction must occur during the avian nesting season (February 1 to September 1), a survey for active nests must be conducted by a qualified biologist one to two weeks <u>no more than three days</u> prior to the activities to determine the presence/absence, location, and status of any active nests on or adjacent to the Project site. If no active nests are discovered or identified, no further mitigation is required. In the event that active nests are discovered on site, a suitable buffer determined by the qualified biologist (e.g., 30 to 50 feet for passerines) should be established around such active nests. <u>Buffers typically have a minimum width of 300 feet (500 feet for raptors).</u> No ground-disturbing activities shall occur within this buffer until the biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest. Limits of construction to avoid a nest site shall be established in the field by a qualified biologist with flagging and stakes or construction fencing. Construction personnel shall be instructed regarding the ecological sensitivity of the fenced area. The results of the survey shall be documented and filed with the Community Development Director within five days after the survey	Prior to construction City of Orange	Prior to construction City of Orange			
Cultural Resources						
CUL-1	In the event a potentially significant cultural resource is encountered during earthwork activities, as determined	During construction	During construction			

No.	Mitigation Measure	Time Frame and Responsible Party for Implementation	Time Frame and Responsible Party for Monitoring	Verification of Compliance		
				Initials	Date	Remarks
	<p>by the foreperson, qualified Native American Monitor, or any City official, all subsurface construction activities within a 100-foot radius of the find shall cease and workers shall avoid altering the materials until a qualified archaeologist who meets the Secretary of Interior’s Professional Qualification Standards for archaeology has evaluated the situation. The City of Orange Public Works Department shall include a standard inadvertent discovery clause in the construction contract to inform contractors of this requirement. Any resources found during construction activities shall expeditiously be recorded on appropriate Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA criteria by a qualified archaeologist. Potentially significant cultural resources consist of but are not limited to stone, bone, glass, ceramics, wood, or shell artifacts, or features including hearths, structural remains, or historic dumpsites. If the resource is determined to be significant under CEQA Guidelines Section 15064.5, the qualified archaeologist shall expeditiously prepare and implement a research design and archaeological data recovery plan that will capture those categories of data for which the site is significant in accordance with Section 15064.5 of the CEQA Guidelines. The archaeologist shall also expeditiously perform appropriate technical analyses, prepare a comprehensive report complete with methods, results, and recommendations, and provide for the permanent curation or repatriation of the recovered resources in cooperation with the designated most likely descendant as needed. The report shall be submitted to</p>	<p>City of Orange</p>	<p>City of Orange</p>			

No.	Mitigation Measure	Time Frame and Responsible Party for Implementation	Time Frame and Responsible Party for Monitoring	Verification of Compliance		
				Initials	Date	Remarks
	the City of Orange Community Development Department, the South Central Coastal Information Center, and the State Historic Preservation Office (SHPO), if required.					
Geology & Soils						
GEO-1	In the event a previously unrecorded paleontological deposit is encountered during construction; all activity shall cease in the vicinity of the find and redirected elsewhere, and the City shall be immediately informed of the discovery. A paleontologist shall be retained by the City to make recommendations on the treatment of the deposits. The recommendations shall be developed in accordance with applicable provisions of Public Resource Code Section 21083.2 and State CEQA Guidelines 15126.4. The City shall be consulted on the treatment of the deposits. The City shall follow all recommendations made by the paleontologist. The deposits shall not be disturbed or removed until the appropriate treatment has been recommended by the paleontologist and approved by the City. No construction activity in the vicinity of the find, the boundary of which shall be determined by the paleontologist, may resume until the recommendations for treatment of the deposits have been implemented. If applicable, the final report containing site forms, site significance, and mitigation measures shall be submitted to the Community Development Department when finalized. The final written report shall be submitted to the appropriate regional paleontological Information Center within three months after work has been completed.					

No.	Mitigation Measure	Time Frame and Responsible Party for Implementation	Time Frame and Responsible Party for Monitoring	Verification of Compliance		
				Initials	Date	Remarks
Tribal Cultural Resources						
TCR-1	<p>Prior to the commencement of any ground disturbing activity at the project site, the project applicant shall retain a Native American Monitor approved by the Gabrieleno Band of Mission Indians-Kizh Nation – the tribe that consulted on this project pursuant to Assembly Bill A52 (the “Tribe” or the “Consulting Tribe”). The monitor will have experience working with a qualified archaeologist, as defined in the Secretary of the Interior’s Professional Qualifications Standards, and/or education or professional training in a related field, such as anthropology, archaeology or ethnology. A copy of the executed contract shall be submitted to the City of Orange Community Development Department prior to the issuance of any permit necessary to commence a ground-disturbing activity. The on-site monitoring shall commence when ground-disturbing activities begin and shall end when the project site ground-disturbing activities are completed, or when the Native American Monitor has indicated that the site has a low potential for impacting Tribal Cultural Resources, whichever occurs first.</p> <p>Ground disturbing activities are defined as activities that may include, but are not limited to, pavement removal, potholing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the project area. The Tribal Monitor will complete daily monitoring logs that will provide descriptions of the day’s activities, including construction activities,</p>	<p>During construction</p> <p>City of Orange</p>	<p>During construction</p> <p>City of Orange</p>			

No.	Mitigation Measure	Time Frame and Responsible Party for Implementation	Time Frame and Responsible Party for Monitoring	Verification of Compliance		
				Initials	Date	Remarks
	<p>locations, soil, and any cultural materials identified. Upon discovery of any Tribal Cultural Resources, construction activities shall cease in the immediate vicinity of the find (not less than the surrounding 100 feet) until the find can be assessed.</p> <p>All Tribal Cultural Resources unearthed by project activities shall be evaluated by the qualified archaeologist and Tribal monitor approved by the Consulting Tribe. If the resources are determined to be Native American in origin, the Consulting Tribe will retain it/them in the form and/or manner the Tribe deems appropriate, for educational, cultural and/or historic purposes. If human remains and/or grave goods are discovered or recognized at the Project Site, all ground disturbance shall immediately cease, and the county coroner shall be notified per Public Resources Code Section 5097.98, and Health & Safety Code Section 7050.5. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2).</p> <p>Work may continue on other parts of the Project Site while evaluation and, if necessary, mitigation takes place in accordance with CEQA Guidelines Section 15064.5(f). If the resource is determined by the qualified archaeologist and tribal monitor to be a non-Native American resource the applicant would be required to implement MM CUL-1.</p>					

5.0 FINAL INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

EXISTING SETTING

Project Site

The Project site is comprised of two areas, the Fire Station No. 1 and Headquarters site, and the Water Street-separated parking lot area, as follows:

Fire Station No. 1 Headquarters

The site of the new Orange Fire Station No. 1 and Headquarters (or main Project site), approximately 1.52 acres in area, is located on 105 S. Water Street, approximately 417 feet east of the boundary of the Old Towne Orange Historic District (see Figure 1 and Figure 2). The site of the parking lot (parking site) for the Fire Department is located diagonally across the southwest corner of the site, across Water Street. The main Project site is bordered by East Chapman Avenue on the north, South Jameson Street on the east, the City of Orange Department of Water on the south and South Water Street on the west. Chapman Avenue, lined by historic buildings, is considered the gateway to the Old Towne Historic District and leads to the Plaza. Currently, the main Project site is unpaved, graded with little to no vegetation, and is vacant except for an existing storage building onsite. There are multiple parcels that occur on the site and a Tentative Parcel Map is proposed to merge all the parcels into a single parcel. The General Plan Land Use Element designation for this site is Public Facilities and Institutions (PFI). The Project site is zoned as Office Professional (O-P) and Single Family Residential (R-1-6). The Project proposes a zone change of the site to Public Institution (P-I) to better reflect the existing nature of the land uses in the neighborhood and to ensure that the Proposed Project is consistent with the General Plan. Surrounding land uses and zoning of nearby properties are as follows:

- North: The northern vicinity to the main Project site has a General Plan land use designation of Neighborhood Office Professional (NOP) (Maximum FAR 0.5) and is zoned Office Professional (O-P). The existing uses are one to two-story office buildings, including therapy centers, escrow service offices, pharmacies and assisted living facilities.
- South: The southern vicinity to the main Project site has General Plan land use designations of Public Facilities and Institutions (PFI) (Maximum FAR 0.5 and 2.0 respectively) and Low Medium Residential (LMDR) (6-15 DU/AC). The area is zoned Public Institution (P-I) and Single Family Residential (R-1-6). The existing uses include one-story single-family residential buildings, parking lots and the City of Orange Water Division.
- East: The eastern vicinity to the main Project site has General Plan land use designations of Neighborhood Office Professional (NOP) (Maximum FAR 0.5) and Low Density Residential (LDR) (2-6 DU/AC). The area is zoned Office Professional (O-P) and Single Family Residential (R-1-6). The existing uses are one-story single-family residential buildings.
- West: The western vicinity to the main Project site has General Plan land use designations of Neighborhood Office Professional (NOP) (Maximum FAR 0.5) and Low

Density Residential (LDR) (2-6 DU/AC). The area is zoned Office Professional (O-P). The existing ground uses are two-story office buildings including dental clinics.

Parking Lot

The site of the parking lot for the Fire Department is approximately 1.23 acres in area, located diagonally across the southwest corner of the site, across Water Street, and will include a reorganization of the existing parking lot, along with the addition of landscaped features and security gates. Currently, the parking site is a combination of asphalt paving and compacted gravel, fenced, with a few small trees and shrubs on site. The site of the proposed parking lot has a Low Density Residential (LDR) (2-6 DU/AC) General Plan land use designation and is zoned Single Family Residential (R-1-6). Surrounding land uses and zoning categories are as follows:

- North: The Northern vicinity to the parking site has a General Plan land use designation of Neighborhood Office Professional (NOP) (Maximum FAR 0.5) and is zoned Office Professional (O-P). The existing uses are a two-story office building, housing dental offices.
- South: The southern vicinity to the parking site has General Plan land use designations of Low Medium Residential (LMDR) (6-15 DU/AC). The area is zoned Residential Duplex Single-story overlay (R-2-6 A), Multiple Family Residential (R-3). The existing ground uses are one-story single-family residential buildings.
- East: The eastern vicinity to the parking site has General Plan land use designations of Public Facilities and Institutions (PFI) (Maximum FAR 0.5 and 2.0 respectively). The area is zoned Public Institution (P-I). The existing ground use is the City of Orange Water Division.
- West: The western vicinity to the parking site has General Plan land use designations of Low Density Residential (LDR) (2-6 DU/AC). The area is zoned Single Family Residential (R-1-6). The existing ground uses are one-story single-family residences and parking lots.

PROJECT DESCRIPTION

Background:

The Orange City Fire Department was established on December 14, 1905, at a meeting of the City's Fire and Water Committee to organize a volunteer fire department. At the present day, the Fire Department houses eight fire stations, two Battalion Chief vehicles, seven front line fire engines (also called "pumpers"), one front line fire truck (also called a "ladder truck"), one front line quintuple combination pumper (also referred to as a "quint"), one front line Urban Search and Rescue truck, four front line rescue ambulances, two front line Type 3 wildland fire engines, four reserve fire engines, one reserve fire truck, four reserve rescue ambulances, one small spill unit, one rehab unit, eight utility vehicles, eight Command Staff vehicles and nine Fire Prevention staff vehicles. The Fire Department's responsibilities include fire suppression, expanded advanced life support and medical transportation, increased responses for hazardous materials and environmental monitoring, technical rescue operations including urban search and rescue, swift water rescue, confined space and trench rescue, disaster preparedness, public education, fire prevention and fire/arson investigation.

Fire Station No. 1 includes protection for the Old Towne Orange Historic District, Chapman University, and stretches of the State Route (SR) 55 and SR-22 freeways. Fire Station No. 1 serves as the Department's Headquarters, which has offices for the Command staff, Administrative staff, and Fire Prevention staff. It also has the provisions to operate as a backup Emergency Operations Center, Regional Occupational Program's Fire Program classroom; contains a mapping room for creating and maintaining the department's mapping system, a uniform storage room, self-contained breathing apparatus maintenance room, arson investigation lockup, and additional rooms that are used for equipment storage, rope storage, and sewing. A portable trailer, present on site, is used as a conference room for the Fire Department. Additionally, the Orange City Fire Department's stations, including the Fire Station No. 1 and Headquarters, provide coverage for each other and county-wide when resources are unavailable, based on availability and mutual agreements, respectively. The new Fire Headquarters and Fire Station No. 1 will accommodate the above mentioned existing facilities along with an exercise room, ready room, dorm spaces, study/library, turn-out room, extractor room, kitchen, training classroom, lockers, storage, and additional conference rooms.

A Non-Significant Environmental Impact Declaration form filed by the City of Orange in 1973 shows that the Project site historically housed State and County fire apparatus repair shops, warehouse, offices outfitting and storage buildings along with State Division of Forestry residences and gasoline and diesel dispensing pumps. The facility suffered destruction by fire in the late 1980s, which resulted in a hazardous material discharge (gasoline) in the site. Soil Vapor Extraction method was applied as a remedial measure to mitigate the negative impacts. Presently, the Project site has undergone hazardous material clean-up review to ensure no residual gasoline discharge is present on the site.

Project Description:

The Proposed Project includes Fire Station No. 1, which will be approximately 16,574 square feet in size, as well as an attached two-story Headquarters which will include approximately 11,353 square feet of space. The two-story Headquarters building would be 30 feet 8 inches in height, with its exhaust tower structure reaching a height of 33 feet 3 inches; the apparatus room of the Fire Station No. 1 would be 24 feet in height. In addition, the existing storage building located on the site will be retrofitted and refurbished and will provide approximately 3,780 square feet of space to serve as Reserve Apparatus storage for the new facility. The retrofitting would include replacement of the interior slab, reskinning the building exterior with new metal panels and addition of new lighting.

The Proposed Project will include the following components for Fire Station No. 1:

- Apparatus room with room for two engines, a truck, a rescue vehicle, and a battalion vehicle. The room will have three bays with shutters and three internal doors.
- Exercise room
- Fire station offices
- Ready room to allow for the crew and staff to quickly respond to the apparatus.
- Restrooms
- Dorm spaces

- Study/library
- Turn-out room to place turnout gear at the station prior to decontamination and be stored afterward
- Extractor room to house commercial grade washer-extractors and dryers dedicated to cleaning Personal Protective Equipment (PPE)
- Kitchen

The Proposed Project will include the following components for the Fire Headquarters:

- Administration space for the Headquarters including offices and workstations
- Training classroom
- Lockers
- Storage
- Conference rooms

The Proposed Project will have a Reserve Apparatus storage facility to store additional vehicles and for disaster equipment storage, proposed to be housed within the retrofitted storage building. The parking lot for the Proposed Project will be located across Water Street to the west and will consist of two ungated visitor spots, two automated security gates, and approximately 54 gated staff parking stalls. Both the main Project site and the parking site would have associated lighting and 6-foot high perimeter fencing, constructed of masonry and steel tubes. The wall on the east side of the proposed staff parking lot that is located on the southeast corner of the Fire Station site will be a 7.7-foot high concrete masonry unit wall. This will also function as a sound wall and any doors installed in the wall will be solid doors with self-closing hinges. Additionally, as a measure of sound proofing, a sound enclosure will be installed on the proposed emergency generator that is depicted in Figure 3. The Proposed Project would also include necessary utility upgrades including, but not limited to, sewer, stormwater, dry utilities and solid waste management.

Architecture

The architecture of the Orange Fire Station No. 1 and Headquarters has been designed to reflect the Spanish Revival style found throughout the Old Towne Orange Historic District (see Figure 5 and Figure 6, below). The two-story building would have an offset massing that steps back from the street as the building increases in height. The roof would be a combination of flat parapet areas flanked by low-sloped mansards. Concrete roofing tiles, designed to simulate clay, would be used on all sloped roof areas. The west side would feature a second-story arcade element and a heavy-timber pergola to help break up the massing. Window and door openings, with charcoal gray frames, would occur symmetrically at exterior planes, at regular intervals. The exterior finish is primarily composed of a smooth, cream-colored stucco, terracotta-colored brick veneer and cast concrete panels. Decorative wrought iron details, period style lighting, and a small tower element at the main entrance would help complete the historic styling.

Landscaping

All the existing trees would be retained and protected on site, including the pine tree at the parking site. Two Ficus trees on Chapman Avenue, however, would be removed. Once

constructed, the site perimeter will be landscaped with trees and shrubs at appropriately regularly-spaced intervals. Trees include Magnolias at the Chapman Avenue-facing frontage, Natchez Crape Myrtle trees facing Water and Jameson Streets, Goldenrain trees at the visitor parking lot, and Brisbane Box trees between the site and southern boundary where the water yard begins. Shrubs include a variety mixed with accent plantings and groundcover as specified on the landscape plan.

Circulation and Parking

The Proposed Project intends to retain the existing circulation patterns (automobile and pedestrian) and sidewalks around the site. Currently, there are no existing or planned bicycle lanes or related facilities on Chapman Avenue or Water Street. The response driveway for Fire Station No. 1 will take access from Chapman Avenue. Stop signs and emergency warning systems will be installed along Chapman Avenue and Water Street to ensure safe egress from the site. The Fire Department vehicles will return to the station via Water Street and will stage to exit directly onto Chapman Avenue via the response driveway. Pedestrian access to Fire Station No. 1 and Headquarters will be located at the northeast corner of the building at the Chapman Avenue and Water Street intersection.

Staff and visitor vehicles would access the Fire Station No. 1 and Headquarters site off of Water Street. The Project facility would also have a gated staff parking and unsecured visitor parking accessible from Water Street. The parking site, located across Water Street from the main Project site, would have a secured entrance on Water Street, facing the Proposed Project site. In addition, a secured ingress/egress point would be provided on the western edge of the parking lot. The western ingress/egress access will feed the empty lot to the west of the Parking site. There are currently no plans for this empty lot; it is currently leased to store car dealership vehicles; this may or may not continue in the future. The staff and visitors, using the associated parking lot, would make a pedestrian crossing over Water Street to gain access to the Fire Station No. 1 and Headquarters site. However, due to the residential and business nature of the land uses along Water Street, a vehicular speed limit of 25 mph and the street not being a busy thoroughfare, the Project does not assume a requirement for a signaled crosswalk.

Project Design Features:

Project Design Feature 1:

The Project applicant shall construct a minimum 7.7-foot concrete masonry unit wall that is depicted on the proposed site plan and is located on the east side of the proposed staff parking lot that is located on the southeast corner of the Fire Station Site. Any doors installed in the wall shall be solid doors with self-closing hinges.

Project Design Feature 2:

The Project applicant shall install a sound enclosure on the proposed emergency generator that is depicted on the proposed site plan. The sound enclosure shall be no less effective than a Level 1 Sound Enclosure provided by Generac.

Project Schedule:

The Proposed Project is expected to break ground in January 2021 and be completed by July 2022. Construction activities will take place between the hours of 7:00 a.m. and 8:00 p.m. on any day except for Sunday or a Federal holiday, or between the hours of 9:00 a.m. and 8:00 p.m. on Sunday or a Federal holiday.

Construction Activities:

Once the Proposed Project has been approved by the City, Project construction activities could begin in January 2021 and take approximately 19 months. The site is currently graded with little to no vegetation on site. The construction staging area will be located in the parking lot site.

Construction equipment to be used during construction of the Proposed Project include the following items:

- Loaders
- Pick-up trucks
- Backhoe
- Water Truck
- Crane
- Asphalt paver
- Excavators

Figure 1: Project Vicinity

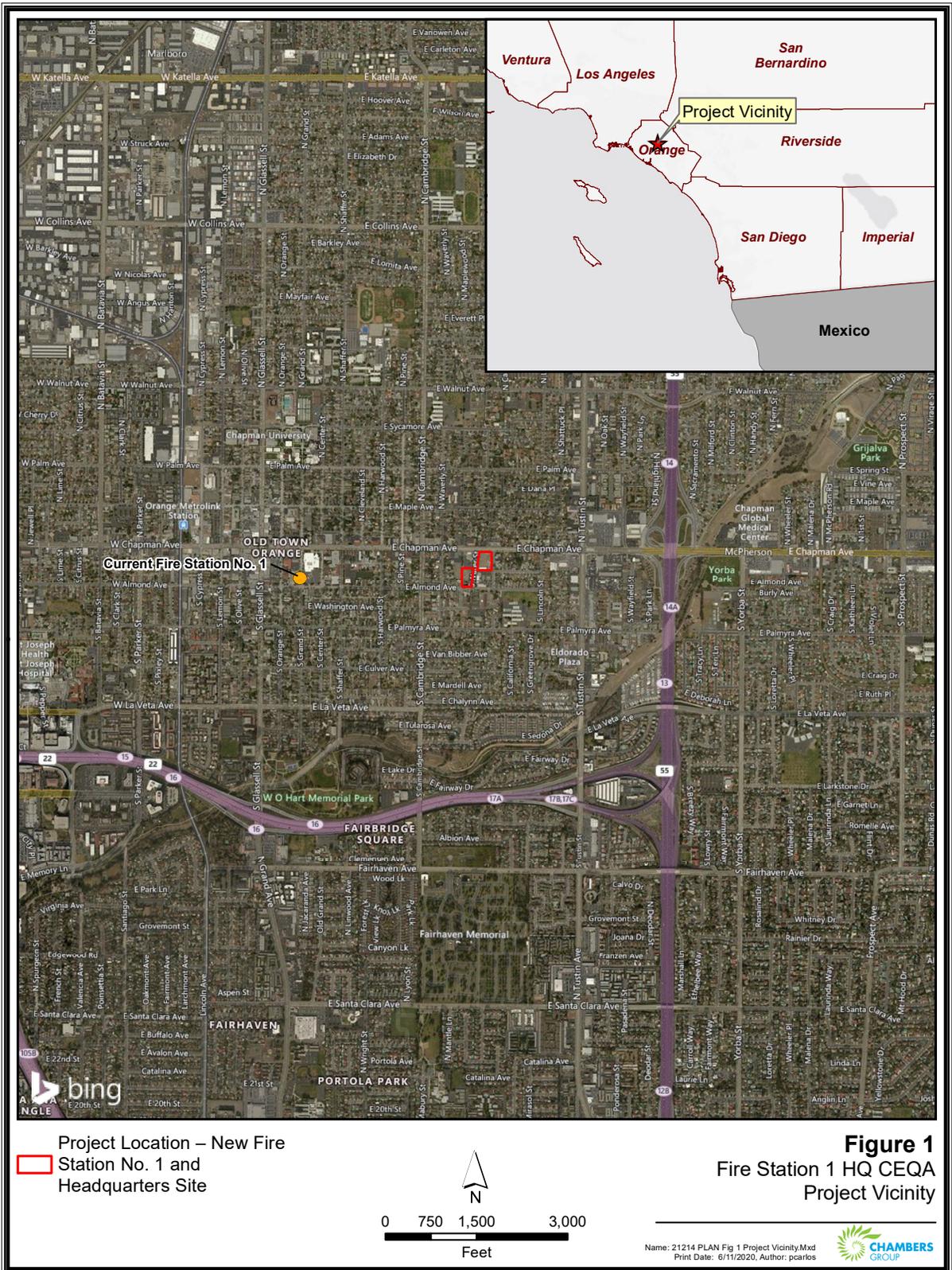


Figure 2: Project Location

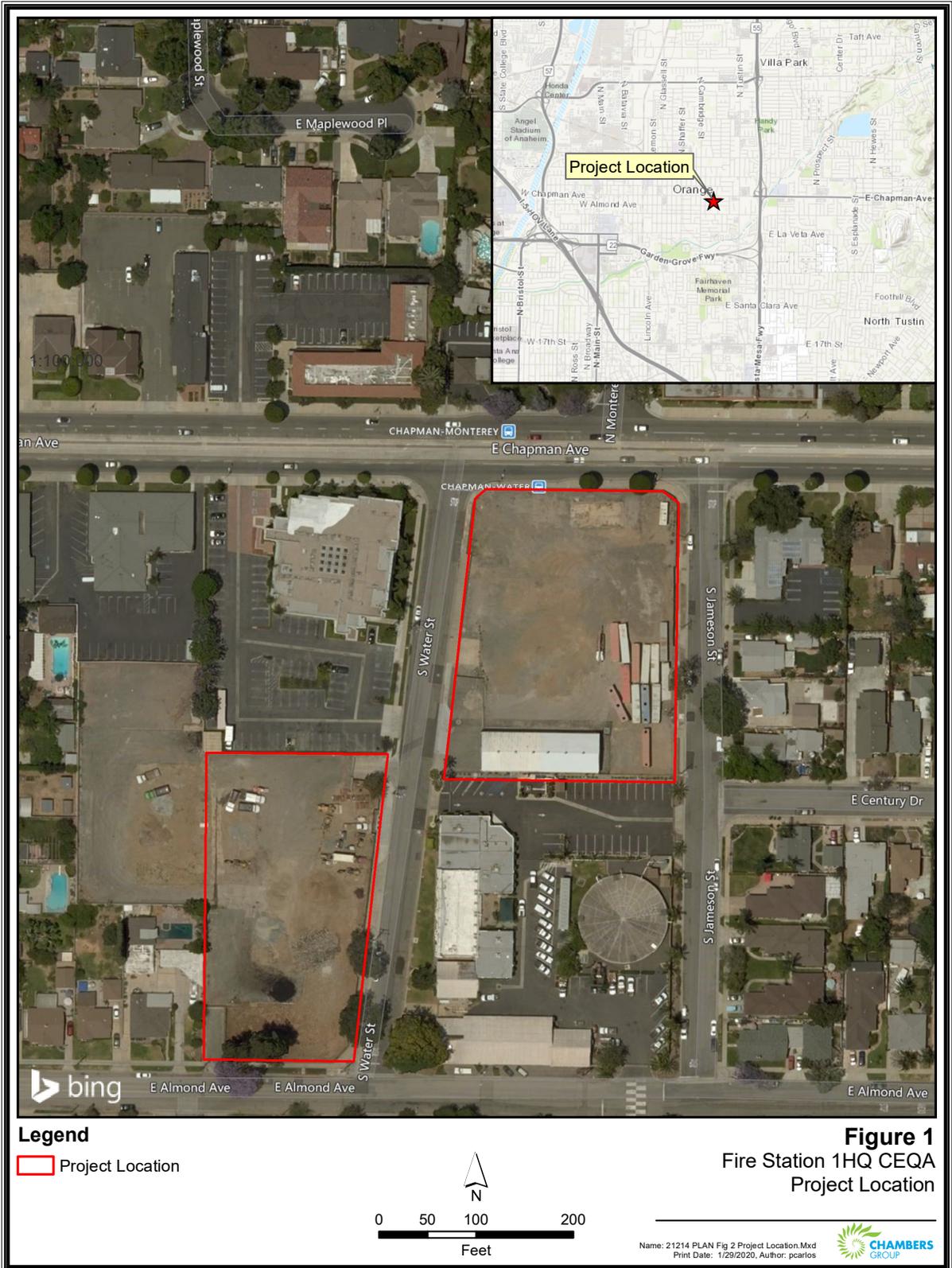


Figure 3: Project Site Plan

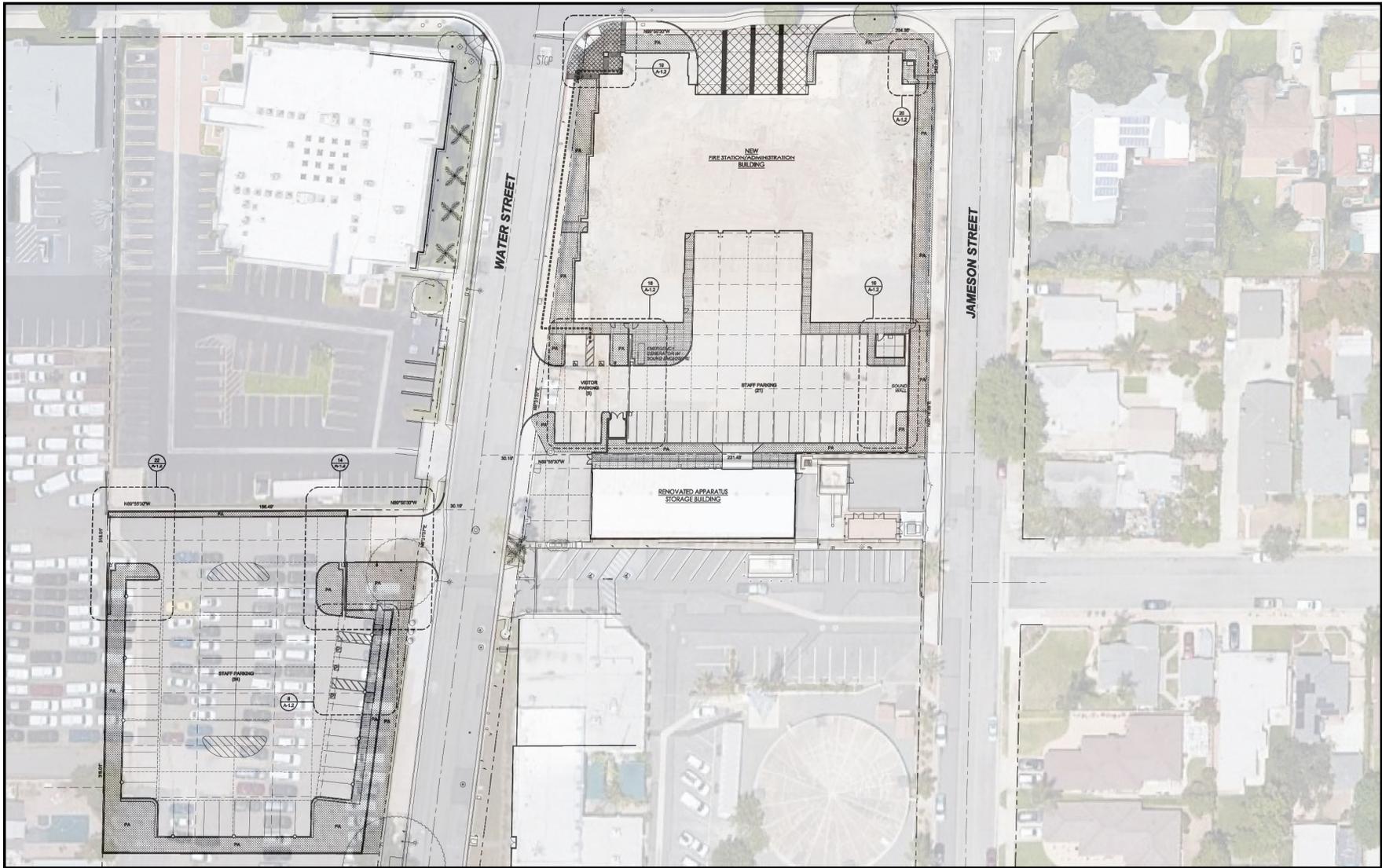


Figure 3
Fire Station 1HQ CEQA
Site Plan

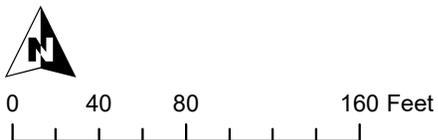


Figure 4: Parking Lot Plan



Figure 4
Fire Station 1HQ CEQA
Parking Lot Plan

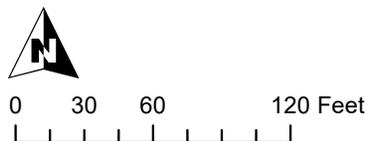


Figure 5: Elevation Drawings



EAST ELEVATION

Figure 5
Fire Station 1HQ CEQA
Proposed Elevations

Name: 21214 PLAN Fig 5 Proposed Elevations.Mxd
Print Date: 5/15/2020, Author: pcarlos



Figure 6: Elevation Drawings (part 2)



Figure 6
Fire Station 1HQ CEQA
Proposed Elevations

Name: 21214 PLAN Fig 6 Proposed Elevations.Mxd
Print Date: 6/19/2020, Author: pcarlos



REQUIRED AGENCY PERMITS, APPROVALS, AND COORDINATION:

The City of Orange (City) is the lead agency under the California Environmental Quality Act (CEQA), and is responsible for planning and implementing the Proposed Project. This environmental document is intended to meet the requirements of CEQA for all discretionary actions taken by the City related to the Proposed Project including, but not limited to, approval of preliminary project plans, approval of final plans and specifications, authorization to bid the project for construction, and authorization to award the construction contract.

Because a project also involves approvals, permits or authorization from other agencies, these agencies are “Responsible Agencies” under CEQA. Section 15381 of the State CEQA Guidelines defines Responsible Agencies as public agencies other than the Lead Agency that will have discretionary approval power of a project, including mitigation.

No responsible or trustee agencies have been identified, as no other agency approvals are anticipated to be required due to Project implementation. Cooperating agencies include:

- City of Orange Fire Department – approval of site plan/access
- County of Orange Planning & Development – Tentative Parcel Map recording
- Regional Water Quality Control Board – approval of SWPPP

SCHEDULED PUBLIC MEETINGS OR HEARINGS:

Adjourned Regular Meeting of the Planning Commission:

- August 17, 2020
- 7:00 p.m. or as soon thereafter as the matter may be heard
- Please refer to the August 17, 2020, Planning Commission agenda to be posted on the City’s website at www.cityoforange.org for location details and updates.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.

- | | | |
|--|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture & Forest Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input checked="" type="checkbox"/> Geology/Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials |
| <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Wildfire | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION. On the basis of this initial evaluation:

1. I find that the Project **could not** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
2. I find that although the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
3. I find the Proposed Project **may have a significant effect** on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
4. I find that the Proposed Project **may have a “potentially significant impact” or “potentially significant unless mitigated impact”** on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.
5. I find that although the Proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or Negative Declaration pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or Negative Declaration, including revisions or mitigation measures that are imposed upon the Proposed Project, nothing further is required.



 Eduardo Lopez, Senior Civil Engineer

6/24/2020

 Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to Projects like the one involved (e.g., the Project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on Project-specific factors as well as general standards (e.g., the Project will not expose sensitive receptors to pollutants, based on a Project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as Project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
4. “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact”. The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from earlier analyses may be cross-referenced, as discussed below).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c)(3)(D). In this case, a brief discussion should identify the following:
 - a. Earlier Analysis Used. Identify and state where they are available for review.
 - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c. Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated”, describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the Project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a Project’s environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
 - a. the significance criteria or threshold, if any, used to evaluate each question; and
 - b. the mitigation measure identified, if any, to reduce the impact to less than significance.

CHECKLIST OF ENVIRONMENTAL IMPACT ISSUES:

1. AESTHETICS

Except as provided in Public Resources Code Section 21099, would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the Project is in an urbanized area, would the Project conflict with applicable zoning or other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact Analysis

a) The City of Orange General Plan characterizes portions of the City as scenic vistas that include hillsides, ridgelines, or open space areas that provide a unifying visual backdrop to the urban environment. These “viewsheds” contribute to the City’s identity and quality of life. However, no such scenic vistas are identified in the immediate vicinity of the Proposed Project site (City of Orange 2010a). Views from the existing residents and businesses adjacent to the Proposed Project site is largely built out, fully urbanized, and consists mostly of one to two story residential, commercial, and institutional buildings. Thus, no significant impact to any scenic vistas are anticipated due to the construction and operation of the Proposed Project.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

b) There are no State scenic highways within the City of Orange; the City does not contain any designated scenic resources such as rock outcroppings or trees within or adjacent to a State scenic highway. Policy 7.2 of the Natural Resources Element of the City of Orange General Plan designates Santiago Canyon Road, to the east of Jamboree Road, as a City scenic highway (City of Orange 2010a). However, Santiago Canyon Road is approximately 4.5 miles away and out of the viewshed of the Proposed Project site. Furthermore, while the Proposed Project site is within 500 feet of the Old Towne Orange Historic District, the site itself is vacant except for an existing storage building and does not contain any designated historic structures (Google Map 2020). Potential impacts to historic structures on the Project site are analyzed in Section 5, Cultural Resources of this IS/MND. Additionally, no scenic rock outcroppings are located within the Project limits. No impact is anticipated.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

c) As discussed in Response 1(a), the Proposed Project site is located in an urbanized part of the City of Orange with no scenic vistas designated in its vicinity. Currently, the Project site is vacant except for an existing storage building, with sparse vegetation and the site of the future parking lot is currently operated as a combination asphalt and compacted gravel parking lot with no defined landscaping or lot demarcations. The construction of the Proposed Project would not degrade the existing visual character because the vacant parcels would be developed with structures consistent with surrounding uses and associated landscaping.

The Project site is located approximately 0.1 miles east of the Old Towne Orange Historic District. The architecture of the Proposed Project would be designed in a way to be harmonious with the architecture present in the Historic District and with the Historic Preservation Standards for Old Towne. As described in the Project Description of this document, the architecture of the Proposed Project has been designed to reflect the Spanish Revival style found throughout the Old Towne Orange Historic District. Further, the Proposed Project buildings would be congruous with the design guidelines established for the Old Towne Orange Historic District, and any other applicable regulations governing scenic quality to maintain visual consistency with the other buildings in the neighborhood. Based upon the proposed site design, the Project does not represent an adverse impact to the existing visual character and conditions of the surrounding area, and therefore would not degrade the visual character or quality of the surrounding area. Impacts would be less than significant.

Significance Determination: Less Than Significant.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant.

d) Existing light sources from the areas around the Proposed Project consist of lights from the vehicles, businesses and residences in the vicinity of the Project site. No lighting is currently located within the vacant main Project site parcel. Any lighting on that parcel would be spillover from neighboring buildings. The parking lot site currently functions as a parking area for the offices in the vicinity and consists of nominal associated lighting. During construction, the Proposed Project would generate light and glare from the presence and operation of vehicles and equipment. Construction would be scheduled between the hours of 7:00 a.m. and 8:00 p.m. on any day except for Sunday or a Federal holiday, or between the hours of 9:00 a.m. and 8:00 p.m. on Sunday or a Federal holiday; no construction activities would occur during nighttime hours.

Once operational, the Proposed Project would include new permanent lighting from outdoor building lights and security lighting for the parking area. While the Proposed Project would include installation of new permanent lighting, this type of lighting would be consistent with lighting offered at the existing buildings within the area. The Proposed Project would comply with Orange Municipal Code (OMC), Section 17.12.030 (see below), which addresses general lighting guidelines for day and nighttime uses of buildings of all the districts and would include any shielding or barriers to minimize spill over into other businesses and residences. Impacts would be less than significant.

OMC Section 17.12.030 - Lighting.

A Lighting on any premises shall be directed, controlled, screened or shaded in such a manner as not to shine directly on surrounding premises. Furthermore, lighting on any residential property shall be controlled so as to prevent glare or direct illumination of any public sidewalk or thoroughfares.

Significance Determination: Less Than Significant.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant.

2. AGRICULTURE & FOREST RESOURCES

(In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland.) In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.) *Would the Project:*

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impact Analysis:

a) The Farmland Mapping and Monitoring Program (FMMP) administered by the California Department of Conservation produces maps and statistical data to analyze impacts on California’s agricultural resources. Agricultural land is rated according to soil quality and irrigation status. The Proposed Project site is categorized as ‘Urban and Built-Up Land’ as part of the FMMP due to its location in an urban residential neighborhood in the City of Orange in Orange County (California Department of Conservation 2016). The California Department of Conservation defines ‘Urban and Built-Up Land’ as land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel including residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures. Thus, the Proposed Project would not convert Prime Farmland, or Farmland of Statewide Importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. No impact would occur.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

b) The main Project site parcels, currently zoned Office Professional (O-P) and Single Family Residential (R-1-6), are proposed to be amended to Public Institution (P-I). The parking site is zoned

as Single Family Residential (R-1-6) and will retain the same designation throughout the Proposed Project activities. None of the parcels are in a Williamson Act contract or conflict with any existing agricultural use (City of Orange 2016). No impact would occur.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

c) The Proposed Project site, per the current zoning of O-P and R-1-6, is intended for the development of single-family residences and professional offices, with limited retail and service commercial uses, permitted only when clearly incidental to the permitted primary office use. After the proposed zoning amendment of the main Project site to Public Institution (P-I), the site will accommodate a wide range of public and quasi-public uses, conditional on its compatibility with its surrounding uses (City of Orange 2016). The parking site will remain zoned as R-1-6, and would not have any impact to zoned forest land or timberland. The site is not currently and will not, in the future, be zoned for forest land or timberland; the Proposed Project thus would not result in the conversion of any farmland or forest land to another use. No impact would occur.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

d) As noted in Impact 2(c), the Proposed Project site, located in an urbanized neighborhood in the City, is currently zoned for single-family and professional office uses and will be zoned for public or quasi-public uses after the proposed zone change. Neither of the zoning districts account for forest land or timberland (City of Orange 2016). No forest land would be lost or converted to non-forest uses for the purpose of the Proposed Project. No impact would occur.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

e) The Proposed Project includes Fire Station No. 1, which will be approximately 16,574 square feet in size, as well as a two-story Headquarters which will include approximately 11,353 square feet of space. In addition, an existing prefabricated steel storage building will be retrofitted, and will provide approximately 3,780 of Reserve Apparatus storage space. The Proposed Project buildings are sited on a currently vacant and graded City-owned lot, less than a mile away from the current Fire Department Headquarters. The Proposed associated parking is located at the site of an existing parking lot, across Water Street. No changes are anticipated in the existing environment during construction or operation, which could result in conversion of Farmland, to nonagricultural use or the conversion of forest land to non-forest use. No impact would occur.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

3. AIR QUALITY

(Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.) *Would the Project:*

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Introduction:

The following analysis is based on the technical air quality study prepared by Vista Environmental, dated June 22, 2020 (Appendix A).

Environmental Setting

The Proposed Project site is located in the City of Orange in Orange County. The Proposed Project site is located within the South Coast Air Basin (Air Basin), and air quality regulation is administered by the South Coast Air Quality Management District (SCAQMD). The SCAQMD implements the programs and regulations required by the federal and State Clean Air Acts.

Regulatory Setting

The Proposed Project site lies within the Air Basin, which is managed by the SCAQMD. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) have been established for the following criteria pollutants: carbon monoxide (CO), ozone, sulfur dioxide (SO₂), nitrogen dioxide (NO₂), inhalable particulate matter (PM₁₀), fine particulate matter (PM_{2.5}), and lead. The CAAQS also set standards for sulfates, hydrogen sulfide, and visibility.

Areas are classified under the Federal Clean Air Act as either “attainment” or “nonattainment” areas for each criteria pollutant, based on whether the NAAQS have been achieved or not. Attainment relative to the State standards is determined by the California Air Resources Board (CARB). The Air Basin has been designated by the Federal Environmental Protection Agency (EPA) as a nonattainment area for O₃ and PM_{2.5}. Currently, the Air Basin is in attainment with the NAAQS for CO, SO₂, NO₂, and PM₁₀. The Air Basin is designated as partial nonattainment for lead based on data from two source-specific monitors in Vernon and the City of Industry that are both near battery recycling facilities.

The EPA has designated the Air Basin as extreme nonattainment for the 8-hour average ozone standard. The SCAQMD, the agency principally responsible for comprehensive air pollution control in the Air Basin, adopted the 2016 Air Quality Management Plan (AQMP) in March 2016 that provides measures to reduce 8-hour ozone levels to below the federal standard by 2037.

Additionally, the EPA has designated the Air Basin as nonattainment for PM_{2.5}. PM_{2.5} is a subset of the PM₁₀ emissions whose standards were developed to complement the PM₁₀ standards that cover a full range of inhalable particle matter. For the PM₁₀ health standards, the annual PM₁₀ standard was revoked by the EPA on October 17, 2006; and the 24-hour average PM₁₀ attainment status for the Air Basin was redesignated to attainment (maintenance) on July 26, 2013.

The Air Basin has been designated by CARB as a nonattainment area for ozone, NO₂, PM₁₀, and PM_{2.5}. Currently, the Air Basin is in attainment with the State ambient air quality standards for CO, SO₂, and sulfates and is unclassified for visibility-reducing particles and hydrogen sulfide. The adopted AQMPs provide measures to meet the State standards for ozone, NO₂, PM₁₀, and PM_{2.5}. Table 1 presents the designations and classifications applicable to the Proposed Project area.

Table 1: South Coast Air Basin Attainment Status

Criteria Pollutant	Standard	Averaging Time	Designation ^{a)}	Attainment Date ^{b)}
1-Hour Ozone ^{c)}	NAAQS	1979 1-Hour (0.12 ppm)	Nonattainment (Extreme)	2/6/2023 (revised deadline)
	CAAQS	1-Hour (0.09 ppm)	Nonattainment	N/A
8-Hour Ozone ^{d)}	NAAQS	1997 8-Hour (0.08 ppm)	Nonattainment (Extreme)	6/15/2024
	NAAQS	2008 8-Hour (0.075 ppm)	Nonattainment (Extreme)	8/3/2038
	NAAQS	2015 8-Hour (0.070 ppm)	Pending – Expect Nonattainment (Extreme)	Pending (beyond 2032)
	CAAQS	8-Hour (0.070 ppm)	Nonattainment	Beyond 2032
CO	NAAQS	1-Hour (35 ppm) 8-Hour (9 ppm)	Attainment (Maintenance)	6/11/2007 (attained)
	CAAQS	1-Hour (20 ppm) 8-Hour (9 ppm)	Attainment	6/11/2007 (attained)
NO ₂ ^{e)}	NAAQS	2010 1-Hour (0.10 ppm)	Unclassifiable/ Attainment	N/A (attained)
	NAAQS	1971 Annual (0.053 ppm)	Attainment (Maintenance)	9/22/1998 (attained)
	CAAQS	1-Hour (0.18 ppm) Annual (0.030 ppm)	Attainment	---
SO ₂ ^{f)}	NAAQS	2010 1-Hour (75 ppb)	Designations Pending (expect Unclassifiable/ Attainment)	N/A (attained)
	NAAQS	1971 24-Hour (0.14 ppm) 1971 Annual (0.03 ppm)	Unclassifiable/ Attainment	3/19/1979 (attained)
PM ₁₀	NAAQS	1987 24-hour (150 µg/m ³)	Attainment (Maintenance) ^{g)}	7/26/2013 (attained)
	CAAQS	24-hour (50 µg/m ³) Annual (20 µg/m ³)	Nonattainment	N/A
PM _{2.5} ^{h)}	NAAQS	2006 24-Hour (35 µg/m ³)	Nonattainment (Serious)	12/31/2019
	NAAQS	1997 Annual (15.0 µg/m ³)	Attainment (final determination pending)	8/24/2016 (attained 2013)
	NAAQS	2012 Annual (12.0 µg/m ³)	Nonattainment (Moderate)	12/31/2021
	CAAQS	Annual (12.0 µg/m ³)	Nonattainment	N/A
Lead ⁱ⁾	NAAQS	2008 3-Months Rolling (0.15 µg/m ³)	Nonattainment (Partial) (Attainment determination requested)	12/31/2015

Source: Vista Environmental 2020

Notes:

a) U.S. EPA often only declares Nonattainment areas; everywhere else is listed as Unclassifiable/Attainment or Unclassifiable

b) A design value below the NAAQS for data through the full year or smog season prior to the attainment date is typically required for attainment demonstration

- c) The 1979 1-hour O₃ standard (0.12 ppm) was revoked, effective June 15, 2005; however, the Basin has not attained this standard and therefore has some continuing obligations with respect to the revoked standard
- d) The 2008 8-hour ozone NAAQS (0.075 ppm) was revised to 0.070 ppm. Effective 12/28/15 with classifications and implementation goals to be finalized by 10/1/17; the 1997 8-hour O₃ NAAQS (0.08 ppm) was revoked in the 2008 O₃ implementation rule, effective 4/6/15; there are continuing obligations under the revoked 1997 and revised 2008 O₃ until they are attained.
- e) New NO₂ 1-hour standard, effective August 2, 2010; attainment designations January 20, 2012; annual NO₂ standard retained
- f) The 1971 annual and 24-hour SO₂ standards were revoked, effective August 23, 2010; however, these 1971 standards will remain in effect until one year after U.S. EPA promulgates area designations for the 2010 SO₂ 1-hour standard. Area designations are still pending, with Basin expected to be designated Unclassifiable /Attainment.
- g) Annual PM₁₀ standard was revoked, effective December 18, 2006; 24-hour PM₁₀ NAAQS deadline was 12/31/2006; SCAQMD request for attainment redesignation and PM₁₀ maintenance plan was approved by U.S. EPA on June 26, 2013, effective July 26, 2013.
- h) The attainment deadline for the 2006 24-Hour PM_{2.5} NAAQS was 12/31/15 for the former “moderate” classification; EPA approved reclassification to “serious”, effective 2/12/16 with an attainment deadline of 12/31/19; the 2012 (proposal year) annual PM_{2.5} NAAQS was revised on 1/15/13, effective 3/18/13, from 15 to 12 µg/m³; new annual designations were final 1/15/15, effective 4/15/15; on July 25, 2016 EPA finalized a determination that the Basin attained the 1997 annual (15.0 µg/m³) and 24-hour PM_{2.5} (65 µg/m³) NAAQS, effective August 24, 2016
- i) Partial Nonattainment designation – Los Angeles County portion of Basin only for near-source monitors. Expect to remain in attainment based on current monitoring data; attainment re-designation request pending.

Monitored Air Quality

The air quality at any site is dependent on the regional air quality and local pollutant sources. Regional air quality is determined by the release of pollutants throughout the Air Basin. The 2016 AQMP found that since 2012 AQMP Projections were made stationary source VOC emissions have decreased by approximately 12 percent, but mobile VOC emissions have increased by 5 percent. The percentage of NO_x emissions remain unchanged between the 2012 and 2016 Projections.

SCAQMD has divided the Air Basin into 38 air-monitoring areas with a designated ambient air monitoring station representative of each area. The Project site is located on the northwestern edge of Air Monitoring Area 21, which covers the southeastern portion of Orange County. The nearest air monitoring station to the Project site is the Anaheim-Pampas Lane Monitoring Station (Anaheim Station), which is located approximately 6.5 miles west of the Project site at 1630 Pampas Lane, Anaheim. The monitoring data is presented in Table 23 and shows the most recent three years of monitoring data from CARB. CO measurements have not been provided, since CO is currently in attainment in the Air Basin and monitoring of CO within the Air Basin ended on March 31, 2013.

Table 2: Local Area Air Quality Monitoring Summary

Pollutant (Standard)	Year ¹		
	2016	2017	2018
Ozone: ¹			
Maximum 1-Hour Concentration (ppm)	0.103	0.090	0.112
Days > CAAQS (0.09 ppm)	2	0	1
Maximum 8-Hour Concentration (ppm)	0.074	0.076	0.071
Days > NAAQS (0.070 ppm)	4	4	1
Days > CAAQs (0.070 ppm)	0	2	0
Nitrogen Dioxide: ¹			
Maximum 1-Hour Concentration (ppb)	64.3	81.2	66.0
Days > NAAQS (100 ppb)	0	0	0
Days > CAAQS (180 ppb)	0	0	0

Pollutant (Standard)	Year ¹		
	2016	2017	2018
Inhalable Particulates (PM10):¹			
Maximum 24-Hour National Measurement (ug/m ³)	74.0	95.7	94.6
Days > NAAQS (150 ug/m ³)	0	0	0
Days > CAAQS (50 ug/m ³)	3	5	2
Annual Arithmetic Mean (AAM) (ug/m ³)	28.0	26.9	27.7
Annual > NAAQS (50 ug/m ³)	No	No	No
Annual > CAAQS (20 ug/m ³)	Yes	Yes	Yes
Ultra-Fine Particulates (PM2.5):¹			
Maximum 24-Hour National Measurement (ug/m ³)	44.4	53.9	63.1
Days > NAAQS (35 ug/m ³)	1	7	7
Annual Arithmetic Mean (AAM) (ug/m ³)	9.4	ND	12.3
Annual > NAAQS and CAAQS (12 ug/m ³)	No	ND	No

Source: Vista Environmental 2020

Notes: Exceedances are listed in **bold**. CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard; ppm = parts per million; ppb = parts per billion; ND = no data available.

¹ Data obtained from the Anaheim Station.

Impact Analysis:

a) The Proposed Project would not conflict with or obstruct implementation of the SCAQMD Air Quality Management Plan (AQMP). The following discussion elaborates on the Proposed Project's consistency with the SCAQMD AQMP.

SCAQMD Air Quality Management Plan

The purpose of this analysis is to set forth the issues regarding consistency with the assumptions and objectives of the AQMP and discuss whether the Proposed Project would interfere with the region's ability to comply with federal and State air quality standards. If the decision-makers determine that the Proposed Project is inconsistent, the lead agency may consider Project modifications or inclusion of mitigation to eliminate the inconsistency.

The SCAQMD CEQA Handbook states that "New or amended GP Elements (including land use zoning and density amendments), Specific Plans, and significant Projects must be analyzed for consistency with the AQMP." Strict consistency with all aspects of the plan is usually not required. A proposed project should be considered to be consistent with the AQMP if it furthers one or more policies and does not obstruct other policies. The SCAQMD CEQA Handbook identifies two key indicators of consistency:

- (1) Whether the Project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
- (2) Whether the Project will exceed the assumptions in the AQMP, or increments based on the year of Project buildout and phase.

Both of these criteria are evaluated in the following sections:

Criterion 1 - Increase in the Frequency or Severity of Violations?

Based on the air quality modeling analysis contained in Appendix A, short-term regional construction air emissions would not result in significant impacts based on SCAQMD regional thresholds of significance or local thresholds of significance. The ongoing operation of the Proposed Project would generate air pollutant emissions that are inconsequential on a regional basis and would not result in significant impacts based on SCAQMD thresholds of significance discussed. The analysis for long-term local air quality impacts showed that local pollutant concentrations would not be Projected to exceed the air quality standards. Therefore, a less than significant long-term impact would occur, and no mitigation would be required.

Therefore, based on the information provided above, the Proposed Project would be consistent with the first criterion.

Criterion 2 - Exceed Assumptions in the AQMP?

Consistency with the AQMP assumptions is determined by performing an analysis of the Proposed Project with the assumptions in the AQMP. The emphasis of this criterion is to ensure that the analyses conducted for the Proposed Project are based on the same forecasts as the AQMP. The AQMP is developed through use of the planning forecasts provided in the Southern California Association of Government's (SCAG) Regional Transportation and Sustainable Communities Strategy (RTP/SCS) and the Federal Highway Administration's Federal Transportation Improvement Program (FTIP). The RTP/SCS is a major planning document for the regional transportation and land use network within Southern California. The RTP/SCS is a long-range plan that is required by federal and state requirements placed on SCAG, as the region's Metropolitan Planning Organization (MPO), and is updated every four years. The FTIP provides long-range planning for future transportation improvement Projects that are constructed with state and/or federal funds within Southern California. Local governments are required to use these plans as the basis of their plans for the purpose of consistency with applicable regional plans under CEQA. For this Project, the City of Orange General Plan's Land Use Plan defines the assumptions that are represented in AQMP.

The General Plan Land Use Element designation for the main Project site is Public Facilities and Institutions (PFI) and is currently zoned as Office Professional (O-P) and Single Family Residential (R-1-6). The parking site has a Low Density Residential (LDR) General Plan land use designation and is zoned Single Family Residential (R-1-6). The Proposed Project would include a zone amendment of the main Project site to Public Institution (P-I) to better reflect the existing nature of the land uses in the neighborhood and to ensure that the Proposed Project is consistent with the General Plan. Since the Proposed Project is an allowed land use under the current General Plan land use designation and zoning, the Proposed Project is consistent with the current land use designation and zoning and is not anticipated to exceed the AQMP assumptions for the Project site and is found to be consistent with the AQMP for the second criterion.

Based on the above, the Proposed Project will not result in an inconsistency with the SCAQMD AQMP. Therefore, a less than significant impact will occur in relation to implementation of the AQMP.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

b) The Proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or State ambient

air quality standard. The following section calculates the potential air emissions associated with the construction and operations of the Proposed Project and compares the emissions to the SCAQMD standards.

Construction Emissions

The construction activities for the Proposed Project are anticipated to include demolition and grading of both Project sites, building construction, paving of the onsite driveways, and parking lots, and application of architectural coatings. The construction emissions have been analyzed for both regional and local air quality impacts.

Construction-Related Regional Impacts

The CalEEMod model has been utilized to calculate the construction-related regional emissions from the Proposed Project and the input parameters utilized in this analysis have been detailed in Appendix A. The worst-case summer or winter daily construction-related criteria pollutant emissions from the Proposed Project for each phase of construction activities are shown below in Table 3 and the CalEEMod daily printouts are shown in Appendix A. Since it is possible that building construction, paving, and architectural coating activities may occur concurrently towards the end of the building construction phase, Table 3 also shows the combined regional criteria pollutant emissions from year 2022 building construction, paving and architectural coating phases of construction.

Table 3: Construction-Related Regional Criteria Pollutant Emissions

Activity	Pollutant Emissions (pounds/day)					
	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Demolition¹						
Onsite	1.99	19.70	14.49	0.02	1.86	1.10
Offsite	0.13	2.73	1.13	0.00	0.34	0.01
Total	2.12	22.43	15.62	0.02	2.20	1.11
Grading¹						
Onsite	1.83	20.21	9.76	0.02	3.86	2.36
Offsite	0.06	0.59	0.45	0.00	0.15	0.04
Total	1.89	20.80	10.21	0.00	4.01	2.40
Building Construction (Year 2021)						
Onsite	2.05	16.03	14.56	0.03	0.82	0.78
Offsite	0.17	1.08	1.01	0.00	0.34	0.10
Total	2.22	17.11	15.57	0.03	1.16	0.88
Building Construction (Year 2022)						
Onsite	1.86	14.60	14.35	0.03	0.70	0.67
Offsite	0.12	1.03	0.00	0.00	0.34	0.09
Total	1.98	15.63	14.35	0.03	1.04	0.76
Paving						
Onsite	1.09	9.33	11.68	0.02	0.49	0.45
Offsite	0.05	0.03	0.43	0.00	0.04	0.05
Total	1.14	9.36	12.11	0.02	0.53	0.50
Architectural Coating						
Onsite	13.31	1.41	1.81	0.00	0.08	0.08
Offsite	0.02	0.01	0.14	0.00	0.06	0.02
Total	13.33	1.42	1.95	0.00	0.14	0.10
Combined Building Construction (Year 2022), Paving and Architectural Coatings						

Activity	Pollutant Emissions (pounds/day)					
	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Onsite	16.26	25.34	27.84	0.05	1.27	1.20
Offsite	0.36	2.15	1.58	0.00	0.78	0.26
Total	16.62	27.49	29.42	0.05	2.05	1.46
Maximum Daily Construction Emissions	16.62	27.49	29.42	0.05	4.01	2.40
SCQAMD Thresholds	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Source: Vista Environmental 2020

Notes:

¹ Demolition and Grading based on adherence to fugitive dust suppression requirements from SCAQMD Rule 403.

² Onsite emissions from equipment not operated on public roads.

³ Offsite emissions from vehicles operating on public roads.

Table 3 shows that none of the analyzed criteria pollutants would exceed the regional emissions thresholds during either demolition, grading, or the combined building construction, paving and architectural coatings phases. Therefore, a less than significant regional air quality impact would occur from construction of the Proposed Project.

Construction-Related Local Impacts

Construction-related air emissions may have the potential to exceed the State and federal air quality standards in the Project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Air Basin.

The local air quality emissions from construction were analyzed through utilizing the methodology described in Localized Significance Threshold Methodology (LST Methodology), prepared by SCAQMD, revised October 2009. The LST Methodology found the primary criteria pollutant emissions of concern are NO_x, CO, PM₁₀, and PM_{2.5}. In order to determine if any of these pollutants require a detailed analysis of the local air quality impacts, each phase of construction was screened using the SCAQMD's Mass Rate LST Look-up Tables. The Look-up Tables were developed by the SCAQMD in order to readily determine if the daily onsite emissions of CO, NO_x, PM₁₀, and PM_{2.5} from the Proposed Project could result in a significant impact to the local air quality.

Table 4 shows the onsite emissions from the CalEEMod model for the different construction phases and the calculated localized emissions thresholds that have been detailed in Section 8.2 of Appendix A. Since it is possible that building construction, paving, and architectural coating activities may occur concurrently towards the end of the building construction phase, Table 4 also shows the combined local criteria pollutant emissions from year 2022 building construction, paving and architectural coating phases of construction.

Table 4: Construction-Related Local Criteria Pollutant Emissions

Phase	Pollutant Emissions (pounds/day) ¹			
	NO _x	CO	PM ₁₀	PM _{2.5}
Demolition ²	20.04	14.63	1.90	1.10
Grading ²	20.28	9.82	3.88	2.37
Building Construction (Year 2021)	16.17	14.69	0.86	0.79
Combined Building Construction (Year 2021), Paving and Architectural Coatings	25.61	28.04	1.37	1.23
Maximum Daily Construction Emissions	20.28	14.63	3.88	2.37

Phase	Pollutant Emissions (pounds/day) ¹			
	NOx	CO	PM ₁₀	PM _{2.5}
SCAQMD Local Construction Thresholds³	115	715	6	4
Exceeds Threshold?	No	No	No	No

Source: Vista Environmental 2020.

Notes:

¹ The Pollutant Emissions include 100% of the On-Site emissions (off-road equipment and fugitive dust) and 1/8 of the Off-Site emissions (on road trucks and worker vehicles), in order to account for the on-road emissions that occur within a ¼ mile of the Project site.

² Demolition and Grading phases based on adherence to fugitive dust suppression requirements from SCAQMD Rule 403.

³ The nearest offsite sensitive receptors are homes located 60 feet (18 meters) east of the Main Project site and 30 feet (9 meters) southwest of the parking site. According to SCAQMD methodology, all receptors closer than 25 meters are based on the 25 meter threshold.

The data provided in Table 4 shows that none of the analyzed criteria pollutants would exceed the local emissions thresholds during either demolition, grading, or the combined building construction, paving, and architectural coatings phases. Therefore, a less than significant local air quality impact would occur from construction of the Proposed Project.

Operational Emissions

The on-going operation of the Proposed Project would result in a long-term increase in air quality emissions. This increase would be due to emissions from the Project-generated vehicle trips, emissions from energy usage, onsite area source emissions created from the on-going use of the Proposed Project, and from the proposed 125 kilowatt backup diesel generator. The following section provides an analysis of potential long-term air quality impacts due to regional air quality and local air quality impacts with the on-going operations of the Proposed Project.

Operations-Related Regional Criteria Pollutant Analysis

The operations-related regional criteria air quality impacts created by the Proposed Project have been analyzed through use of the CalEEMod model and the input parameters utilized in this analysis have been detailed in Section 8.1 of Appendix A. The worst-case summer or winter VOC, NO_x, CO, SO₂, PM₁₀, and PM_{2.5} daily emissions created from the Proposed Project's long-term operations have been calculated and are summarized below in Table 5 and the CalEEMod daily emissions printouts are shown in Appendix A.

The data provided in Table 5 shows that none of the analyzed criteria pollutants would exceed the regional emissions thresholds. Therefore, a less than significant regional air quality impact would occur from operation of the Proposed Project.

Table 5: Operational Regional Criteria Pollutant Emissions

Activity	Pollutant Emissions (pounds/day)					
	VOC	NOx	CO	SO ₂	PM ₁₀	PM _{2.5}
Area Sources ¹	0.72	0.00	0.01	0.00	0.00	0.00
Energy Usage ²	0.01	0.07	0.06	0.00	0.01	0.01
Mobile Sources ³	1.71	4.87	8.08	0.01	0.49	0.14
Backup Generator ⁴	0.16	0.44	0.40	0.00	0.02	0.02
Total Emissions	2.60	5.38	8.55	0.01	0.52	0.17
SCQAMD Operational Thresholds	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Activity	Pollutant Emissions (pounds/day)					
	VOC	NOx	CO	SO ₂	PM ₁₀	PM _{2.5}

Source: Vista Environmental 2020.

Notes:

¹ Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.

² Energy usage consist of emissions from natural gas usage.

³ Mobile sources consist of emissions from vehicles and road dust.

⁴ Backup Generator based on a 125 kW (190 Horsepower) diesel generator that has a cycling schedule of 30 minutes per week.

In *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502 (also referred to as “*Friant Ranch*”), the California Supreme Court held that when an EIR concluded that when a project would have significant impacts to air quality impacts, an EIR should “make a reasonable effort to substantively connect a Project’s air quality impacts to likely health consequences.” In order to determine compliance with this Case, the Court developed a multi-part test that includes the following:

- 1) The air quality discussion shall describe the specific health risks created from each criteria pollutant, including diesel particulate matter.

Appendix A details the specific health risks created from each criteria pollutant discussed in Section 4.1 and specifically in Table B of Appendix A. In addition, the specific health risks created from diesel particulate matter is detailed in Section 2.2 of Appendix A. As such, this analysis meets the part 1 requirements of the *Friant Ranch* Case.

- 2) The analysis shall identify the magnitude of the health risks created from the Project. The Ruling details how to identify the magnitude of the health risks. Specifically, on page 24 of the ruling it states “The Court of Appeal identified several ways in which the EIR could have framed the analysis so as to adequately inform the public and decision makers of possible adverse health effects. The County could have, for example, identified the Project’s impact on the days of nonattainment per year.”

Table 5 above shows that the primary source of operational air emissions would be created from mobile source emissions that would be generated throughout the Air Basin. As such, any adverse health impacts created from the Proposed Project should be assessed on a basin-wide level. As indicated in Appendix A, the Air Basin has been designated by EPA for the national standards as a non-attainment area for ozone, PM_{2.5}, and partial non-attainment for lead. In addition, PM₁₀ has been designated by the State as non-attainment. It should be noted that VOC and NO_x are ozone precursors, as such they have been considered as non-attainment pollutants. According to the 2016 AQMP, in 2016 the total emissions of: VOC was 500 tons per year; NO_x was 522 tons per year; SO_x was 18 tons per year; and PM_{2.5} was 66 tons per year. Since the 2016 AQMP did not calculate total PM₁₀ emissions, the total PM₁₀ emissions were obtained from The California Almanac of Emissions and Air Quality 2013 Edition, prepared by CARB, for the year 2020. The Project contribution to each criteria pollutant in the South Coast Air Basin is shown in Table 6.

Table 6: Project’s Contribution to Criteria Pollutants in the South Coast Air Basin

Emissions Source	Pollutant Emissions (pounds/day)					
	VOC	NOx	CO	SO ₂	PM ₁₀	PM _{2.5}
Project Emissions ¹	2.60	5.38	8.55	0.01	0.52	0.17
Total Emissions in Air Basin ²	1,000,000	1,044,000	4,246,000	36,000	322,000	132,000

Emissions Source	Pollutant Emissions (pounds/day)					
	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Project's Percent of Air Emissions	0.0003%	0.0005%	0.0002%	0.00003%	0.0002%	0.0001%
SCQAMD Operational Thresholds	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Source: Vista Environmental 2020.

Notes:

¹ From the Project's total operational emissions shown above in Table 5.

² VOC, NO_x, CO, SO₂ and PM_{2.5} from 2016 AQMP and PM₁₀ from the California Almanac of Emissions and Air Quality 2013 Edition.

As shown in Table 6, the Project would increase criteria pollutant emissions by as much as 0.0005 percent for NO_x in the South Coast Air Basin. Due to these nominal increases in the Air Basin-wide criteria pollutant emissions, no increases in days of non-attainment are anticipated to occur from operation of the Proposed Project. As such, this analysis meets the part 2 requirements of the *Friant Ranch* Case and therefore no further analysis is required. Therefore, operation of the Project is not anticipated to result in a quantitative increase in premature deaths, asthma in children, days children will miss school, asthma-related emergency room visits, or an increase in acute bronchitis among children due to the criteria pollutants created by the Proposed Project. Impacts would be less than significant.

Operations-Related Local Air Quality Impacts

Project-related air emissions may have the potential to exceed the State and federal air quality standards in the Project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Air Basin. The Proposed Project has been analyzed for the potential local CO emission impacts from the Project-generated vehicular trips and from the potential local air quality impacts from on-site operations. The following analyzes the vehicular CO emissions and local impacts from on-site operations.

Local CO Hotspot Impacts from Project-Generated Vehicular Trips

CO is the pollutant of major concern along roadways because the most notable source of CO is motor vehicles. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network and are used as an indicator of potential local air quality impacts. Local air quality impacts can be assessed by comparing future without and with Project CO levels to the State and Federal CO standards of 20 ppm over one hour or 9 ppm over eight hours.

At the time of the 1993 Handbook, the Air Basin was designated nonattainment under the CAAQS and NAAQS for CO. With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the Air Basin and in the state have steadily declined. According to the SCAQMD Air Quality Data Tables, in 2007 Central Orange County had maximum CO concentrations of 4.0 ppm for 1 hour and 2.9 ppm for 8-hours and in 2018 Central Orange County had maximum CO concentrations of 2.3 ppm for 1-hour and 1.9 ppm for 8-hours, which represent decreases in CO concentrations of 43 percent and 34 percent, respectively between 2018 and 2007. In 2007, the Air Basin was designated in attainment for CO under both the CAAQS and NAAQS. SCAQMD conducted a CO hot spot analysis for attainment at the busiest intersections in Los Angeles during the peak morning and afternoon periods and did not predict a violation of CO standards. Since the nearby intersections to the Proposed Project are much smaller with less traffic than what was analyzed by the SCAQMD and since the CO concentrations are now at least 34 percent lower than when CO was designated in attainment in 2007, no local CO Hotspot are

anticipated to be created from the Proposed Project and no CO Hotspot modeling was performed. Therefore, a less than significant long-term air quality impact is anticipated to local air quality with the on-going use of the Proposed Project.

Local Criteria Pollutant Impacts from Onsite Operations

Project-related air emissions from onsite sources such as architectural coatings, landscaping equipment, and onsite usage of natural gas appliances may have the potential to create emissions areas that exceed the State and Federal air quality standards in the Project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Air Basin.

The local air quality emissions from onsite operations were analyzed using the SCAQMD’s Mass Rate LST Look-up Tables and the methodology described in LST Methodology. The Look-up Tables were developed by the SCAQMD in order to readily determine if the daily emissions of CO, NO_x, PM₁₀, and PM_{2.5} from the Proposed Project could result in a significant impact to the local air quality. Table 7 shows the onsite emissions from the CalEEMod model that includes area sources, energy usage, and vehicles operating in the immediate vicinity of the Project site and the calculated emissions thresholds.

Table 7: Operations-Related Local Criteria Pollutant Emissions

Onsite Emission Source	Pollutant Emissions (pounds/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Area Sources	0.00	0.01	0.00	0.00
Energy Usage	0.07	0.06	0.01	0.01
Mobile Sources	0.61	1.01	0.06	0.02
Backup Generator	0.44	0.40	0.02	0.02
Total Emissions	1.12	1.48	0.09	0.05
SCAQMD Local Operational Thresholds¹	115	715	2	1
Exceeds Threshold?	No	No	No	No

Source: Vista Environmental 2020.

Notes:

¹ The nearest offsite sensitive receptors are homes located 60 feet (18 meters) east of the Main Project site and 30 feet (9 meters) southwest of the parking site. According to SCAQMD methodology, all receptors closer than 25 meters are based on the 25 meter threshold.

The data provided in Table 7 shows that the on-going operations of the Proposed Project would not exceed the local NO_x, CO, PM₁₀ and PM_{2.5} thresholds of significance discussed in Appendix A. Therefore, the on-going operations of the Proposed Project would create a less than significant operations-related impact to local air quality due to onsite emissions and no mitigation would be required.

Therefore, the Proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

c) The Proposed Project would not expose sensitive receptors to substantial pollutant concentrations. The local concentrations of criteria pollutant emissions produced in the nearby vicinity of the Proposed

Project, which may expose sensitive receptors to substantial concentrations have been calculated in Appendix A for both construction and operations, which are discussed separately below. The discussion below also includes an analysis of the potential impacts from toxic air contaminant emissions. The nearest sensitive receptors to the Main Project site are homes located on the east side of Jameson Street, which are as near as 60 feet east of the Main Project site. The nearest sensitive receptors to the parking site are homes located as near as 30 feet southwest of the parking site.

Construction-Related Sensitive Receptor Impacts

The construction activities for the Proposed Project are anticipated to include anticipated to include demolition and grading of both Project sites, building construction, paving of the onsite driveways and parking lots, and application of architectural coatings. Construction activities may expose sensitive receptors to substantial pollutant concentrations of localized criteria pollutant concentrations and from toxic air contaminant emissions created from onsite construction equipment, which are described below.

Local Criteria Pollutant Impacts from Construction

The local air quality impacts from construction of the Proposed Project has been analyzed in Section 10.3 of Appendix A and found that the construction of the Proposed Project would not exceed the local NO_x, CO, PM₁₀ and PM_{2.5} thresholds of significance discussed in Section 9.2 of Appendix A. Therefore, construction of the Proposed Project would create a less than significant construction-related impact to local air quality and no mitigation would be required.

Toxic Air Contaminants Impacts from Construction

The greatest potential for toxic air contaminant emissions would be related to diesel particulate matter (DPM) emissions associated with heavy equipment operations during construction of the Proposed Project. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of “individual cancer risk”. “Individual Cancer Risk” is the likelihood that a person exposed to concentrations of toxic air contaminants over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. It should be noted that the most current cancer risk assessment methodology recommends analyzing a 30 year exposure period for the nearby sensitive receptors (OEHHA, 2015).

Given the relatively limited number of heavy-duty construction equipment, the varying distances that construction equipment would operate to the nearby sensitive receptors, and the short-term construction schedule, the Proposed Project would not result in a long-term (i.e., 30 or 70 years) substantial source of toxic air contaminant emissions and corresponding individual cancer risk. In addition, California Code of Regulations Title 13, Article 4.8, Chapter 9, Section 2449 regulates emissions from off-road diesel equipment in California. This regulation limits idling of equipment to no more than five minutes, requires equipment operators to label each piece of equipment and provide annual reports to CARB of their fleet’s usage and emissions. This regulation also requires systematic upgrading of the emission Tier level of each fleet, and currently no commercial operator is allowed to purchase Tier 0 or Tier 1 equipment and by January 2023 no commercial operator is allowed to purchase Tier 2 equipment. In addition to the purchase restrictions, equipment operators need to meet fleet average emissions targets that become more stringent each year between years 2014 and 2023. As of January 2019, 25 percent or more of all contractors’ equipment fleets must be Tier 2 or higher. Therefore, no significant short-term toxic air contaminant impacts would occur during construction of the Proposed Project. As such, construction of the Proposed Project would result in a less than significant exposure of sensitive receptors to substantial pollutant concentrations.

Operations-Related Sensitive Receptor Impacts

The on-going operations of the Proposed Project may expose sensitive receptors to substantial pollutant concentrations of local CO emission impacts from the Project-generated vehicular trips and from the potential local air quality impacts from onsite operations. The following analyzes the vehicular CO emissions. Local criteria pollutant impacts from onsite operations, and toxic air contaminant impacts.

Local CO Hotspot Impacts from Project-Generated Vehicle Trips

CO is the pollutant of major concern along roadways because the most notable source of CO is motor vehicles. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network and are used as an indicator of potential impacts to sensitive receptors. The analysis provided in Response 3(b) shows that no local CO Hotspots are anticipated to be created at any nearby intersections from the vehicle traffic generated by the Proposed Project. Therefore, operation of the Proposed Project would result in a less than significant exposure of offsite sensitive receptors to substantial pollutant concentrations.

Local Criteria Pollutant Impacts from Onsite Operations

The local air quality impacts from the operation of the Proposed Project would occur from onsite sources such as architectural coatings, landscaping equipment, and onsite usage of natural gas appliances. The analysis provided in Response 3(b) found that the operation of the Proposed Project would not exceed the local NO_x, CO, PM₁₀ and PM_{2.5} thresholds of significance. Therefore, the on-going operations of the Proposed Project would create a less than significant operations-related impact to local air quality due to on-site emissions and no mitigation would be required.

Operations-Related Toxic Air Contaminant Impacts

Particulate matter (PM) from diesel exhaust is the predominant toxic air contaminants (TAC) in most areas and according to The California Almanac of Emissions and Air Quality 2013 Edition, prepared by CARB, about 80 percent of the outdoor TAC cancer risk is from diesel exhaust. Some chemicals in diesel exhaust, such as benzene and formaldehyde have been listed as carcinogens by State Proposition 65 and the Federal Hazardous Air Pollutants program. Due to the nominal number of diesel truck trips that are anticipated to be generated by the Proposed Project, a less than significant TAC impact would occur during the on-going operations of the Proposed Project and no mitigation would be required.

Operation of the Proposed Project would create TAC emissions from operation of a 250 kilowatt (389 horsepower) backup diesel generator equipped with a diesel particulate filter (DPF) that will limit DPM created from the backup generator. Backup generators typically cycle on for 30 minutes on a weekly basis in order to keep the engine lubricated and ready to use in case of a power outage. The typical cycling of a backup generator would operate for approximately 26 hours per year. SCAQMD Rule 1110.2 exempts emergency standby generators that operate less than 200 hours per year from obtaining an air permit. The SCAQMD has developed the operating hour exemption limits based on levels that were determined to result in the generation of inconsequential emissions from backup generators. As such, the cancer risk created from the backup generator's TAC emissions to the nearby sensitive receptors is anticipated to be negligible. Therefore, through adherence to the backup generator operating time limits detailed in Rule 1110.2, less than significant long-term toxic air contaminant impacts would occur during operation of the Proposed Project.

Therefore, operation of the Proposed Project would result in a less than significant exposure of sensitive receptors to substantial pollutant concentrations.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

d) The Proposed Project would not create objectionable odors affecting a substantial number of people. Individual responses to odors are highly variable and can result in a variety of effects. Generally, the impact of an odor results from a variety of factors such as frequency, duration, offensiveness, location, and sensory perception. The frequency is a measure of how often an individual is exposed to an odor in the ambient environment. The intensity refers to an individual's or group's perception of the odor strength or concentration. The duration of an odor refers to the elapsed time over which an odor is experienced. The offensiveness of the odor is the subjective rating of the pleasantness or unpleasantness of an odor. The location accounts for the type of area in which a potentially affected person lives, works, or visits; the type of activity in which he or she is engaged; and the sensitivity of the impacted receptor.

Sensory perception has four major components: detectability, intensity, character, and hedonic tone. The detection (or threshold) of an odor is based on a panel of responses to the odor. There are two types of thresholds: the odor detection threshold and the recognition threshold. The detection threshold is the lowest concentration of an odor that will elicit a response in a percentage of the people that live and work in the immediate vicinity of the Project site and is typically presented as the mean (or 50 percent of the population). The recognition threshold is the minimum concentration that is recognized as having a characteristic odor quality, this is typically represented by recognition by 50 percent of the population. The intensity refers to the perceived strength of the odor. The odor character is what the substance smells like. The hedonic tone is a judgment of the pleasantness or unpleasantness of the odor. The hedonic tone varies in subjective experience, frequency, odor character, odor intensity, and duration. Potential odor impacts have been analyzed separately for construction and operations below.

Construction-Related Odor Impacts

Potential sources that may emit odors during construction activities include the application of coatings such as asphalt pavement, paints and solvents and from emissions from diesel equipment. The objectionable odors that may be produced during the construction process would be temporary and would not likely be noticeable for extended periods of time beyond the Project site's boundaries. Due to the transitory nature of construction odors, a less than significant odor impact would occur and no mitigation would be required.

Operations-Related Odor Impacts

Potential sources of odor emission during operation of the Proposed Project would include diesel emissions from the fire trucks and backup generator as well as odors from trash storage areas. All fire trucks that operate on the Project site will be required to meet State emissions standards that require the use of diesel particulate filters that would minimize odors created from the fire trucks. The operation of the backup diesel generator would be limited to 200 hours or less per year and would include an exhaust stack with a diesel particulate filter that would limit the exhaust and associated odors created from the generator to negligible levels. Pursuant to City regulations, permanent trash enclosures that protect trash bins from rain as well as limit air circulation would be required for the trash storage areas. Due to the distance of the nearest sensitive receptor from the Project site and through compliance with SCAQMD's rules that include Rule 402 (odor regulations) and Rule 1110.2 (backup generator regulations) and the City's trash storage regulations, a less than significant impact related to odors would occur during the on-going operations of the Proposed Project. Operational-related odor impacts would be less than significant, and no mitigation would be required.

Therefore, a less than significant odor impact would occur and no mitigation would be required.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

4. BIOLOGICAL RESOURCES

Would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impact Analysis:

a) The Project site is currently zoned as Office Professional (O-P) and Single Family Residential (R-1-6) and the parking site is zoned as Single Family Residential (R-1-6). After the proposed zoning change, included as a part of the Project, the main Project site will be zoned as Public Institutional (P-I). The zoning of the parking site will remain unchanged. The sites are located in an urbanized area of the City and are surrounded by the City of Orange Water Division, residential and office buildings. The main Project site is fenced, graded and consists of dirt, sand, gravel, sparse vegetation, and trash and debris. Due to the urban nature of the area and fact that the site is graded and vacant, the Proposed Project site is not expected to be a suitable habitat to house any sensitive or special status species.

While the site is not considered to be suitable habitat, it is possible that birds may use the existing vegetation, surrounding the parking site, for potential nesting. The Proposed Project would attempt to avoid vegetation removal activities during nesting season (February to September). However, mitigation measure BIO-1 has been included to minimize any potential impacts to nesting birds during construction due to their potential presence in vacant and urban environments.

Although only a few small trees and a small number of shrubs were observed on the site of the parking lot and sparse vegetation on the site of the fire station and headquarters, the Proposed Project has the potential to disturb ground-nesting birds and birds nesting in trees located in the buffer area of the sites. All trees located within the main Project site and parking site would be protected in place; however, two Ficus trees would be removed along Chapman Avenue. Implementation of mitigation measure BIO-1 would reduce impacts on nesting birds to a level less than significant and comply with

the Migratory Bird Treaty Act which protects the removal of listed migratory birds or their parts such as eggs and nests from private property.

BIO-1: Nesting Birds. If Project clearing and construction must occur during the avian nesting season (February 1 to September 1), a survey for active nests must be conducted by a qualified biologist ~~one to two weeks~~ no more than three days prior to the activities to determine the presence/absence, location, and status of any active nests on or adjacent to the Project site. If no active nests are discovered or identified, no further mitigation is required. In the event that active nests are discovered on site, a suitable buffer determined by the qualified biologist (~~e.g., 30 to 50 feet for passerines~~) should be established around such active nests. Buffers typically have a minimum width of 300 feet (500 feet for raptors). No ground-disturbing activities shall occur within this buffer until the biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest. Limits of construction to avoid a nest site shall be established in the field by a qualified biologist with flagging and stakes or construction fencing. Construction personnel shall be instructed regarding the ecological sensitivity of the fenced area. The results of the survey shall be documented and filed with the Community Development Director within five days after the survey

With implementation of mitigation measure BIO-1, impacts would be less than significant.

Significance Determination: Potentially Significant Impact.

Mitigation Measures: BIO-1.

Significance Determination After Mitigation: Less Than Significant Impact with Mitigation Incorporated.

b) The Proposed Project site does not include riparian habitat, wetlands, or a sensitive natural community and is currently graded and vacant (USFWS 2020). The Proposed Project site and surrounding areas are urban, predominantly built out and consist primarily of residential and office buildings. Therefore, impacts to riparian or sensitive habitats is not expected.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

c) According to the U.S. Fish and Wildlife Service National Wetland Inventory Map, the Proposed Project is not located on any protected wetlands or areas that appear to contain wetlands, marshes, or vernal pools (USFWS 2020). No impact would occur.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

d) The Proposed Project is located in an urbanized area primarily surrounded by residential and office uses. As discussed in Response 4(a), the Proposed Project is not expected to be a suitable habitat that would house any sensitive or special status species. No water bodies are present that can provide an adequate habitat for migratory fish. The area is not designated for a wildlife nursery site. The two Proposed Project sites are not a designated habitat for any endangered species or any species of concern.

While the Proposed Project is not found to contain suitable habitat for migratory species, the Proposed Project has the potential to disturb ground-nesting birds and birds nesting in trees located in the buffer area of the Project site. Implementation of mitigation measure BIO-1 would reduce impacts on nesting birds to a level less than significant and comply with the Migratory Bird Treaty Act which protects the removal of listed migratory birds or their parts such as eggs and nests from private property.

Implementation of BIO-1 would result in less than significant impacts to trees and migratory wildlife with mitigation incorporated.

Significance Determination: Potentially Significant Impact.

Mitigation Measures: BIO-1.

Significance Determination After Mitigation: Less Than Significant Impact with Mitigation Incorporated.

e) While little to no vegetation exists on the graded Project site, a few trees and shrubs were observed on the site of the proposed parking lot. However, the Proposed Project design, including the landscaping for the associated parking lot, does not require the removal of any trees on site during construction; only two Ficus trees would be removed along Chapman Avenue. However, the removal will be undertaken only after coordination with the Community Services Department and Public Works Department.

Although there is a possibility of the Proposed Project conflicting with a local ordinance related to preservation of biological resources, such as street trees, coordination with staff from Community Services and Public Works Departments that have arboricultural expertise reduces any potential impacts to a less than significant level.

Significance Determination: Less than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

f) As noted in Response 4(a), the Proposed Project site is not expected to include suitable habitat that would house any sensitive or special status species. The Proposed Project sites are within an area primarily for residential, office and institutional uses; the area is not designated as, nor would it be considered, a suitable habitat for species or for conservation uses. No impact would occur.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

5. CULTURAL RESOURCES

Would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact Analysis:

a) The Proposed Project site is not located within any of the City of Orange’s historic districts, but is located approximately 0.1 miles east of the Old Towne Orange Historic District boundary (City of Orange 2010e). As discussed in Response 1(c), the Proposed Project architecture would be congruous with the design guidelines established for the Old Towne Orange Historic District. The Proposed Project site is not listed as a Designated Historic Resources in the General Plan (City of Orange 2010e). The main Project site is currently graded and vacant with the exception of an existing storage building. The storage building is constructed of masonry and wood framing covered by corrugated metal panels. It does not contain any distinct architectural features and is not constructed in any particular architectural style relevant to a period of significance to the City. The parking site currently operates as an existing parking lot and does not contain any built features onsite. Therefore, considering the Proposed Project site does not involve direct impacts to any historical resources, less than significant impacts are anticipated.

Significance Determination: Less than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less than Significant Impact.

b) The fire station lot of the Proposed Project site has been previously graded and developed, and the parking site currently has a combination asphalt and compacted gravel surface. Further, the areas surrounding the Proposed Project are fully developed and ground disturbing activities have occurred through the installation of building foundations and utility lines. The Proposed Project would not include grading that would extend in depths reaching native soils. The depth of disturbance would be approximately 5-6 feet below existing grade at the buildings. Any grading that would occur would be within depths where previous utility lines would be located during the development of the surrounding areas.

Figure 5.5-2 (Historical Archaeological Sensitivity) of the City’s General Plan EIR notes that a Farmstead Development (1870s-1920) has been identified in the area of the Project site. Due to the historic settlement of the Project area and vicinity, there is the potential to encounter buried cultural material associated with early 20 century development. In addition, the Project area was inhabited prehistorically, and is located approximately 0.5 miles northwest of Santiago Creek. Because prehistoric settlements typically occurred in proximity to natural waterways, there is also the potential for encountering buried prehistoric cultural resources during construction excavation.

As such, it is possible that unknown archaeological resources could exist at the Project site and could be encountered during ground-disturbing activities associated with Project construction. If proper care

is not taken, significant impacts to unknown archaeological resources could occur. However, the Project Applicant would be required to implement Mitigation Measure CUL-1, which provides direction for the proper recordation of previously undiscovered archaeological resources, should such resources be found during Project construction activities. Implementation of Mitigation Measure CUL-1 would ensure that the Project would not cause a substantial adverse change in significance of an archaeological resource pursuant to State CEQA Guidelines §15064.5. Therefore, with mitigation, Project impacts related to archaeological resources would be less than significant.

CUL-1: In the event a potentially significant cultural resource is encountered during earthwork activities, as determined by the foreperson, qualified Native American Monitor, qualified archaeologist, or any City official, all subsurface construction activities within a 100-foot radius of the find shall cease and workers shall avoid altering the materials until a qualified archaeologist who meets the Secretary of Interior's Professional Qualification Standards for archaeology has evaluated the situation. The City of Orange Public Works Department shall include a standard inadvertent discovery clause in the construction contract to inform contractors of this requirement. Any resources found during construction activities shall expeditiously be recorded on appropriate Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA criteria by a qualified archaeologist. Potentially significant cultural resources consist of but are not limited to stone, bone, glass, ceramics, wood, or shell artifacts, or features including hearths, structural remains, or historic dumpsites. If the resource is determined to be significant under CEQA Guidelines Section 15064.5, the qualified archaeologist shall expeditiously prepare and implement a research design and archaeological data recovery plan that will capture those categories of data for which the site is significant in accordance with Section 15064.5 of the CEQA Guidelines. The archaeologist shall also expeditiously perform appropriate technical analyses, prepare a comprehensive report complete with methods, results, and recommendations, and provide for the permanent curation or repatriation of the recovered resources in cooperation with the designated most likely descendant as needed. The report shall be submitted to the City of Orange Community Development Department, the South Central Coastal Information Center, and the State Historic Preservation Office (SHPO), if required.

Significance Determination: Potentially Significant Impact.

Mitigation Measures: CUL-1

Significance Determination After Mitigation: Less Than Significant Impact.

c) There are no known cemeteries located within the Proposed Project site. The areas surrounding the Proposed Project are fully developed and ground disturbing activities have occurred through the installation of building foundations, as well as installation of utility lines to service the area. However, because resources are often buried and not easily identifiable, the Proposed Project would be subject to local, State, and federal regulations if any cultural resources, including human remains, are identified. In accordance with the State's Health and Safety Code Section 7050.5, in the event of discovery or recognition of any human remains at the Project site, no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains will occur until the Orange County Coroner has determined, in accordance with Chapter 10 (commencing with Section 27460) or Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner, and cause of any death, and the

recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission. As a result, impacts would be less than significant based on compliance with existing regulations.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

6. ENERGY

Would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The following analysis is based on the technical energy usage study prepared by Vista Environmental, dated June 22, 2020 (Appendix A).

Impact Analysis:

a) The Proposed Project would impact energy resources during construction and operation. Energy resources that would be potentially impacted include electricity, natural gas, and petroleum based fuel supplies and distribution systems. This analysis includes a discussion of the potential energy impacts of the Proposed Project, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. The following analysis calculates the potential energy consumption associated with the construction and operations of the Proposed Project and provides a determination if any energy utilized by the Proposed Project is wasteful, inefficient, or unnecessary consumption of energy resources.

Electricity is provided to the Project Site by Southern California Edison (SCE). Natural gas is provided to the Project Site by The Southern California Gas Company (SoCalGas). Both forms of energy are provided to the Project Site via existing infrastructure located adjacent to the site. The Project would be served by this infrastructure and would not require the need for new, expanded, or relocated energy infrastructure.

Construction Energy

The construction activities for the Proposed Project are anticipated to include demolition and grading of both Project sites, building construction, paving of the onsite driveways and parking lots, and application of architectural coatings. The Proposed Project would consume energy resources during construction in three general forms:

1. Petroleum-based fuels used to power off-road construction vehicles and equipment on the Project Site, construction worker travel to and from the Project Site, as well as delivery and haul truck trips (e.g. hauling of demolition material to off-site reuse and disposal facilities).
2. Electricity associated with the conveyance of water that would be used during Project construction for dust control (supply and conveyance) and electricity to power any necessary lighting during construction, electronic equipment, or other construction activities necessitating electrical power; and,
3. Energy used in the production of construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Construction-Related Electricity

During construction, the Proposed Project would consume electricity to construct the new structures and infrastructure. Electricity would be supplied to the Project site by SCE and would be obtained

from the existing electrical lines in the vicinity of the Project site. The use of electricity from existing power lines rather than temporary diesel or gasoline powered generators would minimize impacts on energy use. Electricity consumed during Project construction would vary throughout the construction period based on the construction activities being performed. Various construction activities include electricity associated with the conveyance of water that would be used during Project construction for dust control (supply and conveyance) and electricity to power any necessary lighting during construction, electronic equipment, or other construction activities necessitating electrical power. Such electricity demand would be temporary, nominal, and would cease upon the completion of construction. Overall, construction activities associated with the Proposed Project would require limited electricity consumption that would not be expected to have an adverse impact on available electricity supplies and infrastructure. Therefore, the use of electricity during Project construction would not be wasteful, inefficient, or unnecessary.

Since there are power poles running along the east side of the Project site, it is anticipated that only nominal improvements would be required to SCE distribution lines and equipment with development of the Proposed Project. Where feasible, the new service installations and connections would be scheduled and implemented in a manner that would not result in electrical service interruptions to other properties. Compliance with City guidelines and requirements would ensure that the Proposed Project fulfills its responsibilities relative to infrastructure installation, coordinates any electrical infrastructure removals or relocations, and limits any impacts associated with construction of the Project. Construction of the Project's electrical infrastructure is not anticipated to adversely affect the electrical infrastructure serving the surrounding uses or utility system capacity.

Construction-Related Natural Gas

Construction of the Proposed Project typically would not involve the consumption of natural gas. Natural gas would not be supplied to support construction activities, thus there would be no demand generated by construction. Since the Project site is currently developed that currently has natural gas service to the Project site, construction of the Proposed Project would be limited to installation of new natural gas connections within the Project site. Development of the Proposed Project would likely not require extensive infrastructure improvements to serve the Project site. Construction-related energy usage impacts associated with the installation of natural gas connections are expected to be confined to trenching in order to place the lines below surface. In addition, prior to ground disturbance, the Proposed Project would notify and coordinate with SoCalGas to identify the locations and depth of all existing gas lines and avoid disruption of gas service. Therefore, construction-related impacts to natural gas supply and infrastructure would be less than significant.

Construction-Related Petroleum Fuel Use

Petroleum-based fuel usage represents the highest amount of transportation energy potentially consumed during construction, which would be utilized by both off-road equipment operating on the Project site and on-road automobiles transporting workers to and from the Project site and on-road trucks transporting equipment and supplies to the Project site.

The off-road construction equipment fuel usage was calculated through use of the off-road equipment assumptions and fuel use assumptions shown in Section 8.3 of Appendix A, which found that the off-road equipment utilized during construction of the Proposed Project would consume 39,727 gallons of fuel. The on-road construction trips fuel usage was calculated through use of the construction vehicle trip assumptions and fuel use assumptions shown in Section 8.3 of Appendix A, which found that the on-road trips generated from construction of the Proposed Project would consume 8,064 gallons of

fuel. As such, the combined fuel used from off-road construction equipment and on-road construction trips for the Proposed Project would result in the consumption of 47,787 gallons of petroleum fuel.

Construction activities associated with the Proposed Project would be required to adhere to all State and SCAQMD regulations for off-road equipment and on-road trucks, which provide minimum fuel efficiency standards. As such, construction activities for the Proposed Project would not result in the wasteful, inefficient, and unnecessary consumption of energy resources. Impacts regarding transportation energy would be less than significant. Development of the Project would not result in the need to manufacture construction materials or create new building material facilities specifically to supply the Proposed Project. It is difficult to measure the energy used in the production of construction materials such as asphalt, steel, and concrete, it is reasonable to assume that the production of building materials such as concrete, steel, etc., would employ all reasonable energy conservation practices in the interest of minimizing the cost of doing business.

Operational Energy

The on-going operation of the Proposed Project would require the use of energy resources for multiple purposes including, but not limited to, heating/ventilating/air conditioning (HVAC), refrigeration, lighting, appliances, and electronics. Energy would also be consumed during operations related to water usage, solid waste disposal, landscape equipment and vehicle trips.

Operations-Related Electricity

Operation of the Proposed Project would result in consumption of electricity at the Project site. As detailed in Section 8.3 of Appendix A, the Proposed Project would consume 375,876 kilowatt-hours per year of electricity. It should be noted that, the Proposed Project would comply with all federal, State, and City requirements related to the consumption of electricity, including California Code of Regulations (CCR) Title 24, Part 6 Building Energy Efficiency Standards and CCR Title 24, Part 11: California Green Building Standards. The CCR Title 24, Part 6 and Part 11 standards require numerous energy efficiency measures to be incorporated into the proposed buildings, including enhanced insulation, use of energy efficient lighting and appliances as well as requiring a variety of other energy-efficiency measures to be incorporated into all of the proposed structures. Therefore, it is anticipated the Proposed Project will be designed and built to minimize electricity use and that existing and planned electricity capacity and electricity supplies would be sufficient to support the Proposed Project's electricity demand. Thus, impacts with regard to electrical supply and infrastructure capacity would be less than significant and no mitigation measures would be required.

Operations-Related Natural Gas

Operation of the Proposed Project would result in increased consumption of natural gas at the Project site. As detailed in Section 8.3 of Appendix A, the Proposed Project would consume 40 MBTU per year of natural gas. It should be noted that, the Proposed Project would comply with all federal, State, and City requirements related to the consumption of natural gas, including CCR Title 24, Part 6 Building Energy Efficiency Standards and CCR Title 24, Part 11: California Green Building Standards. The CCR Title 24, Part 6 and Part 11 standards require numerous energy efficiency measures to be incorporated into the proposed structures, including enhanced insulation as well as use of efficient natural gas appliances and HVAC units. Therefore, it is anticipated the Proposed Project will be designed and built to minimize natural gas use and that existing and planned natural gas capacity and natural gas supplies would be sufficient to support the Proposed Project's natural gas demand. Thus, impacts with regard to natural gas supply and infrastructure capacity would be less than significant and no mitigation measures would be required.

Operations-Related Vehicular Petroleum Fuel Usage

Operation of the Proposed Project would result in increased consumption of petroleum-based fuels related to vehicular travel to and from the Project site. As detailed in Section 8.3 of Appendix A, the Proposed Project would consume 6,305 gallons of petroleum fuel per year from vehicle travel and 385 gallons of diesel per year from the operation of the backup generator. It should be noted that, the Proposed Project would comply with all federal, State, and City requirements related to the consumption of transportation energy, including California Code of Regulations Title 24, Part 11 California Green Building Standards that require the proposed project to provide both long-term and short-term bicycle parking spaces that will promote the use of alternative transportation. Therefore, it is anticipated the Proposed Project will be designed and built to minimize transportation energy through the promotion of the use of alternative transportation and it is anticipated that existing and planned capacity and supplies of transportation fuels would be sufficient to support the Proposed Project’s demand. Thus, impacts with regard transportation energy supply and infrastructure capacity would be less than significant and no mitigation measures would be required.

In conclusion, the Proposed Project would comply with regulatory compliance measures outlined by the State and City related to Air Quality, Greenhouse Gas Emissions (GHG), Transportation/Circulation, and Water Supply. Additionally, the Proposed Project would be constructed in accordance with all applicable Building and Fire Codes. Therefore, the Proposed Project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources during Project construction or operation. Impacts would be less than significant.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

b) The Proposed Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. The applicable energy plan for the Proposed Project is the City of Orange General Plan, March 2010, that provides an Energy Resources Component. The Proposed Project’s consistency with the applicable energy-related policies in the General Plan are shown in Table 8.

Table 8: Proposed Project Compliance with City General Plan Energy Policies

General Plan Energy Policy	Proposed Project Consistency with General Plan Policies
Natural Resources Element Goal 2.0: Protect air, water, and energy resources from pollution and overuse.	Consistent. The Proposed Project would not overuse air, water, and energy resources.
Policy 2.1: Cooperate with the South Coast Air Quality Management District (SCAQMD) and other regional agencies to implement and enforce regional air quality management plans.	Consistent. The Proposed Project is consistent with the SCAQMD air quality management plan.
Policy 2.2: Support alternative transportation modes, alternative technologies, and bicycle- and pedestrian-friendly neighborhoods to reduce emissions related to vehicular travel.	Consistent. The Proposed Project has a bus stop on the Project site that would promote the use of alternative transportation to the Project.
Policy 2.6: Encourage sustainable building and site designs for new construction and renovation Projects.	Consistent. The Proposed Project has taken into account site designs for sustainability.
Policy 2.7: Coordinate with energy suppliers to ensure adequate energy supplies to meet community needs, and to promote energy conservation and public education	Not Applicable. This policy is only applicable to the City to work with energy suppliers.

General Plan Energy Policy	Proposed Project Consistency with General Plan Policies
programs for that purpose.	
Policy 2.9: Promote City operations as a model for energy efficiency and green building.	Consistent. The Proposed Project has been designed to meet green building standards.
Policy 2.10: Work toward replacing existing City vehicles with ultra low or zero emission vehicles. At a minimum, new City vehicles shall be low emission vehicles as defined by the California Air Resources Board, except if certain vehicle types are not available in the marketplace. Public safety vehicles are exempted from this requirement.	Not Applicable. This is a City requirement for City vehicles to be ultra low to zero emissions vehicles, which is not a part of the Project.
Infrastructure Element Goal 3.0: Ensure adequate maintenance of public rights-of-way to enhance public safety and improve circulation.	Not Applicable. This is a City requirement; however the Project does provide adequate rights-of-way.
Policy 3.4: Investigate the feasibility of using energy-efficient street lights to conserve energy.	Not Applicable. This is a City requirement to place energy efficient street lights.
Infrastructure Element Goal 4.0: Ensure adequate provision of electricity, natural gas, telephone and data services and cable television.	Consistent. The Proposed Project has been designed to ensure adequate capacity of electricity, natural gas, data and cable television can be supplied to the Project.
Policy 4.4: Encourage integrated and cost-effective design and technology features within new development to minimize demands on dry utility networks.	Consistent. The Proposed Project will be constructed using the most current design and technologies for dry utility networks.

Source: Vista Environmental 2020.

As shown in Table 8, the Proposed Project would be consistent with all applicable energy-related policies provided in the City’s General Plan. Therefore, the Proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Impacts would be less than significant.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

7. GEOLOGY AND SOILS

Would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The following analysis is based on the technical geotechnical investigation prepared by Leighton Consulting, dated September 26, 2019 (Appendix B).

Impact Analysis:

a) i) As noted in the Public Safety Element of the City of Orange General Plan, no known Alquist-Priolo fault zone is located in the City. A geotechnical investigation of the site (Appendix B) revealed that the closest known active or potentially active faults are the Elysian Park Blind Thrust and the Puente Hills Blind Thrust fault systems, located approximately 9 miles northwest of the Proposed Project site. However, due to the fact that no active faults traverse the site and the site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone, the potential risk for surface fault rupture through the site is considered low (Leighton 2019). Due to its location in Southern California, a seismically active region, it is highly likely that regional earthquakes might occur that could affect the Proposed Project site.

However, in accordance with the City of Orange requirements, the Project Applicant would comply with any recommendations made in a final Geotechnical Exploration Report that addresses the final design of the Project. Additionally, all structures and onsite facilities would be designed in accordance with all applicable current codes and standards utilizing the appropriate seismic design parameters to reduce seismic risk as defined by California Geological Survey Chapter 2 of Special Publication 117A and the most current edition of the California Building Code. Therefore, considering that the Project site is not located within an Alquist-Priolo Earthquake Fault Zone and would comply with all local and

State requirements, the potential impacts due to rupture of a known earthquake fault would be less than significant.

Significance Determination: Less Than Significant.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant.

a) ii) As noted in the Public Safety Element, the City of Orange is vulnerable to ground shaking caused by seismic events along large regional faults in the area, including the Newport-Inglewood Fault, the Elsinore Fault, and the San Andreas Fault. These faults, along with its associated fault zones, has the potential to cause widespread seismic movements in the City. A geotechnical investigation of the site (Appendix B) revealed that the closest known active or potentially active faults are the Elysian Park Blind Thrust and the Puente Hills Blind Thrust fault systems, located approximately 9 miles northwest of the Proposed Project site. The potential for ground shaking within the City depends on the distance to the fault and the intensity of a specific seismic event along the fault. The Public Safety Element describes two potential events of an 8.3 Richter Magnitude earthquake along San Andreas Fault and a 7.5 Richter Magnitude earthquake along Newport-Inglewood Fault. The Proposed Project site is approximately 1 to 2 miles away from the nearest potential ground shaking boundaries in the respective cases; it is assumed that the sites would be exposed to ground shaking during the event of a comparable earthquake along these faults (City of Orange 2010b). However, in accordance with the City of Orange requirements, the Project Applicant would comply with any recommendations made in a final Geotechnical Exploration Report that addresses the final design of the Project. In addition, all structures and onsite facilities would be designed in accordance with the California Geological Survey and California Building Code seismic safety standards to minimize the hazards from earthquakes and other seismic activities. Since the design and construction of the Proposed Project would be required to conform to the specific mandated structural design requirements to protect against strong seismic shaking, the potential impacts due to strong seismic ground shaking are less than significant.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

a) iii) Liquefaction occurs when moisture-saturated soils lose stability during seismic conditions. Structures built on such soils may collapse and could potentially result in damage and loss. However, the Proposed Project site is not located within a liquefaction zone (California Department of Conservation 2020). Further, the geotechnical investigation concluded that the potential for liquefaction at the site is very low due to the nature of the onsite soils, and the groundwater depth (deeper than 50 feet) (Leighton 2019). As noted above, as a protective measure from injury and structural damage caused by geologic and seismic hazards, all new development will abide by the applicable California Geological Survey and California Building Code safety standards along with the most recently adopted City and State seismic and geotechnical requirements. Therefore, the Proposed Project would result in no impact to the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

a) iv) Landslides can occur when strong ground movement such as an earthquake shakes loose soil and causes land and debris to lose stability and slide. However, the Proposed Project site is not located within a landslide zone (California Department of Conservation 2020). Landslide potential in the area of the site is further considered low as it is relatively flat. Therefore, the Proposed Project would result in no impact to the risk of loss, injury, or death involving landslides.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

b) Construction, grading, and excavation activities would expose areas of the 2.75 acre Project site to the erosional effects of wind or water for a protracted period of time. Development of the Proposed Project would include construction activities that would expose soils and could potentially result in substantial erosion. Excavation would be limited to that necessary for the installation of building foundations and utilities. All grading activities require adherence to the City's grading ordinance, which include requirements and standards designed to limit potential impacts to acceptable levels. During construction, the Project would be required by to prevent the transport of sediments from the Project Site through stormwater runoff and winds through the use of appropriate Best Management Practices (BMPs).

Furthermore, the State Water Resources Control Board (SWRCB) adopted a National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit). To obtain coverage under the Construction General Permit, a Project Applicant must submit various documents, including a Notice of Intent and a Stormwater Pollution Prevention Plan (SWPPP). Activities subject to the Construction General Permit include clearing, grading, and disturbances to the ground, such as grubbing or excavation. The purpose of the SWPPP is to identify sources of sediment and other pollutants that could affect the quality of stormwater discharges and to describe and ensure the implementation of Best Management Practices (BMPs) to reduce or eliminate sediment and other pollutants in stormwater as well as non-stormwater discharges resulting from construction activity. Potential BMPs for construction activities that could be used during the Project's construction phase include but are not limited to silt fencing, fiber rolls, hydraulic mulch, velocity dissipation device, and construction waste management. With the implementation of the NPDES regulations, Project impacts related to soil erosion would be less than significant.

Operation of the Proposed Project would not cause substantial soil erosion, since the Proposed Project design would include appropriate drainage systems and landscaping to ensure no soil erosion results from Project operation involving the use of water. Thus, this impact, due to the implementation of the Proposed Project, is considered less than significant.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

c) Lateral spreading is defined as landslides that occur on gentle slopes caused by earthquake-induced liquefaction. Subsidence occurs when a sudden sinking of the ground's surface occurs. The Proposed Project site is identified to be located within an area prone to subsidence due to groundwater pumping (USGS 2020). However, any extraction activities, that could result in subsidence, are not proposed as a part of the Project-related activities. The construction activities planned as a part of the Proposed

Project would follow applicable California Geological Survey and California Building Code safety guidelines to avoid the possibility of any subsidence in the area. Further, as discussed in Responses 7(a)(iii) and (iv), the Proposed Project site is not located within a liquefaction zone or a landslide zone; no significant impact is anticipated.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

d) A near-surface soil sample from the Proposed Project site was tested for expansion index as a part of a geotechnical investigation (Appendix B). Based on these test results, the near surface soil is expected to have a very low expansion potential. Given the developed and urban character of the City, no significant adverse constraints related to expansive soils are anticipated. The Proposed Project would not create substantial direct or indirect risks to life or property. All structures and onsite facilities would be designed in accordance with the California Geological Survey and California Building Code seismic safety standards to minimize the hazards from earthquakes and other seismic activities. No impact would occur.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

e) The City of Orange Public Works Department, Water Division is responsible for the local network of sewer collection systems throughout the City, and in collaboration with Orange County Sanitation District (OCSD) is responsible for the treatment of residential, commercial and industrial sewage in Orange (City of Orange 2010c). The Proposed Project site relies on sewers for wastewater disposal. While the Proposed Project buildings include the construction of kitchen and bathroom facilities for the employees which would increase the generation of wastes and wastewater, the Proposed Project would tie into existing network lines and would not require the installation of septic tanks or other alternative systems. Impacts would be less than significant.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

f) The City's General Plan does not identify the Proposed Project site as an area anticipated to contain any unique geologic features or known paleontological resources. However, per mitigation measure GEO-1, in the event that any paleontological resources are encountered during the course of Project development, all construction activity must temporarily cease in the affected area(s) until the uncovered resources are properly assessed by a qualified paleontologist and subsequent recommendations for appropriate documentation and conservation are evaluated by the Lead Agency. With implementation of Mitigation Measure GEO-1, impacts would be less than significant.

GEO-1 In the event a previously unrecorded paleontological deposit is encountered during construction; all activity shall cease in the vicinity of the find and redirected elsewhere, and the City shall be immediately informed of the discovery. A paleontologist shall be retained by the City to make recommendations on the treatment of the deposits. The recommendations shall be developed in accordance with applicable provisions of Public Resource Code Section 21083.2 and State CEQA Guidelines 15126.4. The City shall be

consulted on the treatment of the deposits. The City shall follow all recommendations made by the paleontologist. The deposits shall not be disturbed or removed until the appropriate treatment has been recommended by the paleontologist and approved by the City. No construction activity in the vicinity of the find, the boundary of which shall be determined by the paleontologist, may resume until the recommendations for treatment of the deposits have been implemented. If applicable, the final report containing site forms, site significance, and mitigation measures shall be submitted to the Community Development Department when finalized. The final written report shall be submitted to the appropriate regional paleontological Information Center within three months after work has been completed.

Significance Determination: Potentially Significant Impact.

Mitigation Measures: GEO-1.

Significance Determination After Mitigation: Less Than Significant Impact.

8. GREENHOUSE GAS EMISSIONS

Would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The following analysis is based on the technical greenhouse gas emissions study prepared by Vista Environmental, dated June 22, 2020 (Appendix A).

Impact Analysis:

a) The Proposed Project would not generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment. The regulatory setting related to global climate change is addressed through the efforts of various international, federal, state, regional and local government agencies. These agencies work jointly, as well as individually, to reduce GHG emissions through legislation, regulations, planning, policy-making, education and a variety of programs. The agencies responsible for global climate regulations are discussed in detail in Section 6.0 of Appendix A.

Constituent gases of the Earth's atmosphere, called atmospheric greenhouse gases, play a critical role in Earth's radiation amount by trapping infrared radiation from Earth's surface, which otherwise would have escaped to space. Prominent greenhouse gases contributing to this process include carbon dioxide (CO₂), methane (CH₄), ozone (O₃), water vapor, nitrous oxide (N₂O), and chlorofluorocarbons (CFCs). GHGs have varying global warming potential (GWP). The GWP is the potential of a gas or aerosol to trap heat in the atmosphere; it is the cumulative radiative forcing effects of a gas over a specified time horizon resulting from the emission of a unit mass of gas relative to the reference gas, CO₂. The GHGs listed by the International Panel on Climate Change (IPCC) and the CEQA Guidelines are discussed in this section in order of abundance in the atmosphere. To simplify reporting and analysis, GHGs are commonly defined in terms of their GWP. The IPCC defines the GWP of various GHG emissions on a normalized scale that recasts all GHG emissions in terms of CO₂e. As such, the GWP of CO₂ is equal to 1.

The Proposed Project would consist of development of the proposed Fire Station No. 1 and Headquarters. The Project site is located within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). In order to identify the significance criteria under CEQA for development projects, SCAQMD initiated a Working Group, which provided detailed methodology for evaluating significance under CEQA. At the September 28, 2010 Working Group meeting, SCAQMD released its most current version of the draft GHG emissions thresholds, which recommends a tiered approach that provides a quantitative annual threshold of 3,000 MTCO₂e for all land use projects.

The Proposed Project is anticipated to generate GHG emissions from area sources, energy usage, mobile sources, waste disposal, water usage, backup generator, and construction equipment. The Project's GHG emissions have been calculated with the CalEEMod model based on the construction and operational parameters detailed in Section 8.1 of Appendix A. A summary of the results is shown below in Table 9 and the CalEEMod model run is provided in Appendix A.

Table 9: Project Related Greenhouse Gas Annual Emissions

Category	Greenhouse Gas Emissions (Metric Tons per Year)			
	CO ₂	CH ₄	N ₂ O	CO ₂ e
Area Sources ¹	0.00	0.00	0.00	0.00
Energy Usage ²	134.18	0.01	0.00	134.69
Mobile Sources ³	128.14	0.01	0.00	128.45
Backup Generator ⁴	1.88	0.00	0.00	1.89
Solid Waste ⁵	3.00	0.18	0.00	7.42
Water and Wastewater ⁶	34.25	0.17	0.01	39.73
Construction ⁷	5.05	0.00	0.00	15.12
Total GHG Emissions	306.50	0.37	0.01	327.30
SCAQMD Draft Threshold of Significance				3,000
Exceed Thresholds?				No

Source: Vista Environmental 2020

Notes:

¹ Area sources consist of GHG emissions from consumer products, architectural coatings, and landscaping equipment.

² Energy usage consists of GHG emissions from electricity and natural gas usage.

³ Mobile sources consist of GHG emissions from vehicles.

⁴ Backup Generator based on a 125 kW (190 Horsepower) diesel generator that has a cycling schedule of 30 minutes per week.

⁵ Waste includes the CO₂ and CH₄ emissions created from the solid waste placed in landfills.

⁶ Water includes GHG emissions from electricity used for transport of water and processing of wastewater.

⁷ Construction emissions amortized over 30 years as recommended in the SCAQMD GHG Working Group on November 19, 2009.

The data provided in Table 9 shows that the Proposed Project would create 327.30 MTCO₂e per year. According to the SCAQMD draft threshold of significance detailed in Section 9.6 of Appendix A, a cumulative global climate change impact would occur if the GHG emissions created from the on-going operations would exceed 3,000 MTCO₂e per year.

Therefore, a less than significant generation of greenhouse gas emissions would occur from development of the Proposed Project. Impacts would be less than significant.

Significance Determination: Less than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less than Significant Impact.

b) The Proposed Project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing GHG emissions. The Proposed Project consists of the development of the proposed Fire Station No. 1 and Headquarters. As detailed in Response 8(a), the Proposed Project is anticipated to create 327.30 MTCO₂e per year, which is well below the SCAQMD draft threshold of significance of 3,000 MTCO₂e per year. The SCAQMD developed this threshold through a Working Group, which also developed detailed methodology for evaluating significance under CEQA. At the September 28, 2010 Working Group meeting, the SCAQMD released its most current version of the draft GHG emissions thresholds, which recommends a tiered approach that provides a quantitative annual threshold of 3,000 MTCO₂e for all land use type Projects, which was based on substantial evidence supporting the use of the recommended thresholds. Therefore, the Proposed Project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

Significance Determination: Less than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less than Significant Impact.

9. HAZARDS AND HAZARDOUS MATERIALS

Would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impact Analysis:

a) The construction activities for the Proposed Project would involve the transport, use, and disposal of hazardous materials. Typical hazardous materials handled during construction include grease, lubricants, fuels, solvents, and aerosols. The Proposed Project would comply with the applicable regulations relating to transporting, using, and disposing of such materials. In addition, the proposed construction activities would be temporary until the end of construction. Thus, it would not create a significant hazard to the public or environment. During operation, Fire Station No. 1 and Headquarters would comply with regulated usage of hazardous materials typically found in fire stations and associated facilities. Such chemicals are already used at the existing facility, approximately 0.5 miles west of the Proposed Project site, and would be handled, stored, and disposed of in accordance with applicable regulations and under Fire Department guidelines. Impacts would be less than significant.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

b) While the Proposed Project will utilize potentially hazardous materials during construction, the transport, use, and disposal of such materials will abide by applicable regulations that will reduce the likelihood of an accidental release that would create a significant hazard to the public. Typical hazardous materials found in fire stations and associated facilities, will be handled, stored, and disposed of in accordance with applicable regulations and under Fire Department guidelines. Impacts would be less than significant.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

c) The Proposed Project site is located within a quarter mile (approximately 1,000 feet) away from the Palmyra Elementary School (Google Map 2020). The Proposed Project would involve the use of heavy equipment during construction that would emit emissions associated with internal combustion engines, i.e., diesel and gasoline. Once operational, the Proposed Project would involve the use of chemicals associated with fire station operations which would be subject to federal, State, and local health and safety requirements. As discussed above in Response 9(b), adherence to all local, County, State, and federal policies and regulations would reduce impacts to a level less than significant. Therefore, implementation of the Proposed Project would result in less than significant impacts associated with hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

d) The main Project site, as noted in the Project background, historically housed State and County fire apparatus repair shops, warehouse, offices outfitting and storage buildings along with State Division of Forestry residences and gasoline and diesel dispensing pumps. The facility suffered destruction by fire in the late 1980s, which resulted in a hazardous material discharge (gasoline) in the site. Soil Vapor Extraction method was applied as a remedial measure to mitigate the negative impacts. Presently, the Project site has undergone hazardous material clean-up review to ensure no residual gasoline discharge is present in the site. Thus, a review of federal and State standard and supplemental databases indicated that the two Proposed Project sites are not located within any identified hazardous material site pursuant to Government Code Section 65962.5 and, as a result, would not create a significant hazard to the public or environment (DTSC 2020). No impacts are expected.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

e) The Proposed Project site is located approximately 7.7 miles to the north of the John Wayne Airport in Orange County and outside of the airport's designated planning area (ALUC 2008). Thus, the Proposed Project activities would not result in a safety hazard or excessive noise for people residing or working in the airport area. Implementation of the Proposed Project would not result in an impact associated with a public airport.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

f) The construction of the Proposed Project would not involve blocking or restricting any access routes after construction is complete. While the Proposed Project may introduce temporary traffic delays during construction with vehicles entering and exiting the site, these incidents are limited during the construction phase. The Proposed Project would comply with the City's General Plan Public Safety Policy 6.5 through 6.7 that requires implementing the City's Emergency Preparedness Program, establish designated evacuation routes throughout the City, maintain and update the Emergency Operations Plan and Fire Department Strategic Deployment Plan. (City of Orange 2010b). The Proposed Project would not interfere with emergency response plans or operations near the sites during

construction. As a part of the Project activities, emergency warning systems would be installed along Chapman Avenue and Water Street to ensure safe ingress and egress into the site for Fire Department vehicles. Further, after the completion of the Proposed Project, the presence of the fire station in the neighborhood would beneficially impact the emergency response and actions in and around the neighborhood. Less than significant impacts would occur.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

g) The City of Orange is primarily built-out with the potential danger of wildfires only located on the eastern portions of the City. The Project site not located within a very high fire hazard severity zone (CalFire 2007, 2011). The Proposed Project site is located in an urbanized area in the southwestern part of the City of Orange. Additionally, the Proposed Project site contains limited vegetation; and all construction and operation activities would be conducted in compliance with standard safety protocols, which would minimize potential release of flammable materials (including fuel, lubricant, paint, and solvents). Further, after the completion of the Proposed Project, Fire Station No. 1 would assist in efforts to mitigate risk of loss, injury, or death in the event of a wildfire in the City. No impacts are expected.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

10. HYDROLOGY AND WATER QUALITY

Would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(i) result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding in- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iii) create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(f) Potentially impact stormwater runoff from construction activities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(g) Potentially impact stormwater runoff from post-construction activities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(h) Result in a potential for discharge of stormwater pollutants from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas, loading docks or other outdoor work areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(i) Result in the potential for discharge of stormwater to affect the beneficial uses of the receiving waters?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(j) Create the potential for significant changes in the flow velocity or volume of stormwater runoff to cause environmental harm?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(k) Create significant increases in erosion of the Project site or surrounding areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The following analysis is based on the Preliminary Priority Water Quality Management Plan (WQMP) prepared by MSL Engineering, dated June 22, 2020 (Appendix C).

Impact Analysis:

a) The Proposed Project includes the construction of a new Fire Station No. 1, Fire Headquarters, and associated parking lot to replace the current aging and undersized station. The Project site is currently vacant, graded with little to no vegetation. The site of the parking lot is located at a property that includes an existing parking lot, across Water Street from main Project site. The Proposed Project design, including a reconfiguration of the parking lot and addition of landscaping, would result in a 74,021 square feet of impervious surfaces and approximately 13,144 square feet of landscaping (MSL Eng. 2020).

As previously discussed in Response 7(b), the Proposed Project would, as a part of the NPDES permit, include the development of a Stormwater Pollution Prevention Plan (SWPPP) to address and control possible stormwater pollution impacts during construction. The implementation of a SWPPP is required for projects disturbing more than one acre of developed land. The SWPPP identifies and requires the implementation of best management practices (BMPs) to control soil erosion and sediment runoff.

Post-construction, the Proposed Project operations might result in the generation of the following expected pollutants: suspended-solid/sediments, nutrients, heavy metals, pathogens (bacteria/virus), pesticides, oil and grease, toxic organic compounds, and trash and debris. However, due to the implementation of best management practices (BMPs), including minimizing impervious areas and maximizing permeability onsite, the impacts from any discharge or runoff would be minimized. These BMPs would include, but not be limited to, connecting all impervious areas to the proposed infiltration system and maximizing permeability, developing a Spill Contingency Plan, designating spaces for vehicle or community wash areas and fueling areas (MSL Eng. 2020).

To help prevent long-term water quality impacts associated with land use changes and in accordance with the requirements of the City and consistency with the regional Municipal Separate Storm Sewer System (MS4) storm water permit issued by the Santa Ana Regional Water Quality Control Board (RWQCB) (Order No. R8-2009-0030, amended by Order No. R8-2010-0062; NPDES Permit No. CAS618030), new development and significant redevelopment projects must prepare and implement a project-specific Water Quality Management Plan (WQMP) aimed at reducing pollutants in post-development runoff. Specifically, a project-specific WQMP includes RWQCB approved BMPs, where applicable, that address post-construction management of storm water runoff water quality. As part of the WQMP, projects must incorporate low impact development (LID), site design and source control BMPs to address post-construction storm water runoff management. In addition, new development and redevelopment projects are required to implement site design/LID and source control BMPs applicable to their specific priority project categories, as well as implement treatment control BMPs where necessary. Selection of LID and additional treatment control BMPs is based on the pollutants of concern for the specific project site and the BMP's ability to effectively treat those pollutants, in consideration of site conditions and constraints.

Thus, with the compliance to regulatory requirements and the BMPs established for the Project in a final WQMP, Project construction and operation would not result in a violation of any water quality standard, Therefore, Project impacts related to water quality would be less than significant.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

b) The City currently relies on approximately 20,623 acre-feet per year of groundwater from the Orange County Basin (OC Basin) to meet a large portion of its water demand. Recharging water into the OC Basin through natural and artificial means is essential to support pumping from the OC Basin (City of Orange 2015). However, a review of the Surface Water Recharge Facilities Map prepared by the Orange County Water District shows that the Proposed Project site is not used for groundwater recharge (OCWD 2018). The Proposed Project activities do not involve ground excavation or drilling that would impact the City's wells or the groundwater quality. The Proposed Project would connect to the existing water lines and would not result in a significant decrease in groundwater supplies nor would it exceed the planned groundwater usage. The Proposed Project would comply with applicable

Stormwater Pollution Prevention Plan (SWPPP) procedures and BMPs to restrict the discharge of contaminated runoff into local storm drains. Along with site planning features focused on minimizing impervious areas and increasing permeability onsite, the Proposed Project would include BMPs after project completion to avoid and minimize any polluted runoff from the site as outlined in the WQMP. As a result, impacts would be less than significant.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

c) i) The Proposed Project would be constructed on a currently vacant parcel in an urban setting and would not impact any nearby streams or rivers. The nearest waterway to the Project site is Santiago Creek, which is approximately 0.67 miles to the west of the site. As discussed in Response 10(a), the Proposed Project would minimize impervious areas and maximizing permeability onsite and all generated runoff from the site will be collected onsite and conveyed through new drain box inlets, that contain Kristar Fossil Filter inserts for initial pre-treatment, to the new stormwater treatment system. The Final WQMP would include other BMPs to address operational concerns of soil erosion, including but not limiting to, developing a Spill Contingency Plan and designating spaces for vehicle or community wash areas and fueling areas. Additionally, the Project would also implement a SWPPP to address the concerns of polluted runoff during construction. Thus, impacts would be less than significant.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

ii) As discussed in Response 10(a), the Proposed Project could result in polluted runoff due to construction activities. However, the proposed construction activities would be limited to the Proposed Project site and the Proposed Project does not involve the disturbance or alteration of a stream, river, or water body. Further, as noted in Response 10(c)(i), the Proposed Project would implement a SWPPP and a WQMP to address any concerns related to soil erosion and polluted runoff onsite during construction and operation respectively. The SWPPP addresses construction concerns, whereas the WQMP addresses operational concerns. Impacts would then be less than significant.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

iii) and iv) A geotechnical investigation of the site revealed that the site is not located within a 100-year or 500-year flood plain based on the Federal Emergency Management Agency (FEMA) flood maps, nor is located near dams or in an area shown as susceptible to dam inundation by the California Office of Emergency Services (OES) (Leighton 2019). As previously discussed in Responses 10(c)(i) and (ii), the Proposed Project would result in increased runoff due to the construction and operational activities, especially with the addition of impervious surfaces to the site. However, no activities are proposed that would alter the existing topography of the Project site, which is mostly flat, that would impede or redirect flood flows. Further, the implementation of the BMPs delineated in the SWPPP and WQMP, would ensure that the generated runoff from construction and operational activities respectively would be minimized and mitigated wherever possible. Thus, it is expected that the

Proposed Project would not result in runoff that would exceed the existing or planned capacities of stormwater drainage systems. Impacts would be less than significant.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

d) The Project site is located approximately 12 miles from the Pacific coast. Seiches are large waves generated by ground shaking effects within enclosed bodies of water. Tsunamis are tidal waves generated by fault displacement or major ground movement. The Proposed Project sites are relatively flat, located in an urban setting and not located in any flood hazard, tsunami, or seiche zones. No impacts would occur.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

e) As discussed in Responses 10(a) and 10(b), the Proposed Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management. The Proposed Project would not conflict or obstruct the OCWD's Groundwater Management Plan because the Proposed Project would not involve the modification of any water systems or wells within the area. Thus, impacts would be less than significant.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

f) As noted in Response 10(a), the Proposed Project would involve potentially hazardous materials during construction work, which when mixed with discharge or stormwater runoff onsite, could result in adverse impacts and polluted stormwater runoff. However, the Proposed Project would include BMPs and the development of a SWPPP to address these issues and minimize stormwater pollution during construction. Thus, the impacts will be less than significant.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

g) and h) Post-construction, the Fire Headquarters and the Fire Station No. 1 operations might result in the generation of the following expected pollutants: suspended-solid/sediments, nutrients, heavy metals, pathogens (bacteria/virus), pesticides, oil and grease, toxic organic compounds, and trash and debris. However, as discussed in Response 10(a), all generated runoff from the site would be collected onsite and conveyed through new drain box inlets, that contain Kristar Fossil Filter inserts for initial pre-treatment, to the new stormwater treatment system. Further, the implementation of the BMPs delineated in the SWPPP and WQMP, would ensure that the generated runoff from construction and operational activities respectively would be minimized and mitigated wherever possible. These BMPs would include, but not be limited to, connecting all impervious areas to the proposed infiltration system and maximizing permeability, developing a Spill Contingency Plan, designating spaces for vehicle or community wash areas and fueling areas and conducting employee-training programs

related to the BMP practices. Thus, impacts to stormwater runoff during post-construction activities and during the regular operation of the fire station is less than significant.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

i) As noted in Response 10(a), the Project design proposes that all generated runoff from the site would be collected onsite and conveyed through new drain box inlets, that contain Kristar Fossil Filter inserts for initial pre-treatment, to the new stormwater treatment system. A water well is located at the property adjacent to the main Project site, in the Water Yard. The Project would also implement a SWPPP and a WQMP to ensure that any polluted stormwater runoff, generated during construction and operation respectively, will not impact the receiving public water system. The SWPPP addresses construction concerns, whereas the WQMP addresses operational concerns. These BMPs would include, but not be limited to, connecting all impervious areas to the proposed infiltration system and maximizing permeability, developing a Spill Contingency Plan, designating spaces for vehicle or community wash areas and fueling areas (MSL Eng., 2020). The Proposed Project would convey runoff to an underground infiltration system located on the southwest portion of the main Project site through a new storm drain to the west side of Water Street. The infiltration system will consist of 70 linear feet of 8 inch diameter perforated corrugated steel pipe surrounded by 1 foot of drainage gravel. The infiltration system is proposed approximately 100 feet west of the existing water well on the Water Yard. The onsite stormwater runoff is proposed to be collected within new drain box inlets that contain Kristar Fossil Filter inserts for initial pretreatment and to collect large debris that will occur within the parking lot. Since a filter will be included in the proposed infiltration system, the proximity to the existing well would not cause a significant impact (MSL Engineering 2020). Thus, impacts will be less than significant.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

j) The Proposed Project would generate stormwater runoff during construction and operation of the Fire Station, Headquarters, and the associated facilities. However, the implementation of the BMPs delineated in the SWPPP and WQMP, would ensure that the generated stormwater runoff from construction and operational activities respectively would be minimized and mitigated wherever possible. All runoff from the site will be collected onsite and conveyed through a new underground storm drain system to the new storm water treatment system. The main Project site would be collected and treated separately from the parking Project site. The impervious surface area would be reduced from 82,806 sf in the existing condition to 74,021 in the proposed condition. With the other drainage characteristics remaining relatively consistent in the proposed conditions when compared to the existing condition, this would lead to a reduction in peak flowrates from the site in the proposed condition. The BMPs for the site would include, but not be limited to, connecting all impervious areas to the proposed infiltration system and maximizing permeability, developing a Spill Contingency Plan, designating spaces for vehicle or community wash areas and fueling areas thus minimizing the amount of storm water runoff generated onsite. The two separate underground storm water infiltration systems would treat runoff from the 24hour, 85th Percentile Rainfall depth, determined to be 0.8 inches for the site location (MSL Eng. 2020). Impacts would be less than significant.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

k) The Proposed Project activities, during construction, involves ground disturbance and excavation which could generate loose soil. This, along with stormwater and discharges from construction activities, could result in soil erosion onsite. However, as noted in Response 10(c)(i), a SWPPP will be developed for the site to minimize runoff and soil erosion, and properly treat any polluted runoff that is generated during construction. Thereafter, in accordance with the required final WQMP, BMPs would be employed on the site including, but not limiting to, developing a Spill Contingency Plan and designating spaces for vehicle or community wash areas and fueling areas, which would avoid and minimize any polluted runoff from the site during operations. Impacts would be less than significant.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

11. LAND USE/PLANNING

Would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact Analysis:

a) The Proposed Project includes the construction of the City of Orange Fire Station No. 1, Fire Headquarters, and associated parking lot to replace the current aging and undersized station. The main Project site is located on a City owned and currently vacant lot, adjacent to the Orange Water Division building and other professional office facilities and residential buildings. The parking site is located on the site of an existing operational parking lot across Water Street. The Proposed Project would be consistent with the existing Public Facilities and Institutions (PFI) land use south of the site, as the main Project site is adjacent to the existing Water Division building; and would not divide an established community. The parking lot use would remain with landscape and perimeter screening enhancements. While the southern boundary of Proposed Project site is in close proximity to residential properties, the Proposed Project activities would not prevent resident access to the nearby roadways, transit facilities, or any other public service and utility, either during construction or operation of the facilities. No impact would occur.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

b) The Proposed Project sites, as noted above, are surrounded by the Orange Water Division building, other professional office facilities and residential buildings. The main Project site is zoned Office Professional (O-P) and Single Family Residential (R-1-6), and the parking site is zoned as Single Family Residential (R-1-6) (City of Orange 2016). However, as part of the Project activities, a zone change of the main Project site to Public Institution (P-I) is proposed to better reflect the existing nature of the land uses in the neighborhood and to ensure that the Proposed Project is consistent with the General Plan. Therefore, with the zone change, the Proposed Project, would result in a more consistent and cohesive land use pattern in the neighborhood. The parking site will retain the same designation throughout the Proposed Project activities. Per City Zoning Code 17.38.050 – Exemption for Public Utilities and Publicly Owned Uses, since the site of the parking lot will not be expanding in size, it is not subject to nonconforming provisions. The Proposed Project would not conflict with any policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Less than significant impacts are expected.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

12. MINERAL RESOURCES

Would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impact Analysis:

a) The Proposed Project site is not identified as being within a significant mineral resource zone in the California Department of Conservation’s Mineral Land Classification Map. In addition, the map notes no other sites in the City of Orange as a State Division of Mines and Geology designated classified mineral resource deposit area (California Department of Conservation 2020). No impact would occur.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

b) The Proposed Project would be limited to a total area of approximately 2.75 acres in size and would not result in loss of availability of a known or locally important resource. As noted above, no other sites have been designated as a classified mineral resource deposit area in the City of Orange (California Department of Conservation 2020). In addition, no mineral resource extraction would occur as part of the Proposed Project. No impact would occur.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

13. NOISE

Would the Project result in:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) For a Project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

This section describes the existing noise setting and potential noise and vibration effects from the Proposed Project implementation on the site and its surrounding areas. The following analysis is based on the technical noise study prepared by Vista Environmental, dated June 23, 2020 (Appendix D).

Existing Setting

To determine the existing noise levels, noise measurements have been taken in the vicinity of the Proposed Project site. The field survey noted that noise within the Proposed Project area is generally characterized by vehicle traffic on Chapman Avenue, which is located adjacent to the north side of the main Project site. The noise monitoring locations were selected in order to obtain noise measurements of the current noise levels in the vicinity of the nearby homes. The noise measurement sites were selected to provide a representative sampling of the existing noise levels in the Proposed Project vicinity. The noise measurements were recorded between 12:18 p.m. on Wednesday, April 1, 2020 and 12:35 p.m. on Thursday, April 2, 2020. The descriptions of the noise monitoring sites and results of the noise level measurements are presented in Table 10 below.

Table 10: Existing (Ambient) Noise Level Measurements

Site No.	Site Description	Average (dBA L _{eq})		1-hr Average (dBA L _{eq} /Time)		Average (dBA CNEL)
		Daytime ¹	Nighttime ²	Minimum	Maximum	
A	Located approximately 100 feet south of the southwest corner of the parking site, on a parking lot gate that is located approximately 90 feet north of Almond Ave Centerline.	54.8	47.0	38.5 12:58 a.m.	61.5 11:16 a.m.	56.3
B	Located approximately 160 feet north of the Main Project site on a tree that is located approximately 35 feet west of Monterey Road centerline.	64.2	53.2	46.6 10:56 p.m.	68.8 1:48 a.m.	64.0
C	Located approximately 50 feet east of the Main Project site on a sign in front of the home at 129 Jameson Street	56.8	47.2	40.1 1:13 a.m.	60.1 9:40 a.m.	60.1

Source: Vista Environmental 2020; Noise measurements taken between Wednesday April 1, and Thursday, April 2, 2020.

Notes:

¹ Daytime defined as 7:00 a.m. to 10:00 p.m. (Section 8.24.040 of the Municipal Code)

² Nighttime define as 10:0 p.m. to 7:00 a.m. (Section 8.24.040 of the Municipal Code)

Standard Noise Regulatory Conditions

The City of Orange General Plan and Municipal Code establishes the following applicable policies related to noise and vibration.

City of Orange General Plan

The City of Orange has developed its own land use compatibility standards based on recommended parameters from the California Governor’s Office of Planning and Research that rate compatibility. Using the State’s land use compatibility guidelines, the City has established interior and exterior noise standards. The City’s compatibility standards provide only for normally acceptable conditions based on State recommendations and City land use designations. The City’s Land Use Compatibility standards are presented in Table 11.

Table 11: City of Orange Maximum Allowable Noise Exposure – Transportation Sources

Land Use Designations	Land Use Uses	CNEL (dBA)	
		Interior ^{1,3}	Exterior ²
Estate Low Density Residential	Single-family, duplex, and multiple-family	45	65
Low Density Residential			
Low Medium Density Residential	Mobile home park	N/A	65
Medium Density Residential	Single-family	45	65
Neighborhood	Mobile home park	N/A	65
Mixed-Use	Multiple-family, mixed use	45	65 ^{4,5}
Neighborhood Office Professional	Transient lodging-motels, hotels	45	65
Old Towne Mixed-use	Sports arenas, outdoor spectator sports	N/A	N/A
General Commercial	Auditoriums, concert halls, amphitheaters	45	N/A
Yorba Commercial Overlay			
Urban Mixed-use	Office buildings, business, commercial and professional	50	N/A
Urban Office Professional			
Light Industrial	Manufacturing, utilities, agriculture	N/A	N/A
Industrial			
	Schools, nursing homes, day care facilities, hospitals, convalescent facilities, dormitories	45	65
	Government Facilities-offices, fire stations, community buildings	45	N/A
Public Facilities and Institutions	Places of Worship, Churches	45	N/A
	Libraries	45	N/A
	Utilities	N/A	N/A
	Cemeteries	N/A	N/A
Recreation Commercial			
Open Space	Playgrounds, neighborhood parks	N/A	70
Open Space-Park			
Open Space-Ridgeline	Golf courses, riding stables, water recreation, cemeteries	N/A	N/A
Resource Area			

Source: Vista Environmental 2020

Notes:

Land Use		CNEL (dBA)	
Land Use Designations	Uses	Interior ^{1,3}	Exterior ²
<p>(1) Interior habitable environment excludes bathrooms, closets, and corridors.</p> <p>(2) Exterior noise level standard to be applied at outdoor activity areas, such as private yards, private patio, or balcony of a multi-family residence. Where the location of an outdoor activity area is unknown or not applicable, the noise standard shall be applied inside the property line of the receiving land use.</p> <p>(3) Interior noise standards shall be satisfied with windows in the closed position. Mechanical ventilation shall be provided per Uniform Building Code (UBC) requirements.</p> <p>(4) Within the Urban Mixed-Use, Neighborhood Mixed-Use, Old Towne Mixed-Use, and Medium Density Residential land use designations, exterior space standards apply only to common outdoor recreational areas.</p> <p>(5) Within Urban Mixed-Use and Medium Density Residential land use designations, exterior noise levels on private patios or balconies located within 250 feet of freeways (I-5, SR-57, SR-55, SR-22, or SR-241) and Smart Streets and Principal Arterial identified in the Circulation & Mobility Element that exceed 70 dB should provide additional common open space.</p> <p>N/A=Not Applicable to specified land use category or designation.</p>			

The City’s maximum allowable noise exposure levels from stationary sources are defined in Table N-4 of the General Plan and reprinted below in Table 12.

Table 12: City of Orange Maximum Allowable Noise Exposure – Stationary Sources

Noise Level Descriptor	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly Equivalent Level (Leq), dBA	55	45
Maximum Level (Lmax), dBA	70	65

Source: Vista Environmental 2020.

Notes:

- (1) These standards apply to new or existing noise sensitive land uses affected by new or existing non-transportation noise sources, as determined at the outdoor activity area of the receiving land use. However, these noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g. caretaker dwellings).
- (2) Each of the noise levels specified above should be lowered by five dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. Such noises are generally considered by residents to be particularly annoying and are a primary source of noise complaints. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g. caretaker dwellings).
- (3) No standards have been included for interior noise levels. Standards construction practices that comply with exterior noise levels identified in this table generally result in acceptable interior noise levels.
- (4) The City may impose noise level standards which are more or less restrictive than those specified above based upon determination of existing low or high ambient noise levels. If the existing ambient noise level exceeds the standards listed in Table N-4, then the noise level standards shall be increased at 3 dB increments to encompass the ambient noise environment. Noise level standards incorporating adjustments for existing ambient noise levels shall not exceed a maximum of 70 dB Leq.

For City analysis of noise impacts and determining appropriate mitigation under the California Environmental Quality Act (CEQA), in addition to the maximum allowable noise level standards outlined in Tables N-3 (Table 11 above) and N-4 (Table 12 above) from the General Plan, an increase in ambient noise levels is assumed to be a significant noise impact if a project causes ambient noise levels to exceed the following:

- Where the existing ambient noise level is less than 60 dBA, a project related permanent increase in ambient noise levels of 5 dBA CNEL or greater.
- Where the existing ambient noise level is greater than 65 dBA, a project related permanent increase in ambient noise levels of 3 dBA CNEL or greater.

In addition to the standards provided above, the City of Orange General Plan includes the following goals and policies that are applicable to the proposed project.

Goals and Policies

GOAL 2.0: Minimize vehicular traffic noise in residential areas and near noise-sensitive land uses.

Policy 2.2: Encourage coordinated site planning and traffic control measures that minimize traffic noise in noise-sensitive land use areas.

GOAL 7.0: Minimize construction, maintenance vehicle, and nuisance noise in residential areas and near noise-sensitive land uses.

Policy 7.2: Require developers and contractors to employ noise minimizing techniques during construction and maintenance operations.

Policy 7.3: Limit the hours of construction and maintenance operations located adjacent to noise-sensitive land uses.

Policy 7.4: Encourage limitations on the hours of operations and deliveries for commercial, mixed-use, and industrial uses abutting residential zones.

City of Orange Municipal Code

The City of Orange Municipal Code establishes the following applicable standards related to noise.

Section 8.24.020 Definitions.

The following words, phrases and terms as used in this chapter shall have the meaning as indicated below:

- A. "Ambient noise level" means the all-encompassing noise level associated with a given environment, being a composite of sounds from all sources, excluding the alleged offensive noise at the location and approximate time at which a comparison with the alleged offensive noise is to be made.
- B. "Adjusted ambient noise level" means the measured ambient noise level plus 3 dB (A). Three (3) dB (A) is the industry-accepted threshold of human perceptibility for a change in noise environment.

Section 8.24.040 Exterior Noise Standards.

- A. The following noise standards [Table 13] for fixed noise sources, unless otherwise specifically indicated, shall apply to all residential property:

Table 13: City of Orange Municipal Code Exterior Noise Standards

Standard	Noise Level	Time Period
Hourly Average (Leq)	55 dB (A)	7:00 a.m. – 10:00 p.m.
	50 dB (A)	10:00 p.m. – 7:00 a.m.
Maximum Level	70 dB (A)	7:00 a.m. – 10:00 p.m.
	65 dB (A)	10:00 p.m. – 7:00 a.m.

Source: Vista Environmental, 2020.

- B. It is unlawful for any person at any location within the City to create any noise, or to allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which causes the noise level when measured on any other residential property to exceed the noise standards identified in Table 8.24.040. For multi-family residential or mixed use developments located within the City’s Urban Mixed Use, Neighborhood Mixed Use, Old Towne Mixed Use or Medium Density Residential General Plan land use districts, exterior noise standards shall apply to common recreation areas only and shall not apply to private exterior space (such as a private yard, patio, or balcony)
- C. In the event the ambient noise level exceeds the noise standards identified in Table 8.24.040 of this section, the “adjusted ambient noise level” shall be applied as the noise standard. In cases where the noise standard is adjusted due to a high ambient noise level, the noise standard shall not exceed the “adjusted ambient noise level”, or 70 dB (A), whichever is less. In cases where the ambient noise level is already greater than 70 dB (A), the ambient noise level shall be applied as the noise standard.
- D. Each of the noise limits specified in Table 8.240.040 shall be reduced by five dB(A) for impact or simple tone noises, recurring impulsive noises, or for noises consisting of speech or music. (Ord. No. 1-4 § I, 8-12-14)

8.24.050 Exemptions from Chapter Provisions.

The following activities shall be exempted from the provisions of this chapter:

- Noise sources associated with construction, repair, remodeling, or grading of any real property, provided said activities take place between the hours of 7:00 a.m. and 8:00 p.m. on any day except for Sunday or a Federal holiday, or between the hours of 9:00 a.m. and 8:00 p.m. on Sunday or a Federal holiday. Noise generated outside of the hours specified are subject to the noise standards identified in Table 8.24.040;
- Noise sources associated with the maintenance of real property, provided such activities take place between the hours of 7:00 A.M. and 8:00 P.M. on any day except Sunday or a Federal holiday, or between the hours of 9:00 A.M. and 8:00 P.M. on Sunday or a Federal holiday;
- Mobile noise sources including but not limited to operational noise from trains, or automobiles or trucks traveling on roadways. Transportation noise as related to noise/land use compatibility is subject to the City's General Plan Noise Element;
- Any activity to the extent regulation thereof has been preempted by State or Federal Law. (Ord. No. 1-4 § I, 8-12-14)

8.24.060 Special Provisions for Schools, Hospitals and Churches.

It is unlawful for any person to create any noise which causes the noise level at any school, hospital, or church, while the same is in use, to exceed the noise limits as specified in Section 8.24.040, or which noise level unreasonably interferes with the use of such institutions. (Ord. No. 1-4 § I, 8-12-14)

Project Design Features

The analysis in this section was based on implementation of the following project design features for the Project, as noted in the Project Description section.

Project Design Feature 1:

The Project applicant shall construct a minimum 7.7-foot concrete masonry unit wall that is depicted on the proposed site plan and is located on the east side of the proposed staff parking lot that is located on the southeast corner of the Fire Station Site. Any doors installed in the wall shall be solid doors with self-closing hinges.

Project Design Feature 2:

The Project applicant shall install a sound enclosure on the proposed emergency generator that is depicted on the proposed site plan. The sound enclosure shall be no less effective than a Level 1 Sound Enclosure provided by Generac.

Impact Analysis:

a) The Proposed Project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the City of Orange General Plan or noise ordinance, or applicable standards of other agencies. The following section calculates the potential noise emissions associated with the temporary construction activities and long-term operations of the Proposed Project and compares the noise levels to the City standards.

Construction-Related Noise

The construction activities for the Proposed Project are anticipated to include demolition and grading of both Project sites, building construction, paving of the onsite driveways, and parking lots, and application of architectural coatings. Noise impacts from construction activities associated with the Proposed Project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities. The nearest sensitive receptors to the main Project site are single-family residences located on the east side of Jameson Street, which are as near as 60 feet east of the main Project site. The nearest sensitive receptors to the parking site are single-family residences located as near as 30 feet southwest of the parking site.

Section 8.24.050(E) of the Municipal Code exempts construction noise from the City noise standards that occurs between 7:00 a.m. and 8:00 p.m. Monday through Saturday and between 9:00 a.m. and 8:00 p.m. on Sundays and holidays. However, the City construction noise standards do not provide any limits to the noise levels that may be created from construction activities and even with adherence to the City standards, the resultant construction noise levels may result in a significant substantial temporary noise increase to the nearby residents and offsite workers.

In order to determine if the proposed construction activities would create a significant substantial temporary noise increase, the Federal Transit Administration (FTA) construction noise criteria thresholds detailed in Section 4.1 in Appendix D have been utilized, which shows that a significant construction noise impact would occur if construction noise exceeds 90 dBA Leq at any of the nearby sensitive receptors. The calculated construction noise results are shown below in Table 14 and the RCNM printouts are provided in Appendix D.

Table 14: Construction Noise Levels at the Nearest Homes

Construction Phase	Construction Noise Level (dBA Leq) at:	
	Nearest Homes to Main Project site ¹	Nearest Homes to Parking Site ²
Demolition	82	82
Grading	81	81
Building Construction	76	61
Paving	74	73
Painting	71	71
FTA Construction Noise Threshold³	90	90
Exceed Threshold?	No	No

Source: Vista Environmental 2020

¹ The nearest homes to the Main Project site are located on the east side of Jameson Street and are as near as 60 feet east of the Main Project site.

² The nearest homes to the Parking site are located as near as 30 feet southwest from the southwest corner of the Parking site. 5 dB of shielding was added to account for the existing 6 foot high wall located on the home's property line.

³ FTA Construction Noise Threshold obtained from Appendix D.

Table 14 shows that the greatest noise impacts would occur during the demolition phase of construction, with a noise level as high as 82 dBA Leq at the nearest homes to the main Project site and nearest homes to the parking site. Table 14 also shows that none of the construction phases would exceed the FTA construction noise standard of 90 dBA for residential uses. Therefore, through adherence to allowable construction times provided in 8.24.050(E) of the Municipal Code, the construction activities for the Proposed Project would not create a substantial temporary increase in ambient noise levels that are in excess of applicable noise standards. Impacts would be less than significant.

Operational-Related Noise

The Proposed Project would consist of the relocation of Fire Station No. 1 and Headquarters. Potential noise impacts associated with the operations of the Proposed Project would be from project-generated vehicular traffic on the nearby roadways as well as from onsite noise sources associated with the operation of the Proposed Project.

Roadway Vehicular Noise

Vehicle noise is a combination of the noise produced by the engine exhaust, and tires. According to the General Plan, an increase in ambient noise levels is assumed to be a significant noise impact if a Project causes ambient noise levels to exceed the following:

- Where the existing ambient noise level is less than 60 dBA, a Project related permanent increase in ambient noise levels of 5 dBA CNEL or greater.
- Where the existing ambient noise level is greater than 65 dBA, a Project related permanent increase in ambient noise levels of 3 dBA CNEL or greater.

Since the Proposed Project consists of the relocation of the Fire Station No. 1 and Headquarters from 176 S. Grand Street to the proposed location, which is approximately 0.6 mile away, no traffic analysis was prepared for the Project, since the Project generated vehicle trips would occur on the same roads for both without and with Project conditions. However, the Proposed Project has the potential to increase traffic on Chapman Avenue in the immediate vicinity of the Project site. According to the Program Environmental Impact Report for the City of Orange General Plan, in the year 2030, Chapman Avenue between Cambridge Street and Tustin Street will have 28,400 vehicles per day. According to the CalEEMod model run in the Air Quality Analysis (Appendix A), the Proposed Project would generate up to 1,932 daily trips, which would result in up to a 6.8 percent increase of daily trips on Chapman Avenue in the vicinity of the Project site.

In order for Project-generated vehicular traffic to increase the noise level on Chapman Avenue by 3 dB, the roadway traffic would have to double, and for the roadway noise levels to increase by 1.5 dB, the roadway traffic would have to increase by 50 percent. Since the Proposed Project would only result in a maximum of a 6.8 percent increase in traffic volumes on Chapman Avenue, the Project-related roadway noise increase is anticipated to be negligible. It should also be noted that a large percentage of trips generated from the existing Fire Station No. 1 and Headquarters currently travel on Chapman Avenue in the vicinity of the Project site, so the actual Project trip generation would be much less than 6.8 percent of the traffic on Chapman Avenue. Roadway noise impacts created from the Proposed Project would be less than significant.

Onsite Noise Impacts

The operation of the proposed Fire Station No. 1 and Headquarters may create an increase in noise levels created onsite from fire station activities, rooftop mechanical equipment, and the backup generator at the nearby homes located as near as 60 feet east of the main Project site. The parking site would consist of long-term employee parking behind a security gate, with only two visitor parking spaces. The parking site activity would create noise levels that would be well below City noise standards.

Section 8.24.040(A) of the City's Municipal Code limits noise generated from onsite activities at the nearby residential properties to 55 dBA Leq and 70 dBA Lmax between the hours of 7:00 a.m. and 10:00 p.m. and 50 dBA Leq and 65 dBA Lmax between the hours of 10:00 p.m. and 7:00 a.m.

In order to determine the noise that would be created with implementation of the Proposed Project, a 24-hour noise measurement was taken in the yard at the existing Fire Station No. 1 that captured all fire station-related noise sources, including if sirens were on when vehicles left the station. In addition, a reference noise measurement of operational rooftop mechanical equipment and the manufacturer noise specifications for a 250 kW backup generator have been utilized to provide a complete assessment of the potential operational noise that would be created by the Project. The reference noise measurements are shown in Table 15. Table 15 also shows the anticipated noise level from each source at the nearest residences located on the east side of the main Project site. The operational reference noise measurements and the noise reduction calculations provided by the proposed 7.7 foot high sound wall on the east side of the staff parking area that is detailed in Project Design Feature 1, a 4 foot high parapet wall that would shield the rooftop equipment, and use of a sound enclosure on the backup generator that is detailed in Project Design Feature 2 are shown in Appendix D.

Table 15: Operational Noise Levels at the Nearest Homes to the Main Project site

Noise Source	Reference Noise		Calculated Noise Levels		City Noise Standards (Day/Night)	Exceed Standard? (Day/Night)
	Distance Receptor to Source (feet)	Reference Noise Level (dBA)	Distance to Homes (feet)	Noise Level ¹ (dBA Leq)		
Fire Station		55.7 Leq		34 Leq	55/50	No/No
Activities (including siren use)	30	67.9 Lmax	150	65 Lmax	70/65	No/No
Rooftop Equipment	10	66.6 Leq	70	31 Leq	55/50	No/No
		79.2 Lmax		43 Lmax	70/65	No/No
Backup Generator	23	76.0 Leq	200	50 Leq	55/50	No/No
		76.0 Lmax		50 Lmax	70/65	No/No

Notes:

¹ The calculated noise levels account for the noise reduction provided by Project Design Feature 1 of the proposed 7.7-foot high wall on the east side of staff parking area and the proposed 4-foot parapet wall on the roof for the Rooftop Equipment and Project Design Feature 2 that requires a sound enclosure for the backup generator (see Appendix D).

Table 15 shows that with implementation of Project Design Features 1 and 2 that the onsite operational noise levels created by the proposed Fire Station No. 1 and Headquarters would be within the City’s daytime and nighttime average and maximum noise standards at the adjacent residences as near as 60 feet from the Project site, adjoining Jameson Street on the east side of the main Project site. Therefore, the Proposed Project would not result in a substantial permanent increase in ambient noise levels from onsite noise sources. Impacts would be less than significant.

Emergency Vehicle Siren Noise on Nearby Roads

The onsite noise analysis, provided above, analyzed the noise impacts from all anticipated onsite noise impacts, including emergency vehicle siren noise. However, there is potential that the proposed relocation of Fire Station No. 1 and Headquarters would result in increased emergency vehicle siren use on the nearby roads. According to the Orange Fire Department, Fire Station No. 1 received 16,483 calls in 2019, which equates to an average of 45 calls per day. It should be noted that a majority of calls do not require sirens (typically less than 23 calls per day use sirens). Approximately a quarter of the calls from the existing Fire Station No. 1 travel along Chapman Avenue in the vicinity of the Project site (approximately 6 calls per day currently travel on Chapman Avenue from Fire Station No. 1), so the proposed relocation of Fire Station No. 1 would likely result in an increase of siren use in the vicinity of the Project site by an average of approximately 17 calls per day (i.e., $45/2 = 23-6=17$).

Section 8.24.050(D) of the Municipal Code exempts noise created from emergency vehicles and Section 8.24.050(L) of the Municipal Code exempts noise created from vehicles operating on public roadways. As such, emergency vehicle siren use is exempt from the Municipal Code noise standards. However, page N-9 of the General Plan details that an increase in ambient noise levels is assumed to be a significant noise impact if a project causes ambient noise levels to exceed the following:

- Where the existing ambient noise level is less than 60 dBA, a project related permanent increase in ambient noise levels of 5 dBA CNEL or greater.
- Where the existing ambient noise level is greater than 65 dBA, a project related permanent increase in ambient noise levels of 3 dBA CNEL or greater.

It is anticipated that the home at that would experience the greatest impact from increased siren use is located at 120 N Monterey Road, which is located as near as 175 feet north of the proposed Fire Station exit driveway on Chapman Avenue. This home/sensitive receptor is the closest distance to Chapman Avenue and is also located nearest to the proposed fire station driveway. Hence this site was selected for analysis as the nearest capture point for siren noise from emergency vehicles traveling both east and west on Chapman Avenue. Noise Measurement Site B that is shown above in Table 10, was taken near the south property line at 120 N Monterey Road, and measured a noise level of 64.0 dBA CNEL.

Most emergency vehicle sirens are rated around 124 dB at 10 feet from the siren (<https://www.fireapparatusmagazine.com/2017/04/04/siren-limitation-training/#gref>). Based on standard geometric spreading of noise, at 175 feet, the siren noise would be 99 dB. The nearest residence is located behind a row of commercial buildings and Caltrans research (Caltrans 2013) has found that a row of buildings provide approximately 5 dB of attenuation. As such, this would lower the siren noise to 94 dB at the nearest home.

It is assumed that the peak siren noise level would last approximately 10 seconds at the nearest home to the proposed Fire Station driveway. Based on the average increase of 17 calls with sirens per day, this would result in a 2.8 minute increase in siren noise per day at the nearest home, which represents 1/508 of the day (24 hour period). The increased siren use would result in a 4.7 dB noise level increase at the nearest residence to the proposed Fire Station No. 1 driveway, which is within the 5 dB increase threshold detailed above. It should be noted, that due to the local nature of the proposed fire station calls, the number of new trips and associated siren use would drop-off quickly as one moves away from the Project site, and therefore other residences in the vicinity of the Project site would experience much lower siren noise impacts than the nearest home to the proposed Fire Station No. 1 driveway. Therefore, emergency vehicle siren noise impacts would be less than significant.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

b) The Proposed Project would not expose persons to or generation of excessive groundborne vibration or groundborne noise levels. The following section analyzes the potential vibration impacts associated with the construction and operations of the Proposed Project.

Construction-Related Vibration Impacts

The construction activities for the Proposed Project are anticipated to include demolition and grading of both Project sites, building construction, paving of the onsite driveways, and parking lots, and application of architectural coatings. Vibration impacts from construction activities associated with the Proposed Project would typically be created from the operation of heavy off-road equipment. The nearest sensitive receptors to the main Project site are single-family residences located on the east side of Jameson Street, which are as near as 60 feet east of the main Project site. The nearest sensitive receptors to the parking site are single-family residences located as near as 30 feet southwest of the parking site.

Section 5.10.3 of the City of Orange General Plan Program EIR (General Plan EIR), determined that a significant vibration impact would occur if vibration levels would exceed 0.2 inch per second PPV at any nearby building.

The primary source of vibration during construction would be from the operation of a bulldozer. A large bulldozer would create a vibration level of 0.089 inch per second PPV at 25 feet. Based on typical propagation rates, the vibration level at the nearest offsite residential structure (30 feet away) would be 0.073 inch per second PPV. The vibration level at the nearest offsite structure would be below the 0.2 inch per second PPV threshold. Impacts would be less than significant.

Operations-Related Vibration Impacts

The Proposed Project would consist of the relocation of Fire Station No. 1 and Headquarters. The Proposed Project would result in the operation of fire trucks on the main Project site, which are a known source of vibration. The nearest receptors to the main Project site are single-family residences located on the east side of Jameson Street, which are as near as 150 feet east of where fire trucks would operate on the main Project site.

Caltrans has done extensive research on vibration level created along freeways and State Routes and their vibration measurements of roads have never exceeded 0.08 inches per second PPV at 15 feet from the center of the nearest lane, with the worst combinations of heavy trucks. Fire truck activities would occur onsite as near as 150 feet from the nearest offsite receptor. Based on typical propagation rates, the vibration level at the nearest offsite receptor would be 0.006 inch per second PPV. Therefore, vibration created from operation of the Proposed Project would be within the 0.2 inch per second PPV threshold of detailed. Impacts would be less than significant.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

c) The Proposed Project would not expose people residing or working in the Project area to excessive noise levels from aircraft. The nearest airport is Fullerton Municipal Airport that is located approximately five miles northwest of the Project site. The Project site is located outside of the 60 dBA CNEL noise contours of Fullerton Municipal Airport. John Wayne Airport is located approximately seven miles southwest of the Project site. The Project site is located outside the 60 dBA CNEL noise contours of John Wayne Airport. No impacts would occur from aircraft noise.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

14. POPULATION AND HOUSING

Would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impact Analysis:

a) The Proposed Project does not provide permanent housing or include operations that could result in unplanned growth such as extension or roadways or expansion of existing infrastructure. Although the fire station would include dormitory facilities, these are temporary facilities to account for the nature of fire-fighting operations and the need to provide living facilities. The Proposed Project would not induce population growth as the Project would be a new facility that is intended to replace the already operational fire station and headquarters for the City of Orange. No impacts would occur.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

b) The Proposed Project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. The main Project site is currently vacant, and the site of the parking lot is located at the site of an existing parking area, across the street from the main Project site. Thus, tenants and residents within the vicinity of the site would not be displaced as part of the construction and operation of the Proposed Project. No impacts are anticipated.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

15. PUBLIC SERVICES

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Would the Project result in substantial adverse physical impacts associated with the provision of or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impact Analysis:

(a) i) The Proposed Project includes the construction of Fire Station 1, Fire Headquarters, and associated parking lot. Implementation of the Project would not involve the expansion of service as it would not induce any additional permanent population growth. In addition, the new facility of the City of Orange Fire Department Station is approximately 0.5 miles from the current facility and, thus, is intended to serve the same service area of the City of Orange Historical District, Chapman University, and stretches of the 55 and 22 Freeways. The Proposed Project would not increase the demand for fire protection or require new facilities; it is projected to improve the response times for the neighborhoods on the eastern end of the service area by one minute. No impacts are expected.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

ii) The Proposed Project accounts for an increased area for the new facilities housing the Fire Station 1, Fire Headquarters and the associated parking lot but does not involve the expansion of service. The Proposed Project site is less than two miles away, from the Orange Police Department on Batavia Street (Google Map 2020). The Proposed Project would not induce growth requiring the extension of existing services or creation of new services; there would not be any increase in the demand for police protection or requirement of new facilities. The area is currently being serviced by the Orange Police Department and would continue to receive the same services as nearby businesses. No impacts would occur.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

iii) As noted above in Responses 15(a)(i) and (ii), the Proposed Project includes the construction of a new fire station, headquarters and parking lot for the Orange City Fire Department to replace the existing facility but does not involve the expansion of services. The Project site is approximately 1,000 feet away from Palmyra Elementary School. The Proposed Project would not induce growth requiring

the extension of existing educational services or creation of new services. The Proposed Project would not increase the demand for schools in the City. No impacts would occur.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

iv) The Proposed Project includes the construction of new facilities for the Fire Department but would not induce growth requiring the extension of existing or creation of new park services. The Proposed Project would not increase the demand for parks. No impacts are expected.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

v) The Proposed Project would not induce growth requiring the extension of existing or creation of new services. While the Fire Department would have a new fire station and headquarters building replacing its current facilities, it would not induce expansion or addition of new service areas. The Proposed Project would not increase the demand for other public facilities. No impacts would occur.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

16. RECREATION

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impact Analysis:

a) The Proposed Project does not include features that would contribute to the increase use of existing neighborhood, regional parks or other recreational facilities or would cause substantial deterioration of the facility. The Proposed Project would not induce population growth as it would provide an upgraded and larger workplace for an existing workforce. No impacts are expected.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

b) The Proposed Project does not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. The Proposed Project does not involve the addition of a substantial number of new jobs that may result in increased population and increased demands on recreational resources. No impacts are anticipated.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

17. TRANSPORTATION

Would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Would the Project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Substantially increase hazards due to a geometric design feature (e. g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact Analysis:

a) The Circulation & Mobility Element of the City of Orange General Plan prioritizes the issues and opportunities that exist within the City's transit network, including improved rail and bus transit connections and frequency and implementation of a Bikeway Master Plan (City of Orange 2010d). The Proposed Project would not change any existing roadways, sidewalks or pedestrian paths or conflict with any such proposed plans and would occur within the boundaries of the two sites. There are no bicycle lanes or facilities in the immediate vicinity of the site. The Proposed Project would generate minor increases in traffic associated with short-term construction activities due to the presence and use of construction equipment and vehicles, such as loaders, pick-up trucks, backhoe, water truck, crane, asphalt paver and excavators. The construction equipment and vehicles are expected to be parked within the staging areas of the parking site or areas of the main Project site not currently under construction.

Further, the Proposed Project involves the construction of a replacement Fire Station No. 1 and Headquarters approximately 0.6 miles away from the existing facility; therefore, it is assumed that there will not be a significant increase in traffic after the completion of the Proposed Project that would exceed the current traffic capacity of the neighborhood streets. The proposed associated parking includes reconfiguration of the existing parking lot across Water Street, including demarcation of the parking spots, addition of secured entry/exit, stop signs and emergency warning systems and landscaping. However, all the Project activities would follow safety and design guidelines and would not result in any hazardous geometric design feature. Implementation of the Project would not result in an impact.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

b) *(In accordance with CEQA Guidelines Section 15064.3(c), the City of Orange, as the lead agency, will implement the provisions of Section 15064.3 of the CEQA Guidelines, when the provisions go into effect statewide beginning July 1, 2020.)*

The Proposed Project includes the construction of Fire Station 1, Fire Headquarters, and associated parking lot, which would provide the existing workforce with a new and upgraded facility. The

proposed associated parking will be located on the site of an existing parking lot across Water Street. The Proposed Project would not add a substantial amount of new jobs or cause an expansion of service.

The City of Orange, as the lead agency, will implement the provisions of Section 15064.3 of the CEQA Guidelines, vehicles miles traveled (VMT) thresholds for the purpose of analyzing a Project under Senate Bill (SB) 743, when the provisions go into effect statewide beginning July 1, 2020. Thus, currently, the Proposed Project is not analyzed with respect to VMT guidelines. However, the goal of SB 743 is to reduce VMT by increasing access to common goods. The Proposed Project would not have a significant impact on VMT, as Public Facilities are not considered to result in an increased level of VMT and can be screened out from requiring VMT analysis. Per the OPR Technical Advisory on Evaluating Transportation Impacts in CEQA (2018), some project types have been identified as having the presumption of a less than significant impact. Community institution uses, such as fire stations, can be presumed to have a less than significant impact absent substantial evidence to the contrary as their uses are local serving in nature.

Two transit stops are located on Chapman Avenue, on the northern boundary of the Project site which provide the workforce with alternative transportation to the Proposed Project. Additionally, Orange's Vision for the Future, as described in the General Plan, states that residential areas will be connected to commercial, recreational, and open space areas, as well as educational and cultural facilities via a balanced, multi-modal circulation network that accommodates vehicles, pedestrians, cyclists, hikers, and equestrians. This network will create additional opportunities for walking and biking, thus further reducing VMT all over the City (City of Orange 2010d). The Proposed Project would be consistent with any plan or program proposed to achieve this vision. A less than significant impact would occur.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

c) The Proposed Project would not change the design or location of the existing roadways and would not involve any incompatible uses. Stop signs and emergency warning systems would be installed along Chapman Avenue and Water Street to ensure safe egress from the site. The installation of the emergency warning systems would ensure that vehicles traveling on Chapman Avenue would be aware of any fire department vehicles exiting the site and would reduce hazards associated with the entrance of large vehicles exiting onto Chapman Avenue. When the emergency warning systems are alerted, vehicles traveling in both directions of Chapman Avenue would be indicated to stop to allow fire trucks or fire department vehicles to exit. The proposed associated parking includes reconfiguration of the existing parking lot across Water Street, including demarcation of the parking spots, addition of secured entry/exit, stop signs and emergency warning systems and landscaping. However, all the Project activities would follow safety and design guidelines and would not result in any hazardous geometric design feature. Implementation of the Project would not result in an impact.

Significance Determination: No Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: No Impact.

d) The Proposed Project intends to retain the existing circulation patterns (automobile, pedestrian, and bicycle) around the site. The Project facility would have the response driveway on Chapman Avenue, a gated staff and visitor entry and parking on Water Street. The parking site, located across Water Street,

would have a secured entrance on Water Street, facing the main Project site. Stop signs and emergency warning systems would be installed along Chapman Avenue and Water Street to ensure safe ingress and egress into the site. Additionally, the Project Civil Engineer, in consultation with Fire Department staff, has implemented industry-standard circulation standards for emergency response facilities into the site and surrounding circulation plan, including ingress/egress points, to ensure the Proposed Project complies with emergency access and safety requirements. The Proposed Project would not result in inadequate emergency access. Impacts would be less than significant.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

18. TRIBAL CULTURAL RESOURCES

Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Impact Analysis:

a) and b) Refer to Responses 5(a) and (b). The Proposed Project site is located on a mostly vacant property in an urbanized area with land uses consisting primarily of residential and commercial businesses surrounding it. The area is highly urbanized, and any proposed ground disturbing activities would not be expected to uncover native soils. However, due to the sensitive nature of the area, being in close proximity to Santiago Creek, the tribe considers there to be potential for tribal cultural resources onsite. Implementation of CUL-1 and TCR-1 would result in less than significant impacts.

As part of the Assembly Bill (AB) 52 consultation process required by State law, on April 1, 2020, the District sent tribal scoping letters electronically to the San Gabriel Band Of Mission Indians, Torres Martinez Desert Cahuilla Indians, Gabrielino/Tongva Nation, and the Gabrieleno Band of Mission Indians – Kizh Nation. The letter provided the location of the Proposed Project, the proposed development that will occur, and request to provide comments of the Proposed Project. A response was received from the Gabrieleno Band of Mission Indians – Kizh Nation on April 17, 2020 requesting a consultation with the Lead agency. The meeting took place on May 28, 2020 and as an outcome of the said meeting, the following mitigation measure was proposed to be implemented to allow monitors from the Gabrieleno Band of Mission Indians – Kizh Nation to be on-site to protect tribal cultural resources that may be encountered. As of June 22, 2020, the tribe has agreed to the mitigation measures proposed and consultation is considered complete.

TCR-1:

Prior to the commencement of any ground disturbing activity at the project site, the project applicant shall retain a Native American Monitor approved by the Gabrieleno Band of Mission Indians-Kizh Nation – the tribe that consulted on this project pursuant to Assembly Bill A52 (the “Tribe” or the “Consulting Tribe”). The monitor will have experience working with a qualified archaeologist, as defined in the Secretary of the Interior’s Professional Qualifications Standards, and/or education or professional training in a related field, such as anthropology, archaeology or ethnology. A copy of the executed contract shall be submitted to the City of Orange Community Development Department prior to the issuance of any permit necessary to commence a ground-disturbing activity. The on-site monitoring shall commence when ground-disturbing activities begin and shall end when the project site ground-disturbing

activities are completed, or when the Native American Monitor has indicated that the site has a low potential for impacting Tribal Cultural Resources, whichever occurs first.

Ground disturbing activities are defined as activities that may include, but are not limited to, pavement removal, potholing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the project area. The Tribal Monitor will complete daily monitoring logs that will provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. Upon discovery of any Tribal Cultural Resources, construction activities shall cease in the immediate vicinity of the find (not less than the surrounding 100 feet) until the find can be assessed.

All Tribal Cultural Resources unearthed by project activities shall be evaluated by the qualified archaeologist and Tribal monitor approved by the Consulting Tribe. If the resources are determined to be Native American in origin, the Consulting Tribe will retain it/them in the form and/or manner the Tribe deems appropriate, for educational, cultural and/or historic purposes. If human remains and/or grave goods are discovered or recognized at the Project Site, all ground disturbance shall immediately cease, and the county coroner shall be notified per Public Resources Code Section 5097.98, and Health & Safety Code Section 7050.5. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2).

Work may continue on other parts of the Project Site while evaluation and, if necessary, mitigation takes place in accordance with CEQA Guidelines Section 15064.5(f). If the resource is determined by the qualified archaeologist and tribal monitor to be a non-Native American resource the applicant would be required to implement MM CUL-1.

Significance Determination: Potentially Significant Impact.

Mitigation Measures: CUL-1 and TCR-1.

Significance Determination After Mitigation: Less Than Significant Impact.

19. UTILITIES/SERVICE SYSTEMS

Would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(b) Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's Projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(e) Comply with federal, state, and local management and reduction statutes and regulations related to solid wastes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact Analysis:

a) The Proposed Project includes the construction of the City of Orange Fire Station No. 1, Fire Headquarters, and associated parking lot to replace the current aging and undersized station. The Proposed Project would not require or result in the relocation or construction of new or expanded wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities. The Proposed Project site is a vacant parcel in an urban neighborhood with residential, commercial and public institutional uses close to the Old Towne Orange Historic District and would tie into the existing utilities that are provided in the Proposed Project area. Further, the Proposed Project would be congruous to the Public Facilities and Institutions (PFI) land uses in the neighborhood, and it is expected that any change in demand of the existing utilities caused by the implementation of the Proposed Project would be within the capacity that the City's utility services has projected for the planned land uses. Although the Proposed Project would result in new facilities being connected to the site, nearby uses are connected to these same utilities and the Proposed Project would not result in population growth that would exceed the planned regional capacity.

The Orange County Sanitation District (OCSD) provides wastewater treatment for the City and the closest wastewater treatment plant, Plant No. 1 is located approximately 6.8 miles southeast of the Proposed Project site in Fountain Valley. The capacity of Plant No. 1 is approximately 120 million gallons per day; and the OCSD is responsible for collecting, treating, and disposing the wastewater generated by 2.6 million people living in its service area (OCSD 2020). The new Orange Fire Station No. 1 and Headquarters would not induce population growth or cause an increase in wastewater disposal that would exceed the planned capacity. The nearest electrical power facility is Southern California Edison (SCE) Substation on Taft Avenue, approximately 2.1 miles northeast of the Proposed Project site. The nearest SoCalGas natural gas facility is approximately 2.9 miles northeast of the Proposed Project site (Google Map 2020). Although new connections for utilities including wastewater treatment, energy, and natural gas will be added to the site, the Proposed Project will not

induce population growth or result in the construction of a facility that would exceed planned capacities for the area.

The Proposed Project would not result in a significant change or increase in the use of existing utilities; relocation or construction of new utilities is not proposed. It is not expected that the increased uses would be significantly greater than the uses of the adjacent businesses because the Proposed Project uses are consistent with the area. Impacts would be less than significant.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

b) The City relies on a combination of imported water and local groundwater to meet its water needs, and works together with three primary agencies, Metropolitan, Municipal Water District of Orange County (MWDOC), and OCWD to ensure a safe and reliable water supply that will continue to serve the community in periods of drought and shortage (City of Orange 2015). A comparison between the supply and demand for projected years between 2020 and 2040 as shown in the 2015 Urban Water Management Plan shows that the available supply for the City will meet projected demand due to diversified supply and conservation measures (City 2015). While there may be a temporary increase in water usage during construction, it is expected that there would be no significant permanent impact to cumulative water supply requirements once the Proposed Project activities have been completed. In addition, the Proposed Project would comply with local, regional, and state water conservation policies including Title 22 of the California Code of Regulations related to recycling of water, and would include standard BMPs, such as minimizing impervious areas, maximizing permeability throughout the site, implementing drip-irrigation system and water-efficient landscaping, in order to reduce water consumption. Implementation of the Proposed Project would not result in an adverse impact associated with water supplies. Impacts would be less than significant.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

c) Per the City's General Plan Infrastructure Element, the OCSD provides for the regional collection and treatment of domestic, commercial, and industrial sewage for the City (City of Orange 2010c). While the local collection system is maintained by the City of Orange, OCSD is responsible for safely treating and disposing the wastewater generated by 2.6 million people living in a 479-square-mile area of central and northwest Orange County and has two operating facilities located in the City of Huntington Beach and Fountain Valley (OCSD 2020). The Proposed Project would generate wastewater during construction and operation of the fire station, headquarters and the associated facilities. However, the Proposed Project is a replacement building for an existing facility; it is not anticipated that it would generate significant amounts of wastewater. The wastewater system at the Project location is suitably sized for the Proposed Project, as the wastewater system that the Project will laterally connect into consists of a 30-inch diameter concrete pipe under Chapman Avenue (OCFCD 2000). The new Orange Fire Station No. 1 and Headquarters would not induce population growth or cause an increase in wastewater disposal that would exceed the planned capacity. Prior to construction, the City will obtain letters of service from OCSD to ensure that the Proposed Project will have adequate utility services. Impacts would be less than significant.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

d) The City contracts with private contractors for some services, such as the collection of solid waste, recyclable, and green waste materials and the disposal of household hazardous waste. All solid waste generated during construction would be disposed of by the construction contractor according to the Orange County standard construction practices. Three active landfills are located within Orange county that accept commercial disposal including Olinda Alpha Landfill, Frank R. Bowerman Landfill, and Prima Deschecha Landfill which are permitted to accept 8,00 tons per day (TPD), 11,500 TPD, and 4,000 TPD, respectively (OC Landfills 2020). With each of these landfills available to accept additional disposal, any of these Orange County landfills would be able to accommodate the Proposed Project. The Proposed Project includes the construction of the City of Orange Fire Station No. 1, Fire Headquarters, and associated parking lot to replace the current aging and undersized station, and thus, would not result in the addition of a substantial number of new jobs. Further, the Proposed Project would be congruous to the Public Facilities and Institutions (PFI) land uses in the neighborhood, and any solid waste generated would be within the capacity that the City's utility services has projected for the planned land uses. The California Integrated Waste Management Act (also known as AB 939), requires each jurisdiction in California to divert at least 50 percent of its waste away from landfills, whether through waste reduction, recycling, or other means. The State law, introduced in 1989, established an integrated waste management hierarchy to guide local agencies in implementation, in order of priority: (1) source reduction, (2) recycling and composting, and (3) environmentally safe transformation and land disposal. The Proposed Project would comply with AB 939 requirements for the diversion of solid waste from landfills. A less than significant impact would occur.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

e) The Proposed Project would not negatively impact the provision of solid waste services. All solid waste generated during construction would be disposed of by the construction contractor according to the Orange County standard construction practices, including compliance with The California Integrated Waste Management Act (also known as AB 939). The Project activities related to the site of the parking lot involves mainly surface reconfigurations and landscaping improvements. The Proposed Project operations would comply with AB 939/SB 1066 requirements for the diversion of solid waste from landfills. Waste receptacles would be provided on site for operational wastes, including green waste, which would be sorted for recycling and reuse. No significant impact would occur.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

20. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(b) Due to slope prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impact Analysis:

a) The Proposed Project site is not located within a very high fire hazard severity zone of State or Local responsibility (CalFire 2007, 2011). There are no actions that would interfere with an evacuation or emergency plan. The Project implements the Orange City Fire Department Strategic Plan for emergency response. No impact would occur.

Significance Determination: No Impact.

Mitigation Measures: No Impact.

Significance Determination After Mitigation: No Impact.

b) The Proposed Project site is are not located within an area identified as a very high fire hazard severity zone of State or Local responsibility (CalFire 2007, 2011). Additionally, the Proposed Project site is located in an urban neighborhood with residential, commercial and public institutional uses and not within or adjacent to any open spaces which are identified as a very high fire hazard severity zone. The lack of wildland-urban interface in or near the Proposed Project site reduce any risk associated with exacerbation of wildfire risks. Additionally, the Project supports wildland fire suppression. No impact would occur.

Significance Determination: No Impact.

Mitigation Measures: No Impact.

Significance Determination After Mitigation: No Impact.

c) As noted in Response 20(a), the Proposed Project site is not in an area at risk of wildfire. The Proposed Project would not require infrastructure that would exacerbate fire risk. No impact would occur.

Significance Determination: No Impact.

Mitigation Measures: No Impact.

Significance Determination After Mitigation: No Impact.

d) The Proposed Project site is not in an area prone to wildfire or in close proximity to any waterbodies. Additionally, the topography of the area is relatively flat and does not pose a risk of downstream flooding. No impact would occur.

Significance Determination: No Impact.

Mitigation Measures: No Impact.

Significance Determination After Mitigation: No Impact.

21. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a) Does the Project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Does the Project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a Project are considerable when viewed in connection with the effects of past Projects, the effects of other current Projects, and the effects of probable future Projects?)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact Analysis:

a) As discussed in Section 4, Biological Resources, the sites and their surroundings are predominantly urban with limited to no natural habitats. The Proposed Project would not have the potential to substantially degrade the quality of the environment because the quality of the area is not suitable to sustain special status or sensitive species. However, MM BIO-1 has been incorporated to minimize any potential impacts to nesting birds during construction due to their potential presence in the urban environments.

The Proposed Project site does not contain any structures of historic significance; and, due to the urban nature of the area, resources of significant archaeological and paleontological value are unlikely to be discovered. However, ground-disturbing activities could uncover significant resources. In the event that buried resources are discovered that were not previously identified, implementation of MM CUL-1, GEO-1, and TCR-1 would result in impacts to less than significant for archaeological, paleontological, and tribal cultural resources.

Significance Determination: Potentially Significant.

Mitigation Measures: BIO-1, CUL-1, GEO-1, and TCR-1.

Significance Determination After Mitigation: Less Than Significant Impact.

b) The Proposed Project would include a zoning change of a portion of the main Project site to Public Institutional (P-I) to ensure that the Proposed Project is consistent with the General Plan and existing surrounding uses. Based on the level of impact to other resource areas within the Proposed Project, impacts are found to be less than significant. The Proposed Project includes a new Fire Station No. 1, Fire Headquarters, and associated parking lot to replace the existing aging and undersized station and is not expected to include additional development Projects. The Proposed Project would not result in cumulative impacts in addition to other development within the area as there are no planned developments. Additionally, cumulative impacts were analyzed with respect to the other environmental impact areas and were found to have a less than significant impact.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

c) Effects to human beings are generally associated with air quality, noise, traffic safety, geology/soils, and hazards/hazardous materials. As discussed in the previous environmental topic areas, the Proposed Project would not result in significant impacts to human beings because the Proposed Project would not cause significant impacts to air quality, noise, traffic, geology, and hazards that would impact humans in the area. The Project would provide a net benefit to the local community by improving the City Fire Department's ability to provide fire protection services. Adherence to regulatory codes, ordinances, regulations, BMPs, standards, and mitigation measures listed in the MMRP at the end of the document would ensure that construction and operation would not result in substantial adverse direct or indirect effects on humans. The impacts to human beings as a result of the Proposed Project would be less than significant.

Significance Determination: Less Than Significant Impact.

Mitigation Measures: None.

Significance Determination After Mitigation: Less Than Significant Impact.

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APPENDICES

- Appendix A Air Quality, Energy, and Greenhouse Gas Emissions Impact Analysis
- Appendix B Geotechnical Investigation
- Appendix C Water Quality Management Plan
- Appendix D Noise Impact Analysis

**AIR QUALITY, ENERGY, AND GREENHOUSE GAS
EMISSIONS IMPACT ANALYSIS
FIRE STATION NO. 1 & HEADQUARTERS PROJECT
CITY OF ORANGE**

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June 22, 2020

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ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
Air Basin	South Coast Air Basin
AQMP	Air Quality Management Plan
BACT	Best Available Control Technology
BSFC	Brake Specific Fuel Consumption
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCAA	California Clean Air Act
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFCs	chlorofluorocarbons
Cf ₄	tetrafluoromethane
C ₂ F ₆	hexafluoroethane
C ₂ H ₆	ethane
CH ₄	Methane
CO	Carbon monoxide
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
City	City of Orange
CPUC	California Public Utilities Commission
DPM	Diesel particulate matter
EPA	Environmental Protection Agency
°F	Fahrenheit
FTIP	Federal Transportation Improvement Program
GHG	Greenhouse gas
GWP	Global warming potential
HAP	Hazardous Air Pollutants
HFCs	Hydrofluorocarbons

IPCC	International Panel on Climate Change
kWhr	kilowatt-hour
LCFS	Low Carbon Fuel Standard
LST	Localized Significant Thresholds
MATES	Multiple Air Toxics Exposure Study
MMTCO _{2e}	Million metric tons of carbon dioxide equivalent
MPO	Metropolitan Planning Organization
MSAT	Mobile Source Air Toxics
MWh	Megawatt-hour
NAAQS	National Ambient Air Quality Standards
NO _x	Nitrogen oxides
NO ₂	Nitrogen dioxide
O ₃	Ozone
OPR	Office of Planning and Research
Pb	Lead
Pfc	Perfluorocarbons
PM	Particle matter
PM10	Particles that are less than 10 micrometers in diameter
PM2.5	Particles that are less than 2.5 micrometers in diameter
PPM	Parts per million
PPB	Parts per billion
PPT	Parts per trillion
RTIP	Regional Transportation Improvement Plan
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SCAG	Southern California Association of Governments
SF ₆	Sulfur Hexafluoride
SIP	State Implementation Plan
SO _x	Sulfur oxides
TAC	Toxic air contaminants
UNFCCC	United Nations' Framework Convention on Climate Change
VOC	Volatile organic compounds

1.0 INTRODUCTION

1.1 Purpose of Analysis and Study Objectives

This Air Quality, Energy, and Greenhouse Gas (GHG) Emissions Impact Analysis has been completed to determine the air quality, energy, and GHG emissions impacts associated with the proposed Fire Station No. 1 & Headquarters project (proposed project). The following is provided in this report:

- A description of the proposed project;
- A description of the atmospheric setting;
- A description of the criteria pollutants and GHGs;
- A description of the air quality regulatory framework;
- A description of the energy conservation regulatory framework;
- A description of the GHG emissions regulatory framework;
- A description of the air quality, energy, and GHG emissions thresholds including the California Environmental Quality Act (CEQA) significance thresholds;
- An analysis of the conformity of the proposed project with the South Coast Air Quality Management District (SCAQMD) Air Quality Management Plan (AQMP);
- An analysis of the short-term construction related and long-term operational air quality, energy, and GHG emissions impacts; and
- An analysis of the conformity of the proposed project with all applicable energy and GHG emissions reduction plans and policies.

1.2 Site Locations and Study Area

The project consist of two locations that are both in the City of Orange (City) that include: (1) The proposed Fire Station No. 1 and Headquarters (Fire Station site); and (2) The proposed Parking site for the Fire Department. The proposed Fire Station site is approximately 1.52 acres in area and is located at 105 Water Street. The Fire Station site is currently vacant and is bounded by Chapman Avenue and commercial uses to the north, Jameson Street and commercial and residential uses to the east, the City of Orange Department of Water to the south and Water Street and commercial uses to the west.

The proposed Parking site is approximately 1.23 acres in area and is currently utilized as a parking lot. The Parking site is bounded by commercial uses to the north, Water Street and the City of Orange Water Department to the east, Almond Avenue and residential uses to the south, and parking lot and residential uses to the west. The project local study area is shown in Figure 1.

Sensitive Receptors in Project Vicinity

The nearest sensitive receptors to the Fire Station site are homes located on the east side of Jameson Street, which are as near as 60 feet east of the Fire Station site. The nearest sensitive receptors to the Parking site are homes located as near as 30 feet southwest of the Parking site. The nearest school is Palmyra Elementary School, which is located as near as 460 feet southeast of the Fire Station site and as near as 540 feet east of the Parking site.

1.3 Proposed Project Description

The proposed project is expected to break ground in January 2021 and be completed by July 2022. The proposed project would consist of development of a 16,574 square foot fire station structure with an attached 11,353 square foot headquarters structure, a 250 kilowatt (kW) backup diesel generator, and 21 staff parking spaces and 5 visitor parking spaces on the Fire Station site. In addition, an approximately 3,780 square foot reserve apparatus building that is currently located on the south side of the Fire Station site will be retrofitted as part of the project. The proposed project would also include development of a parking lot that would include 54 staff parking spaces located behind a security gate that is located on the west side of Water Street. The proposed site plan is shown in Figure 2.

1.4 Executive Summary

Standard Air Quality, Energy, and GHG Regulatory Conditions

The proposed project will be required to comply with the following regulatory conditions from the SCAQMD and State of California (State).

South Coast Air Quality Management District Rules

The following lists the SCAQMD rules that are applicable, but not limited to the proposed project.

- Rule 402 Nuisance – Controls the emissions of odors and other air contaminants;
- Rule 403 Fugitive Dust – Controls the emissions of fugitive dust;
- Rules 1108 and 1108.1 Cutback and Emulsified Asphalt – Controls the VOC content in asphalt;
- Rule 1113 Architectural Coatings – Controls the VOC content in paints and solvents; and
- Rule 1143 Paint Thinners – Controls the VOC content in paint thinners.

State of California Rules

The following lists the State of California Code of Regulations (CCR) air quality emission rules that are applicable, but not limited to the proposed project.

- CCR Title 13, Article 4.8, Chapter 9, Section 2449 – In use Off-Road Diesel Vehicles;
- CCR Title 13, Section 2025 – On-Road Diesel Truck Fleets;
- CCR Title 24 Part 6 – California Building Energy Standards; and
- CCR Title 24 Part 11 – California Green Building Standards.

Summary of Analysis Results

The following is a summary of the proposed project's impacts with regard to the State CEQA Guidelines air quality, energy, and GHG emissions checklist questions.

Conflict with or obstruct implementation of the applicable air quality plan?

Less than significant impact.

Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?

Less than significant impact.

Expose sensitive receptors to substantial pollutant concentrations?

Less than significant impact.

Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than significant impact.

Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation;

Less than significant impact.

Conflict with or obstruct a state or local plan for renewable energy;

Less than significant impact.

Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than significant impact.

Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs?

Less than significant impact.

1.5 Mitigation Measures for the Proposed Project

This analysis found that implementation of the State and SCAQMD air quality, energy, and GHG emissions reductions regulations were adequate to limit criteria pollutants, toxic air contaminants, odors, and GHG emissions from the proposed project to less than significant levels. No mitigation measures are required for the proposed project with respect to air quality, energy, and GHG emissions.

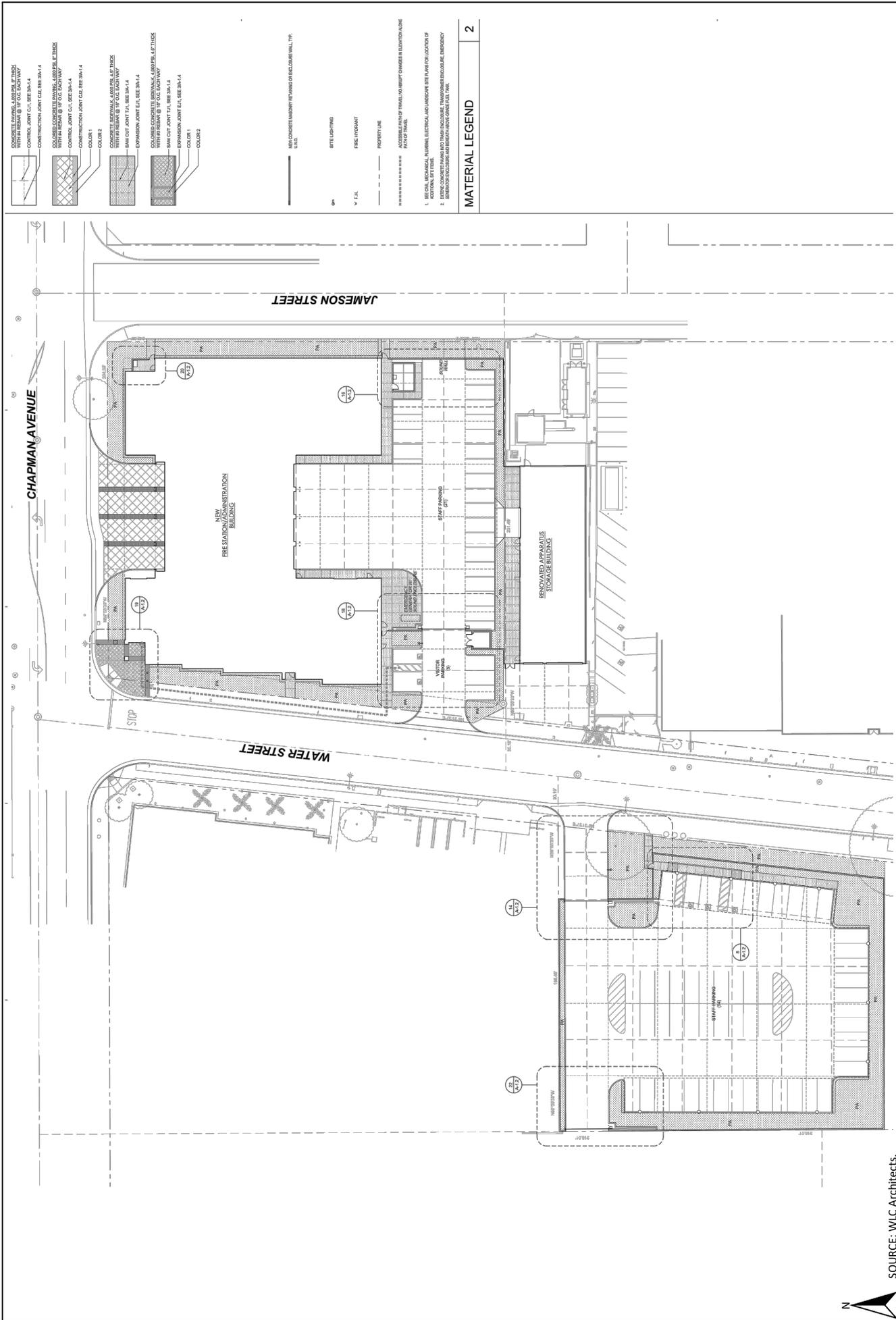


Figure 2
Proposed Site Plan

SOURCE: WLC Architects.



2.0 AIR POLLUTANTS

Air pollutants are generally classified as either criteria pollutants or non-criteria pollutants. Federal ambient air quality standards have been established for criteria pollutants, whereas no ambient standards have been established for non-criteria pollutants. For some criteria pollutants, separate standards have been set for different periods. Most standards have been set to protect public health. For some pollutants, standards have been based on other values (such as protection of crops, protection of materials, or avoidance of nuisance conditions). A summary of federal and state ambient air quality standards is provided in the Regulatory Framework section.

2.1 Criteria Pollutants and Ozone Precursors

The criteria pollutants consist of: ozone, NO_x, CO, SO_x, lead (Pb), and particulate matter (PM). The ozone precursors consist of NO_x and VOC. These pollutants can harm your health and the environment, and cause property damage. The Environmental Protection Agency (EPA) calls these pollutants “criteria” air pollutants because it regulates them by developing human health-based and/or environmentally-based criteria for setting permissible levels. The following provides descriptions of each of the criteria pollutants and ozone precursors.

Nitrogen Oxides

Nitrogen Oxides (NO_x) is the generic term for a group of highly reactive gases which contain nitrogen and oxygen. While most NO_x are colorless and odorless, concentrations of NO₂ can often be seen as a reddish-brown layer over many urban areas. NO_x form when fuel is burned at high temperatures, as in a combustion process. The primary manmade sources of NO_x are motor vehicles, electric utilities, and other industrial, commercial, and residential sources that burn fuel. NO_x reacts with other pollutants to form, ground-level ozone, nitrate particles, acid aerosols, as well as NO₂, which cause respiratory problems. NO_x and the pollutants formed from NO_x can be transported over long distances, following the patterns of prevailing winds. Therefore, controlling NO_x is often most effective if done from a regional perspective, rather than focusing on the nearest sources.

Ozone

Ozone is not usually emitted directly into the air, instead it is created by a chemical reaction between NO_x and volatile organic compounds (VOC) in the presence of sunlight. Motor vehicle exhaust, industrial emissions, gasoline vapors, chemical solvents as well as natural sources emit NO_x and VOC that help form ozone. Ground-level ozone is the primary constituent of smog. Sunlight and hot weather cause ground-level ozone to form with the greatest concentrations usually occurring downwind from urban areas. Ozone is subsequently considered a regional pollutant. Ground-level ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and can cause substantial damage to vegetation and other materials. Because NO_x and VOC are ozone precursors, the health effects associated with ozone are also indirect health effects associated with significant levels of NO_x and VOC emissions.

Carbon Monoxide

Carbon monoxide (CO) is a colorless, odorless gas that is formed when carbon in fuel is not burned completely. It is a component of motor vehicle exhaust, which contributes approximately 56 percent of all CO emissions nationwide. In cities, 85 to 95 percent of all CO emissions may come from motor vehicle exhaust. Other sources of CO emissions include industrial processes (such as metals processing and chemical manufacturing), residential wood burning, and natural sources such as forest fires. Woodstoves,

gas stoves, cigarette smoke, and unvented gas and kerosene space heaters are indoor sources of CO. The highest levels of CO in the outside air typically occur during the colder months of the year when inversion conditions are more frequent. The air pollution becomes trapped near the ground beneath a layer of warm air. CO is described as having only a local influence because it dissipates quickly. Since CO concentrations are strongly associated with motor vehicle emissions, high CO concentrations generally occur in the immediate vicinity of roadways with high traffic volumes and traffic congestion, active parking lots, and in automobile tunnels. Areas adjacent to heavily traveled and congested intersections are particularly susceptible to high CO concentrations.

CO is a public health concern because it combines readily with hemoglobin and thus reduces the amount of oxygen transported in the bloodstream. The health threat from lower levels of CO is most serious for those who suffer from heart disease such as angina, clogged arteries, or congestive heart failure. For a person with heart disease, a single exposure to CO at low levels may cause chest pain and reduce that person's ability to exercise; repeated exposures may contribute to other cardiovascular effects. High levels of CO can affect even healthy people. People who breathe high levels of CO can develop vision problems, reduced ability to work or learn, reduced manual dexterity, and difficulty performing complex tasks. At extremely high levels, CO is poisonous and can cause death.

Sulfur Oxides

Sulfur Oxide (SO_x) gases are formed when fuel containing sulfur, such as coal and oil is burned, as well as from the refining of gasoline. SO_x dissolves easily in water vapor to form acid and interacts with other gases and particles in the air to form sulfates and other products that can be harmful to people and the environment.

Lead

Lead is a metal found naturally in the environment as well as manufactured products. The major sources of lead emissions have historically been motor vehicles and industrial sources. Due to the phase out of leaded gasoline, metal processing is now the primary source of lead emissions to the air. High levels of lead in the air are typically only found near lead smelters, waste incinerators, utilities, and lead-acid battery manufacturers. Exposure of fetuses, infants and children to low levels of Pb can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased lead levels are associated with increased blood pressure.

Particulate Matter

Particle matter (PM) is the term for a mixture of solid particles and liquid droplets found in the air. PM is made up of a number of components including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles. The size of particles is directly linked to their potential for causing health problems. Particles that are less than 10 micrometers in diameter (PM₁₀) that are also known as *Respirable Particulate Matter* are the particles that generally pass through the throat and nose and enter the lungs. Once inhaled, these particles can affect the heart and lungs and cause serious health effects. Particles that are less than 2.5 micrometers in diameter (PM_{2.5}) that are also known as *Fine Particulate Matter* have been designated as a subset of PM₁₀ due to their increased negative health impacts and its ability to remain suspended in the air longer and travel further.

Volatile Organic Compounds

Hydrocarbons are organic gases that are formed from hydrogen and carbon and sometimes other elements. Hydrocarbons that contribute to formation of O₃ are referred to and regulated as VOCs (also referred to as reactive organic gases). Combustion engine exhaust, oil refineries, and fossil-fueled power plants are the sources of hydrocarbons. Other sources of hydrocarbons include evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint.

VOC is not classified as a criteria pollutant, since VOCs by themselves are not a known source of adverse health effects. The primary health effects of VOCs result from the formation of O₃ and its related health effects. High levels of VOCs in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered toxic air contaminants (TACs). There are no separate health standards for VOCs as a group.

2.2 Other Pollutants of Concern

Toxic Air Contaminants

In addition to the above-listed criteria pollutants, toxic air contaminants (TACs) are another group of pollutants of concern. TACs is a term that is defined under the California Clean Air Act and consists of the same substances that are defined as Hazardous Air Pollutants (HAPs) in the Federal Clean Air Act. There are over 700 hundred different types of TACs with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Cars and trucks release at least 40 different toxic air contaminants. The most important of these TACs, in terms of health risk, are diesel particulates, benzene, formaldehyde, 1,3-butadiene, and acetaldehyde. Public exposure to TACs can result from emissions from normal operations as well as from accidental releases. Health effects of TACs include cancer, birth defects, neurological damage, and death.

TACs are less pervasive in the urban atmosphere than criteria air pollutants, however they are linked to short-term (acute) or long-term (chronic or carcinogenic) adverse human health effects. There are hundreds of different types of TACs with varying degrees of toxicity. Sources of TACs include industrial processes, commercial operations (e.g., gasoline stations and dry cleaners), and motor vehicle exhaust.

According to *The California Almanac of Emissions and Air Quality 2013 Edition*, the majority of the estimated health risk from TACs can be attributed to relatively few compounds, the most important of which is DPM. DPM is a subset of PM_{2.5} because the size of diesel particles are typically 2.5 microns and smaller. The identification of DPM as a TAC in 1998 led the CARB to adopt the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-fueled Engines and Vehicles in September 2000. The plan's goals are a 75-percent reduction in DPM by 2010 and an 85-percent reduction by 2020 from the 2000 baseline. Diesel engines emit a complex mixture of air pollutants, composed of gaseous and solid material. The visible emissions in diesel exhaust are known as particulate matter or PM, which includes carbon particles or "soot." Diesel exhaust also contains a variety of harmful gases and over 40 other cancer-causing substances. California's identification of DPM as a toxic air contaminant was based on its potential to cause cancer, premature deaths, and other health problems. Exposure to DPM is a health hazard, particularly to children whose lungs are still developing and the elderly who may have other serious health problems. Overall, diesel engine emissions are responsible for the majority of California's potential airborne cancer risk from combustion sources.

Asbestos

Asbestos is listed as a TAC by CARB and as a HAP by the EPA. Asbestos occurs naturally in mineral formations and crushing or breaking these rocks, through construction or other means, can release asbestiform fibers into the air. Asbestos emissions can result from the sale or use of asbestos-containing materials, road surfacing with such materials, grading activities, and surface mining. The risk of disease is dependent upon the intensity and duration of exposure. When inhaled, asbestos fibers may remain in the lungs and with time may be linked to such diseases as asbestosis, lung cancer, and mesothelioma. The nearest likely locations of naturally occurring asbestos, as identified in the *General Location Guide for Ultramafic Rocks in California*, prepared by the California Division of Mines and Geology, is located in Santa Barbara County. The nearest historic asbestos mine to the project site, as identified in the *Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in California*, prepared by U.S. Geological Survey, is located at Asbestos Mountain, which is approximately 80 miles east of the project site in the San Jacinto Mountains. Due to the distance to the nearest natural occurrences of asbestos, the project site is not likely to contain asbestos.

3.0 GREENHOUSE GASES

3.1 Greenhouse Gases

Constituent gases of the Earth's atmosphere, called atmospheric greenhouse gases (GHGs), play a critical role in the Earth's radiation amount by trapping infrared radiation from the Earth's surface, which otherwise would have escaped to space. Prominent greenhouse gases contributing to this process include carbon dioxide (CO₂), methane (CH₄), ozone (O₃), water vapor, nitrous oxide (N₂O), and chlorofluorocarbons (CFCs). This phenomenon, known as the Greenhouse Effect, is responsible for maintaining a habitable climate. Anthropogenic (caused or produced by humans) emissions of these greenhouse gases in excess of natural ambient concentrations are responsible for the enhancement of the Greenhouse Effect and have led to a trend of unnatural warming of the Earth's natural climate, known as global warming or climate change. Emissions of gases that induce global warming are attributable to human activities associated with industrial/manufacturing, agriculture, utilities, transportation, and residential land uses. Emissions of CO₂ and N₂O are byproducts of fossil fuel combustion. Methane, a potent greenhouse gas, results from off-gassing associated with agricultural practices and landfills. Sinks of CO₂, where CO₂ is stored outside of the atmosphere, include uptake by vegetation and dissolution into the ocean. The following provides a description of each of the greenhouse gases and their global warming potential.

Water Vapor

Water vapor is the most abundant, important, and variable GHG in the atmosphere. Water vapor is not considered a pollutant; in the atmosphere it maintains a climate necessary for life. Changes in its concentration are primarily considered a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization. The feedback loop in which water is involved is critically important to projecting future climate change. As the temperature of the atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher (in essence, the air is able to "hold" more water when it is warmer), leading to more water vapor in the atmosphere. As a GHG, the higher concentration of water vapor is then able to absorb more thermal indirect energy radiated from the Earth, thus further warming the atmosphere. The warmer atmosphere can then hold more water vapor and so on and so on. This is referred to as a "positive feedback loop." The extent to which this positive feedback loop will continue is unknown as there is also dynamics that put the positive feedback loop in check. As an example, when water vapor increases in the atmosphere, more of it will eventually also condense into clouds, which are more able to reflect incoming solar radiation (thus allowing less energy to reach the Earth's surface and heat it up).

Carbon Dioxide

The natural production and absorption of CO₂ is achieved through the terrestrial biosphere and the ocean. However, humankind has altered the natural carbon cycle by burning coal, oil, natural gas, and wood. Since the industrial revolution began in the mid 1700s, each of these activities has increased in scale and distribution. CO₂ was the first GHG demonstrated to be increasing in atmospheric concentration with the first conclusive measurements being made in the last half of the 20th century. Prior to the industrial revolution, concentrations were fairly stable at 280 parts per million (ppm). The International Panel on Climate Change (IPCC) indicates that concentrations were 379 ppm in 2005, an increase of more than 30 percent. Left unchecked, the IPCC projects that concentration of carbon dioxide in the atmosphere is projected to increase to a minimum of 540 ppm by 2100 as a direct result of anthropogenic sources. This

could result in an average global temperature rise of at least two degrees Celsius or 3.6 degrees Fahrenheit.

Methane

CH₄ is an extremely effective absorber of radiation, although its atmospheric concentration is less than that of CO₂. Its lifetime in the atmosphere is brief (10 to 12 years), compared to some other GHGs (such as CO₂, N₂O, and Chlorofluorocarbons (CFCs)). CH₄ has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production (at the roots of the plants). Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of methane. Other anthropocentric sources include fossil-fuel combustion and biomass burning.

Nitrous Oxide

Concentrations of N₂O also began to rise at the beginning of the industrial revolution. In 1998, the global concentration of this GHG was documented at 314 parts per billion (ppb). N₂O is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. N₂O is also commonly used as an aerosol spray propellant (i.e., in whipped cream bottles, in potato chip bags to keep chips fresh, and in rocket engines and race cars).

Chlorofluorocarbons

CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane (C₂H₆) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the Earth's surface). CFCs have no natural source, but were first synthesized in 1928. They were used for refrigerants, aerosol propellants, and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken and in 1989 the European Community agreed to ban CFCs by 2000 and subsequent treaties banned CFCs worldwide by 2010. This effort was extremely successful, and the levels of the major CFCs are now remaining level or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years.

Hydrofluorocarbons

HFCs are synthetic man-made chemicals that are used as a substitute for CFCs. Out of all the GHGs, they are one of three groups with the highest global warming potential. The HFCs with the largest measured atmospheric abundances are (in order), HFC-23 (CHF₃), HFC-134a (CF₃CH₂F), and HFC-152a (CH₃CHF₂). Prior to 1990, the only significant emissions were HFC-23. HFC-134a use is increasing due to its use as a refrigerant. Concentrations of HFC-23 and HFC-134a in the atmosphere are now about 10 parts per trillion (ppt) each. Concentrations of HFC-152a are about 1 ppt. HFCs are manmade for applications such as automobile air conditioners and refrigerants.

Perfluorocarbons

Perfluorocarbons (PFCs) have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above Earth's surface are able to destroy the compounds. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF₄) and hexafluoroethane (C₂F₆).

Concentrations of CF₄ in the atmosphere are over 70 ppt. The two main sources of PFCs are primary aluminum production and semiconductor manufacturing.

Sulfur Hexafluoride

Sulfur Hexafluoride (SF₆) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. SF₆ has the highest global warming potential of any gas evaluated; 23,900 times that of CO₂. Concentrations in the 1990s were about 4 ppt. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

Aerosols

Aerosols are particles emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light. Cloud formation can also be affected by aerosols. Sulfate aerosols are emitted when fuel containing sulfur is burned. Black carbon (or soot) is emitted during biomass burning due to the incomplete combustion of fossil fuels. Particulate matter regulation has been lowering aerosol concentrations in the United States; however, global concentrations are likely increasing.

3.2 Global Warming Potential

GHGs have varying global warming potential (GWP). The GWP is the potential of a gas or aerosol to trap heat in the atmosphere; it is the cumulative radiative forcing effects of a gas over a specified time horizon resulting from the emission of a unit mass of gas relative to the reference gas, CO₂. The GHGs listed by the IPCC and the CEQA Guidelines are discussed in this section in order of abundance in the atmosphere. Water vapor, the most abundant GHG, is not included in this list because its natural concentrations and fluctuations far outweigh its anthropogenic (human-made) sources. To simplify reporting and analysis, GHGs are commonly defined in terms of their GWP. The IPCC defines the GWP of various GHG emissions on a normalized scale that recasts all GHG emissions in terms of CO₂e. As such, the GWP of CO₂ is equal to 1. The GWP values used in this analysis are based on the 2007 IPCC Fourth Assessment Report, which are used in CARB's 2014 Scoping Plan Update and the CalEEMod Model Version 2016.3.2 and are detailed in Table A. The IPCC has updated the Global Warming Potentials of some gases in their Fifth Assessment Report, however the new values have not yet been incorporated into the CalEEMod model that has been utilized in this analysis.

Table A – Global Warming Potentials, Atmospheric Lifetimes and Abundances of GHGs

Gas	Atmospheric Lifetime (years) ¹	Global Warming Potential (100 Year Horizon) ²	Atmospheric Abundance
Carbon Dioxide (CO ₂)	50-200	1	379 ppm
Methane (CH ₄)	9-15	25	1,774 ppb
Nitrous Oxide (N ₂ O)	114	298	319 ppb
HFC-23	270	14,800	18 ppt
HFC-134a	14	1,430	35 ppt
HFC-152a	1.4	124	3.9 ppt
PFC: Tetrafluoromethane (CF ₄)	50,000	7,390	74 ppt
PFC: Hexafluoroethane (C ₂ F ₆)	10,000	12,200	2.9 ppt
Sulfur Hexafluoride (SF ₆)	3,200	22,800	5.6 ppt

Notes:

¹ Defined as the half-life of the gas.

² Compared to the same quantity of CO₂ emissions and is based on the Intergovernmental Panel On Climate Change (IPCC) 2007 standard, which is utilized in CalEEMod (Version 2016.3.2), that is used in this report (CalEEMod user guide: Appendix A).

Definitions: ppm = parts per million; ppb = parts per billion; ppt = parts per trillion

Source: IPCC 2007, EPA 2015

3.3 Greenhouse Gas Emissions Inventory

According to https://cdiac.ess-dive.lbl.gov/trends/emis/tre_glob_2014.html 9,855 million metric tons (MMT) of CO₂ equivalent (CO₂e) emissions were created globally in the year 2014. According to <https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data> the breakdown of global GHG emissions by sector consists of: 25 percent from electricity and heat production; 21 percent from industry; 24 percent from agriculture, forestry and other land use activities; 14 percent from transportation; 6 percent from building energy use; and 10 percent from all other sources of energy use.

According to *Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2018*, prepared by EPA, April 13, 2020, in 2018 total U.S. GHG emissions were 6,676.6 million metric tons (MMT) of CO₂ equivalent (CO₂e) emissions. Total U.S. emissions have increased by 3.7 percent between 1990 and 2018, which is down from a high of 15.2 percent above 1990 levels in 2007. Emissions increased by 2.9 percent or 188.4 MMTCO₂e between 2017 and 2018. The recent increase in GHG emissions was largely driven by an increase in CO₂ emissions from fossil fuel combustion, that was a result of multiple factors including greater heating and cooling needs due to a colder winter and hotter summer in 2018 compared to 2017.

According to <https://www.arb.ca.gov/cc/inventory/data/data.htm> the State of California created 424.1 MMTCO₂e in 2017. The breakdown of California GHG emissions by sector consists of: 41 percent from transportation; 24 percent from industrial; 15 percent from electricity generation; 8 percent from agriculture; 7 percent from residential buildings; and 5 percent from commercial buildings. In 2017, GHG emissions were 5 MMTCO₂e lower than 2016 levels, which is 7 MMTCO₂e below the 2020 GHG limit of 431 MMTCO₂e established by AB 32.

4.0 AIR QUALITY MANAGEMENT

The air quality at the project site is addressed through the efforts of various international, federal, state, regional, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies responsible for improving the air quality are discussed below.

4.1 Federal – United States Environmental Protection Agency

The Clean Air Act, first passed in 1963 with major amendments in 1970, 1977 and 1990, is the overarching legislation covering regulation of air pollution in the United States. The Clean Air Act has established the mandate for requiring regulation of both mobile and stationary sources of air pollution at the state and federal level. The Environmental Protection Agency (EPA) was created in 1970 in order to consolidate research, monitoring, standard-setting and enforcement authority into a single agency.

The EPA is responsible for setting and enforcing the National Ambient Air Quality Standards (NAAQS) for atmospheric pollutants. It regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain locomotives. NAAQS pollutants were identified using medical evidence and are shown below in Table B.

Table B – State and Federal Criteria Pollutant Standards

Air Pollutant	Concentration / Averaging Time		Most Relevant Effects
	California Standards	Federal Primary Standards	
Ozone (O ₃)	0.09 ppm / 1-hour 0.07 ppm / 8-hour	0.070 ppm, / 8-hour	(a) Pulmonary function decrements and localized lung edema in humans and animals; (b) Risk to public health implied by alterations in pulmonary morphology and host defense in animals; (c) Increased mortality risk; (d) Risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (e) Vegetation damage; and (f) Property damage.
Carbon Monoxide (CO)	20.0 ppm / 1-hour 9.0 ppm / 8-hour	35.0 ppm / 1-hour 9.0 ppm / 8-hour	(a) Aggravation of angina pectoris and other aspects of coronary heart disease; (b) Decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (c) Impairment of central nervous system functions; and (d) Possible increased risk to fetuses.
Nitrogen Dioxide (NO ₂)	0.18 ppm / 1-hour 0.030 ppm / annual	100 ppb / 1-hour 0.053 ppm / annual	(a) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (b) Risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; and (c) Contribution to atmospheric discoloration.
Sulfur Dioxide (SO ₂)	0.25 ppm / 1-hour 0.04 ppm / 24-hour	75 ppb / 1-hour 0.14 ppm/annual	(a) Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma.
Suspended Particulate Matter (PM ₁₀)	50 µg/m ³ / 24-hour 20 µg/m ³ / annual	150 µg/m ³ / 24-hour	(a) Exacerbation of symptoms in sensitive patients with respiratory or cardiovascular disease; (b) Declines in pulmonary function growth in children; and (c) Increased risk of premature death from heart or lung diseases in elderly.

Air Pollutant	Concentration / Averaging Time		Most Relevant Effects
	California Standards	Federal Primary Standards	
Suspended Particulate Matter (PM _{2.5})	12 µg/m ³ / annual	35 µg/m ³ / 24-hour 12 µg/m ³ / annual	
Sulfates	25 µg/m ³ / 24-hour	No Federal Standards	(a) Decrease in ventilatory function; (b) Aggravation of asthmatic symptoms; (c) Aggravation of cardio-pulmonary disease; (d) Vegetation damage; (e) Degradation of visibility; and (f) Property damage.
Lead	1.5 µg/m ³ / 30-day	0.15 µg/m ³ /3-month rolling	(a) Learning disabilities; and (b) Impairment of blood formation and nerve conduction.
Visibility Reducing Particles	Extinction coefficient of 0.23 per kilometer - visibility of ten miles or more due to particles when relative humidity is less than 70 percent.	No Federal Standards	Visibility impairment on days when relative humidity is less than 70 percent.

Source: <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>.

As part of its enforcement responsibilities, the EPA requires each state with federal nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the national standards. The SIP must integrate federal, state, and local components and regulations to identify specific measures to reduce pollution, using a combination of performance standards and market-based programs within the timeframe identified in the SIP. The CARB defines attainment as the category given to an area with no violations in the past three years. As indicated below in Table C, the Air Basin has been designated by EPA for the national standards as a non-attainment area for ozone and PM_{2.5} and partial non-attainment for lead. Currently, the Air Basin is in attainment with the national ambient air quality standards for CO, PM₁₀, SO₂, and NO₂.

Table C – South Coast Air Basin Attainment Status

Criteria Pollutant	Standard	Averaging Time	Designation ^{a)}	Attainment Date ^{b)}
1-Hour Ozone ^{c)}	NAAQS	1979 1-Hour (0.12 ppm)	Nonattainment (Extreme)	2/6/2023 (revised deadline)
	CAAQS	1-Hour (0.09 ppm)	Nonattainment	N/A
8-Hour Ozone ^{d)}	NAAQS	1997 8-Hour (0.08 ppm)	Nonattainment (Extreme)	6/15/2024
	NAAQS	2008 8-Hour (0.075 ppm)	Nonattainment (Extreme)	8/3/2038
	NAAQS	2015 8-Hour (0.070 ppm)	Pending – Expect Nonattainment (Extreme)	Pending (beyond 2032)
	CAAQS	8-Hour (0.070 ppm)	Nonattainment	Beyond 2032
CO	NAAQS	1-Hour (35 ppm)	Attainment (Maintenance)	6/11/2007 (attained)
		8-Hour (9 ppm)		

Criteria Pollutant	Standard	Averaging Time	Designation ^{a)}	Attainment Date ^{b)}
NO ₂ ^{e)}	CAAQS	1-Hour (20 ppm) 8-Hour (9 ppm)	Attainment	6/11/2007 (attained)
	NAAQS	2010 1-Hour (0.10 ppm)	Unclassifiable/ Attainment	N/A (attained)
	NAAQS	1971 Annual (0.053 ppm)	Attainment (Maintenance)	9/22/1998 (attained)
	CAAQS	1-Hour (0.18 ppm) Annual (0.030 ppm)	Attainment	---
SO ₂ ^{f)}	NAAQS	2010 1-Hour (75 ppb)	Designations Pending (expect Unclassifiable/ Attainment)	N/A (attained)
	NAAQS	1971 24-Hour (0.14 ppm) 1971 Annual (0.03 ppm)	Unclassifiable/ Attainment	3/19/1979 (attained)
PM10	NAAQS	1987 24-hour (150 µg/m ³)	Attainment (Maintenance) ^{g)}	7/26/2013 (attained)
	CAAQS	24-hour (50 µg/m ³) Annual (20 µg/m ³)	Nonattainment	N/A
PM2.5 ^{h)}	NAAQS	2006 24-Hour (35 µg/m ³)	Nonattainment (Serious)	12/31/2019
	NAAQS	1997 Annual (15.0 µg/m ³)	Attainment (final determination pending)	8/24/2016 (attained 2013)
	NAAQS	2012 Annual (12.0 µg/m ³)	Nonattainment (Moderate)	12/31/2021
	CAAQS	Annual (12.0 µg/m ³)	Nonattainment	N/A
Lead ⁱ⁾	NAAQS	2008 3-Months Rolling (0.15 µg/m ³)	Nonattainment (Partial) (Attainment determination requested)	12/31/2015

Source: SCAQMD, February 2016

Notes:

- a) U.S. EPA often only declares Nonattainment areas; everywhere else is listed as Unclassifiable/Attainment or Unclassifiable
- b) A design value below the NAAQS for data through the full year or smog season prior to the attainment date is typically required for attainment demonstration
- c) The 1979 1-hour O₃ standard (0.12 ppm) was revoked, effective June 15, 2005; however, the Basin has not attained this standard and therefore has some continuing obligations with respect to the revoked standard
- d) The 2008 8-hour ozone NAAQS (0.075 ppm) was revised to 0.070 ppm. Effective 12/28/15 with classifications and implementation goals to be finalized by 10/1/17; the 1997 8-hour O₃ NAAQS (0.08 ppm) was revoked in the 2008 O₃ implementation rule, effective 4/6/15; there are continuing obligations under the revoked 1997 and revised 2008 O₃ until they are attained.
- e) New NO₂ 1-hour standard, effective August 2, 2010; attainment designations January 20, 2012; annual NO₂ standard retained
- f) The 1971 annual and 24-hour SO₂ standards were revoked, effective August 23, 2010; however, these 1971 standards will remain in effect until one year after U.S. EPA promulgates area designations for the 2010 SO₂ 1-hour standard. Area designations are still pending, with Basin expected to be designated Unclassifiable /Attainment.
- g) Annual PM10 standard was revoked, effective December 18, 2006; 24-hour PM10 NAAQS deadline was 12/31/2006; SCAQMD request for attainment redesignation and PM10 maintenance plan was approved by U.S. EPA on June 26, 2013, effective July 26, 2013.
- h) The attainment deadline for the 2006 24-Hour PM2.5 NAAQS was 12/31/15 for the former "moderate" classification; EPA approved reclassification to "serious", effective 2/12/16 with an attainment deadline of 12/31/19; the 2012 (proposal year) annual PM2.5 NAAQS was revised on 1/15/13, effective 3/18/13, from 15 to 12 µg/m³; new annual designations were final 1/15/15, effective 4/15/15; on July 25, 2016 EPA finalized a determination that the Basin attained the 1997 annual (15.0 µg/m³) and 24-hour PM2.5 (65 µg/m³) NAAQS, effective August 24, 2016
- i) Partial Nonattainment designation – Los Angeles County portion of Basin only for near-source monitors. Expect to remain in attainment based on current monitoring data; attainment re-designation request pending.

In 2015, one or more stations in the Air Basin exceeded the most current federal standards on a total of 146 days (40 percent of the year), including: 8-hour ozone (113 days over 2015 ozone NAAQS), 24-hour PM2.5 (30 days, including near-road sites; 25 days for ambient sites only), PM10 (2 days), and NO₂ (1 day). Despite substantial improvement in air quality over the past few decades, some air monitoring stations in the Air Basin still exceed the NAAQS for ozone more frequently than any other area in the United States.

Seven of the top 10 stations in the nation most frequently exceeding the 2015 8-hour ozone NAAQS in 2015 were located within the Air Basin, including stations in San Bernardino, Riverside, and Los Angeles Counties (SCAQMD, 2016).

PM_{2.5} levels in the Air Basin have improved significantly in recent years. By 2013 and again in 2014 and 2015, there were no stations measuring PM_{2.5} in the Air Basin that violated the former 1997 annual PM_{2.5} NAAQS (15.0 µg/m³) for the 3-year design value period. On July 25, 2016 the EPA finalized a determination that the Basin attained the 1997 annual (15.0 µg/m³) and 24-hour PM_{2.5} (65 µg/m³) NAAQS, effective August 24, 2016. Of the 17 federal PM_{2.5} monitors at ambient stations in the Air Basin for the 2013-2015 period, five stations had design values over the current 2012 annual PM_{2.5} NAAQS (12.0 µg/m³), including: Mira Loma (Air Basin maximum at 14.1 µg/m³), Rubidoux, Fontana, Ontario, Central Los Angeles, and Compton. For the 24-hour PM_{2.5} NAAQS (35.0 µg/m³) there were 14 stations in the Air Basin in 2015 that had one or more daily exceedances of the standard, with a combined total of 25 days over that standard in the Air Basin. While it was previously anticipated that the Air Basin's 24-hour PM_{2.5} NAAQS would be attained by 2015, this did not occur based on the data for 2013 through 2015. The higher number of days exceeding the 24-hour PM_{2.5} NAAQS over what was expected is largely attributed to the severe drought conditions over this period that allowed for more stagnant conditions in the Air Basin with multi-day buildups of higher PM_{2.5} concentrations. This was caused by the lack of storm-related dispersion and rain-out of PM and its precursors (SCAQMD, 2016).

The Air Basin is currently in attainment for the federal standards for SO₂, CO, NO₂, and PM₁₀ and the Orange County portion of the Air Basin is currently in attainment for the federal standards for lead. While the concentration level of the 1-hour NO₂ federal standard (100 ppb) was exceeded in the Air Basin for one day in 2015 (Long Beach- Hudson Station), the NAAQS NO₂ design value has not been exceeded. Therefore, the Air Basin remains in attainment of the NO₂ NAAQS (SCAQMD, 2016).

4.2 State – California Air Resources Board

The California Air Resources Board (CARB), which is a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and state air pollution control programs within California. In this capacity, the CARB conducts research, sets the California Ambient Air Quality Standards (CAAQS), compiles emission inventories, develops suggested control measures, provides oversight of local programs, and prepares the SIP. The CAAQS for criteria pollutants are shown above in Table B. In addition, the CARB establishes emission standards for motor vehicles sold in California, consumer products (e.g. hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

The Air Basin has been designated by the CARB as a non-attainment area for ozone, PM₁₀ and PM_{2.5}. Currently, the Air Basin is in attainment with the ambient air quality standards for CO, NO₂, SO₂, lead, and sulfates and is unclassified for visibility reducing particles and Hydrogen Sulfide.

The following lists the State of California Code of Regulations (CCR) air quality emission rules that are applicable, but not limited to all warehouse projects in the State.

Assembly Bill 2588

The Air Toxics “Hot Spots” Information and Assessment Act (Assembly Bill [AB] 2588, 1987, Connelly) was enacted in 1987 as a means to establish a formal air toxics emission inventory risk quantification program. AB 2588, as amended, establishes a process that requires stationary sources to report the type and

quantities of certain substances their facilities routinely release in California. The data is ranked by high, intermediate, and low categories, which are determined by: the potency, toxicity, quantity, volume, and proximity of the facility to nearby receptors.

CARB Regulation for In-Use Off-Road Diesel Vehicles

On July 26, 2007, the California Air Resources Board (CARB) adopted California Code of Regulations Title 13, Article 4.8, Chapter 9, Section 2449 to reduce diesel particulate matter (DPM) and NOx emissions from in-use off-road heavy-duty diesel vehicles in California. Such vehicles are used in construction, mining, and industrial operations. The regulation limits idling to no more than five consecutive minutes, requires reporting and labeling, and requires disclosure of the regulation upon vehicle sale. Performance requirements of the rule are based on a fleet's average NOx emissions, which can be met by replacing older vehicles with newer, cleaner vehicles or by applying exhaust retrofits. The regulation was amended in 2010 to delay the original timeline of the performance requirement making the first compliance deadline January 1, 2014 for large fleets (over 5,000 horsepower), 2017 for medium fleets (2,501-5,000 horsepower), and 2019 for small fleets (2,500 horsepower or less). Currently, no commercial operation in California may add any equipment to their fleet that has a Tier 0 or Tier 1 engine. By January 1, 2018 medium and large fleets will be restricted from adding Tier 2 engines to their fleets and by January 2023, no commercial operation will be allowed to add Tier 2 engines to their fleets. It should be noted that commercial fleets may continue to use their existing Tier 0 and 1 equipment, if they can demonstrate that the average emissions from their entire fleet emissions meet the NOx emissions targets.

CARB Resolution 08-43 for On-Road Diesel Truck Fleets

On December 12, 2008 the CARB adopted Resolution 08-43, which limits NOx, PM10 and PM2.5 emissions from on-road diesel truck fleets that operate in California. On October 12, 2009 Executive Order R-09-010 was adopted that codified Resolution 08-43 into Section 2025, title 13 of the California Code of Regulations. This regulation requires that by the year 2023 all commercial diesel trucks that operate in California shall meet model year 2010 (Tier 4 Final) or latter emission standards. In the interim period, this regulation provides annual interim targets for fleet owners to meet. By January 1, 2014, 50 percent of a truck fleet is required to have installed Best Available Control Technology (BACT) for NOx emissions and 100 percent of a truck fleet installed BACT for PM10 emissions. This regulation also provides a few exemptions including a onetime per year 3-day pass for trucks registered outside of California. All on-road diesel trucks utilized during construction of the proposed project will be required to comply with Resolution 08-43.

4.3 Regional – Southern California

The SCAQMD is the agency principally responsible for comprehensive air pollution control in the South Coast Air Basin. To that end, as a regional agency, the SCAQMD works directly with the Southern California Association of Governments (SCAG), county transportation commissions, and local governments and cooperates actively with all federal and state agencies.

South Coast Air Quality Management District

SCAQMD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emission sources, and enforces such measures through educational programs or fines, when necessary. SCAQMD is directly responsible for reducing emissions from stationary, mobile, and indirect sources. It has responded to this requirement by preparing a sequence of AQMPs. The *Final 2016 Air Quality Management Plan* (2016 AQMP) was adopted by the SCAQMD Board on March 3, 2016 and was

adopted by CARB on March 23, 2017 for inclusion into the California State Implementation Plan (SIP). The 2016 AQMP was prepared in order to meet the following standards:

- 8-hour Ozone (75 ppb) by 2032
- Annual PM2.5 (12 µg/m³) by 2021-2025
- 8-hour Ozone (80 ppb) by 2024 (updated from the 2007 and 2012 AQMPs)
- 1-hour Ozone (120 ppb) by 2023 (updated from the 2012 AQMP)
- 24-hour PM2.5 (35 µg/m³) by 2019 (updated from the 2012 AQMP)

In addition to meeting the above standards, the 2016 AQMP also includes revisions to the attainment demonstrations for the 1997 8-hour ozone NAAQS and the 1979 1-hour ozone NAAQS. The prior 2012 AQMP was prepared in order to demonstrate attainment with the 24-hour PM2.5 standard by 2014 through adoption of all feasible measures. The prior 2007 AQMP demonstrated attainment with the 1997 8-hour ozone (80 ppb) standard by 2023, through implementation of future improvements in control techniques and technologies. These “black box” emissions reductions represent 65 percent of the remaining NO_x emission reductions by 2023 in order to show attainment with the 1997 8-hour ozone NAAQS. Given the magnitude of these needed emissions reductions, additional NO_x control measures have been provided in the 2012 AQMP even though the primary purpose was to show compliance with 24-hour PM2.5 emissions standards.

The 2016 AQMP provides a new approach that focuses on available, proven and cost effective alternatives to traditional strategies, while seeking to achieve multiple goals in partnership with other entities to promote reductions in GHG emissions and TAC emissions as well as efficiencies in energy use, transportation, and goods movement. The 2016 AQMP recognizes the critical importance of working with other agencies to develop funding and other incentives that encourage the accelerated transition of vehicles, buildings and industrial facilities to cleaner technologies in a manner that benefits not only air quality, but also local businesses and the regional economy.

Although SCAQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate air quality issues associated with plans and new development projects throughout the Air Basin. Instead, this is controlled through local jurisdictions in accordance to the California Environmental Quality Act (CEQA). In order to assist local jurisdictions with air quality compliance issues the *CEQA Air Quality Handbook* (SCAQMD CEQA Handbook), prepared by SCAQMD, 1993, with the most current updates found at <http://www.aqmd.gov/ceqa/hdbk.html>, was developed in accordance with the projections and programs detailed in the AQMPs. The purpose of the SCAQMD CEQA Handbook is to assist Lead Agencies, as well as consultants, project proponents, and other interested parties in evaluating a proposed project’s potential air quality impacts. Specifically, the SCAQMD CEQA Handbook explains the procedures that SCAQMD recommends be followed for the environmental review process required by CEQA. The SCAQMD CEQA Handbook provides direction on how to evaluate potential air quality impacts, how to determine whether these impacts are significant, and how to mitigate these impacts. The SCAQMD intends that by providing this guidance, the air quality impacts of plans and development proposals will be analyzed accurately and consistently throughout the Air Basin, and adverse impacts will be minimized.

The following lists the SCAQMD rules that are applicable but not limited to residential development projects in the Air Basin.

Rule 402 - Nuisance

Rule 402 prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other material which causes injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. Compliance with Rule 402 will reduce local air quality and odor impacts to nearby sensitive receptors.

Rule 403- Fugitive Dust

Rule 403 governs emissions of fugitive dust during construction activities and requires that no person shall cause or allow the emissions of fugitive dust such that dust remains visible in the atmosphere beyond the property line or the dust emission exceeds 20 percent opacity, if the dust is from the operation of a motorized vehicle. Compliance with this rule is achieved through application of standard Best Available Control Measures, which include but are not limited to the measures below. Compliance with these rules would reduce local air quality impacts to nearby sensitive receptors.

- Utilize either a pad of washed gravel 50 feet long, 100 feet of paved surface, a wheel shaker, or a wheel washing device to remove material from vehicle tires and undercarriages before leaving project site.
- Do not allow any track out of material to extend more than 25 feet onto a public roadway and remove all track out at the end of each workday.
- Water all exposed areas on active sites at least three times per day and pre-water all areas prior to clearing and soil moving activities.
- Apply nontoxic chemical stabilizers according to manufacturer specifications to all construction areas that will remain inactive for 10 days or longer.
- Pre-water all material to be exported prior to loading, and either cover all loads or maintain at least 2 feet of freeboard in accordance with the requirements of California Vehicle Code Section 23114.
- Replant all disturbed area as soon as practical.
- Suspend all grading activities when wind speeds (including wind gusts) exceed 25 miles per hour.
- Restrict traffic speeds on all unpaved roads to 15 miles per hour or less.

Rules 1108 and 1108.1 – Cutback and Emulsified Asphalt

Rules 1108 and 1108.1 govern the sale, use, and manufacturing of asphalt and limits the VOC content in asphalt. This rule regulates the VOC contents of asphalt used during construction as well as any on-going maintenance during operations. Therefore, all asphalt used during construction and operation of the proposed project must comply with SCAQMD Rules 1108 and 1108.1.

Rule 1113 – Architectural Coatings

Rule 1113 governs the sale, use, and manufacturing of architectural coatings and limits the VOC content in sealers, coatings, paints and solvents. This rule regulates the VOC contents of paints available during construction. Therefore, all paints and solvents used during construction and operation of the proposed project must comply with SCAQMD Rule 1113.

Rule 1143 – Paint Thinners

Rule 1143 governs the sale, use, and manufacturing of paint thinners and multi-purpose solvents that are used in thinning of coating materials, cleaning of coating application equipment, and other solvent cleaning operations. This rule regulates the VOC content of solvents used during construction. Solvents used during construction and operation of the proposed project must comply with SCAQMD Rule 1143.

Southern California Association of Governments

The SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG is the federally designated Metropolitan Planning Organization (MPO) for the majority of the southern California region and is the largest MPO in the nation. With respect to air quality planning, SCAG has prepared the *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)*, adopted April, 2016 and the *2019 Federal Transportation Improvement Program (FTIP)*, adopted September 2018, which addresses regional development and growth forecasts. Although the RTP/SCS and FTIP are primarily planning documents for future transportation projects a key component of these plans are to integrate land use planning with transportation planning that promotes higher density infill development in close proximity to existing transit service. These plans form the basis for the land use and transportation components of the AQMP, which are utilized in the preparation of air quality forecasts and in the consistency analysis included in the AQMP. The RTP/SCS, FTIP, and AQMP are based on projections originating within the City and County General Plans.

4.4 Local – City of Orange

Local jurisdictions, such as the City of Orange, have the authority and responsibility to reduce air pollution through its police power and decision-making authority. Specifically, the City is responsible for the assessment and mitigation of air emissions resulting from its land use decisions. The City is also responsible for the implementation of transportation control measures as outlined in the AQMPs. Examples of such measures include bus turnouts, energy-efficient streetlights, and synchronized traffic signals. In accordance with CEQA requirements and the CEQA review process, the City assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation.

In accordance with the CEQA requirements, the City does not, however, have the expertise to develop plans, programs, procedures, and methodologies to ensure that air quality within the City and region will meet federal and state standards. Instead, the City relies on the expertise of the SCAQMD and utilizes the SCAQMD CEQA Handbook as the guidance document for the environmental review of plans and development proposals within its jurisdiction.

5.0 ENERGY CONSERVATION MANAGEMENT

The regulatory setting related to energy conservation is primarily addressed through State and City regulations, which are discussed below.

5.1 State

Energy conservation management in the State was initiated by the 1974 Warren-Alquist State Energy Resources Conservation and Development Act that created the California Energy Resource Conservation and Development Commission (currently named California Energy Commission [CEC]), which was originally tasked with certifying new electric generating plants based on the need for the plant and the suitability of the site of the plant. In 1976 the Warren-Alquist Act was expanded to include new restrictions on nuclear generating plants, that effectively resulted in a moratorium of any new nuclear generating plants in the State. The following details specific regulations adopted by the State in order to reduce the consumption of energy.

California Code of Regulations (CCR) Title 20

On November 3, 1976 the CEC adopted the *Regulations for Appliance Efficiency Standards Relating to Refrigerators, Refrigerator-Freezers and Freezers and Air Conditioners*, which were the first energy-efficiency standards for appliances. The appliance efficiency regulations have been updated several times by the Commission and the most current version is the *2016 Appliance Efficiency Regulations*, adopted January 2017 and now includes almost all types of appliances and lamps that use electricity, natural gas as well as plumbing fixtures. The authority for the CEC to control the energy-efficiency of appliances is detailed in California Code of Regulations (CCR), Title 20, Division 2, Chapter 4, Article 4, Sections 1601-1609.

California Code of Regulations (CCR) Title 24, Part 6

The CEC is also responsible for implementing the CCR Title 24, Part 6: *California's Energy Efficiency Standards for Residential and Nonresidential Buildings* (Title 24 Part 6) that were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. In 2008 the State set an energy-use reduction goal of zero-net-energy use of all new homes by 2020 and the CEC was mandated to meet this goal through revisions to the Title 24, Part 6 regulations.

The Title 24 standards are updated on a three-year schedule and since 2008 the standards have been incrementally moving to the 2020 goal of the zero-net-energy use. On January 1, 2020 the 2019 standards went into effect, that have been designed so that the average new home built in California will now use zero-net-energy and that non-residential buildings will use about 30 percent less energy than the 2016 standards due mainly to lighting upgrades. The 2019 standards also encourage the use of battery storage and heat pump water heaters, require the more widespread use of LED lighting, as well as improve the building's thermal envelope through high performance attics, walls and windows. The 2019 standards also require improvements to ventilation systems by requiring highly efficient air filters to trap hazardous air particulates as well as improvements to kitchen ventilation systems.

California Code of Regulations (CCR) Title 24, Part 11

CCR Title 24, Part 11: *California Green Building Standards* (CalGreen) was developed in response to continued efforts to reduce GHG emissions associated with energy consumption. The CalGreen Building

Standards are also updated every three years and the current version is the 2019 California Green Building Standard Code that become effective on January 1, 2020.

The CALGreen Code contains requirements for construction site selection; storm water control during construction; construction waste reduction; indoor water use reduction; material selection; natural resource conservation; site irrigation conservation; and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for verifying that all building systems (e.g., heating and cooling equipment and lighting systems) are functioning at their maximum efficiency.

The CALGreen Code provides standards for bicycle parking, carpool/vanpool/electric vehicle spaces, light and glare reduction, grading and paving, energy efficient appliances, renewable energy, graywater systems, water efficient plumbing fixtures, recycling and recycled materials, pollutant controls (including moisture control and indoor air quality), acoustical controls, storm water management, building design, insulation, flooring, and framing, among others. Implementation of the CALGreen Code measures reduces energy consumption and vehicle trips and encourages the use of alternative-fuel vehicles, which reduces pollutant emissions.

Some of the notable changes in the 2019 CALGreen Code over the prior 2016 CALGreen Code include: an alignment of building code engineering requirements with the national standards that include anchorage requirements for solar panels, provides design requirements for buildings in tsunami zones, increases Minimum Efficiency Reporting Value (MERV) for air filters from 8 to 13, increased electric vehicle charging requirements in parking areas, and sets minimum requirements for use of shade trees.

Senate Bill 100

Senate Bill 100 (SB 100) was adopted September 2018 and requires that by December 1, 2045 that 100 percent of retail sales of electricity to be generated from renewable or zero-carbon emission sources of electricity. SB 100 supersedes the renewable energy requirements set by SB 350, SB 1078, SB 107, and SB X1-2. However, the interim renewable energy thresholds from the prior Bills of 44 percent by December 31, 2024, 52 percent by December 31, 2027, and 60 percent by December 31, 2030, will remain in effect.

Executive Order B-48-18 and Assembly Bill 2127

The California Governor issued Executive Order B-48-18 on January 26, 2018 that orders all state entities to work with the private sector to put at least five million zero-emission vehicles on California roads by 2030 and to install 200 hydrogen fueling stations and 250,000 electric vehicle chargers by 2025. Currently there are approximately 350,000 electric vehicles operating in California, which represents approximately 1.5 percent of the 24 million vehicles total currently operating in California. Implementation of Executive Order B-48-18 would result in approximately 20 percent of all vehicles in California to be zero emission electric vehicles. Assembly Bill 2127 (AB 2127) was codified into statute on September 13, 2018 and requires that the California Energy Commission working with the State Air Resources Board prepare biannual assessments of the statewide electric vehicle charging infrastructure needed to support the levels of zero emission vehicle adoption required for the State to meet its goals of putting at least 5 million zero-emission vehicles on California roads by 2030.

Assembly Bill 1109

California Assembly Bill 1109 (AB 1109) was adopted October 2007, also known as the Lighting Efficiency and Toxics Reduction Act, prohibits the manufacturing of lights after January 1, 2010 that contain levels of hazardous substances prohibited by the European Union pursuant to the RoHS Directive. AB 1109 also requires reductions in energy usage for lighting and is structured to reduce lighting electrical consumption by: (1) At least 50 percent reduction from 2007 levels for indoor residential lighting; and (2) At least 25 percent reduction from 2007 levels for indoor commercial and all outdoor lighting by 2018. AB 1109 would reduce GHG emissions through reducing the amount of electricity required to be generated by fossil fuels in California.

Assembly Bill 1493

California Assembly Bill 1493 (also known as the Pavley Bill, in reference to its author Fran Pavley) was enacted on July 22, 2002 and required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. In 2004, CARB approved the “Pavley I” regulations limiting the amount of GHGs that may be released from new passenger automobiles that are being phased in between model years 2009 through 2016. These regulations will reduce GHG emissions by 30 percent from 2002 levels by 2016. In June 2009, the EPA granted California the authority to implement GHG emission reduction standards for light duty vehicles, in September 2009, amendments to the Pavley I regulations were adopted by CARB and implementation of the “Pavley I” regulations started in 2009.

The second set of regulations “Pavley II” was developed in 2010, and is being phased in between model years 2017 through 2025 with the goal of reducing GHG emissions by 45 percent by the year 2020 as compared to the 2002 fleet. The Pavley II standards were developed by linking the GHG emissions and formerly separate toxic tailpipe emissions standards previously known as the “LEV III” (third stage of the Low Emission Vehicle standards) into a single regulatory framework. The new rules reduce emissions from gasoline-powered cars as well as promote zero-emissions auto technologies such as electricity and hydrogen, and through increasing the infrastructure for fueling hydrogen vehicles. In 2009, the U.S. EPA granted California the authority to implement the GHG standards for passenger cars, pickup trucks and sport utility vehicles and these GHG emissions standards are currently being implemented nationwide. However, EPA has performed a midterm evaluation of the longer-term standards for model years 2022-2025, and based on the findings of this midterm evaluation, the EPA has proposed to amend the corporate average fuel economy (CAFE) and GHG emissions standards for light vehicles for model years 2021 through 2026. The EPA’s proposed amendments do not include any extension of the legal waiver granted to California by the 1970 Clean Air Act and which has allowed the State to set tighter standards for vehicle pipe emissions than the EPA standards. On September 20, 2019, California filed suit over the EPA decision to revoke California’s legal waiver that has been joined by 22 other states.

5.2 Local - City of Orange

The City of Orange General Plan, Natural Resources and Infrastructure Elements, March 2010, provides an Energy Resources Component that details the following applicable goals and policies.

NR Goal 2.0: Protect air, water, and energy resources from pollution and overuse.

Policy 2.1

Cooperate with the South Coast Air Quality Management District (SCAQMD) and other regional agencies to implement and enforce regional air quality management plans.

Policy 2.2

Support alternative transportation modes, alternative technologies, and bicycle- and pedestrian-friendly neighborhoods to reduce emissions related to vehicular travel.

Policy 2.6

Encourage sustainable building and site designs for new construction and renovation projects.

Policy 2.7

Coordinate with energy suppliers to ensure adequate energy supplies to meet community needs, and to promote energy conservation and public education programs for that purpose.

Policy 2.9

Promote City operations as a model for energy efficiency and green building.

Policy 2.10

Work toward replacing existing City vehicles with ultra low or zero emission vehicles. At a minimum, new City vehicles shall be low emission vehicles as defined by the California Air Resources Board, except if certain vehicle types are not available in the marketplace. Public safety vehicles are exempted from this requirement.

INF Goal 3.0: Ensure adequate maintenance of public rights-of-way to enhance public safety and improve circulation.**Policy 3.4**

Investigate the feasibility of using energy-efficient street lights to conserve energy.

INF Goal 4.0: Ensure adequate provision of electricity, natural gas, telephone and data services and cable television.**Policy 4.4**

Encourage integrated and cost-effective design and technology features within new development to minimize demands on dry utility networks.

6.0 GLOBAL CLIMATE CHANGE MANAGEMENT

The regulatory setting related to global climate change is addressed through the efforts of various international, federal, state, regional, and local government agencies. These agencies work jointly, as well as individually, to reduce GHG emissions through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies responsible for global climate change regulations are discussed below.

6.1 International

In 1988, the United Nations established the Intergovernmental Panel on Climate Change (IPCC) to evaluate the impacts of global climate change and to develop strategies that nations could implement to curtail global climate change. In 1992, the United States joined other countries around the world in signing the United Nations' Framework Convention on Climate Change (UNFCCC) agreement with the goal of controlling GHG emissions. The parties of the UNFCCC adopted the Kyoto Protocol, which set binding GHG reduction targets for 37 industrialized countries, the objective of reducing their collective GHG emissions by five percent below 1990 levels by 2012. The Kyoto Protocol has been ratified by 182 countries, but has not been ratified by the United States. It should be noted that Japan and Canada opted out of the Kyoto Protocol and the remaining developed countries that ratified the Kyoto Protocol have not met their Kyoto targets. The Kyoto Protocol expired in 2012 and the amendment for the second commitment period from 2013 to 2020 has not yet entered into legal force. The Parties to the Kyoto Protocol negotiated the Paris Agreement in December 2015, agreeing to set a goal of limiting global warming to less than 2 degrees Celsius compared with pre-industrial levels. The Paris Agreement has been adopted by 195 nations with 147 ratifying it, including the United States by President Obama, who ratified it by Executive Order on September 3, 2016. On June 1, 2017, President Trump announced that the United States is withdrawing from the Paris Agreement, however the Paris Agreement is still legally binding by the other remaining nations.

Additionally, the Montreal Protocol was originally signed in 1987 and substantially amended in 1990 and 1992. The Montreal Protocol stipulates that the production and consumption of compounds that deplete ozone in the stratosphere—CFCs, halons, carbon tetrachloride, and methyl chloroform—were to be phased out, with the first three by the year 2000 and methyl chloroform by 2005.

6.2 Federal – United States Environmental Protection Agency

The United States Environmental Protection Agency (EPA) is responsible for implementing federal policy to address global climate change. The Federal government administers a wide array of public-private partnerships to reduce U.S. GHG intensity. These programs focus on energy efficiency, renewable energy, methane, and other non-CO₂ gases, agricultural practices and implementation of technologies to achieve GHG reductions. EPA implements several voluntary programs that substantially contribute to the reduction of GHG emissions.

In *Massachusetts v. Environmental Protection Agency* (Docket No. 05–1120), argued November 29, 2006 and decided April 2, 2007, the U.S. Supreme Court held that not only did the EPA have authority to regulate greenhouse gases, but the EPA's reasons for not regulating this area did not fit the statutory requirements. As such, the U.S. Supreme Court ruled that the EPA should be required to regulate CO₂ and other greenhouse gases as pollutants under the federal Clean Air Act (CAA).

In response to the FY2008 Consolidations Appropriations Act (H.R. 2764; Public Law 110-161), EPA proposed a rule on March 10, 2009 that requires mandatory reporting of GHG emissions from large sources in the United States. On September 22, 2009, the Final Mandatory Reporting of GHG Rule was signed and published in the Federal Register on October 30, 2009. The rule became effective on December 29, 2009. This rule requires suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions to submit annual reports to EPA.

On December 7, 2009, the EPA Administrator signed two distinct findings under section 202(a) of the Clean Air Act. One is an endangerment finding that finds concentrations of the six GHGs in the atmosphere threaten the public health and welfare of current and future generations. The other is a cause or contribute finding, that finds emissions from new motor vehicles and new motor vehicle engines contribute to the GHG pollution which threatens public health and welfare. These actions did not impose any requirements on industry or other entities, however, since 2009 the EPA has been providing GHG emission standards for vehicles and other stationary sources of GHG emissions that are regulated by the EPA. On September 13, 2013 the EPA Administrator signed 40 CFR Part 60, that limits emissions from new sources to 1,100 pounds of CO₂ per MWh for fossil fuel-fired utility boilers and 1,000 pounds of CO₂ per MWh for large natural gas-fired combustion units.

On August 3, 2015, the EPA announced the Clean Power Plan, emissions guidelines for U.S. states to follow in developing plans to reduce GHG emissions from existing fossil fuel-fired power plants (Federal Register Vol. 80, No. 205, October 23 2015). On October 11, 2017, the EPA issued a formal proposal to repeal the Clean Power Plan and on June 19, 2019 the EPA replaced the Clean Power Plan with the Affordable Clean Energy rule that is anticipated to lower power sector GHG emissions by 11 million tons by the year 2030.

6.3 State

The California Air Resources Board (CARB) has the primary responsible for implementing state policy to address global climate change, however there are State regulations related to global climate change that affect a variety of State agencies. CARB, which is a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both the federal and state air pollution control programs within California. In this capacity, the CARB conducts research, sets California Ambient Air Quality Standards (CAAQS), compiles emission inventories, develops suggested control measures, provides oversight of local programs, and prepares the SIP. In addition, the CARB establishes emission standards for motor vehicles sold in California, consumer products (e.g. hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

In 2008, CARB approved a Climate Change Scoping Plan that proposes a “comprehensive set of actions designed to reduce overall carbon GHG emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health” (CARB 2008). The Climate Change Scoping Plan has a range of GHG reduction actions which include direct regulations; alternative compliance mechanisms; monetary and non-monetary incentives; voluntary actions; market-based mechanisms such as a cap-and-trade system. In 2014, CARB approved the First Update to the Climate Change Scoping Plan (CARB, 2014) that identifies additional strategies moving beyond the 2020 targets to the year 2050. On December 14, 2017 CARB adopted the California’s 2017 Climate Change Scoping Plan, November 2017 (CARB, 2017) that provides specific statewide policies and measures to achieve the 2030 GHG reduction target of 40 percent below 1990 levels by 2030 and the

aspirational 2050 GHG reduction target of 80 percent below 1990 levels by 2050. In addition, the State has passed the following laws directing CARB to develop actions to reduce GHG emissions, which are listed below in chronological order, with the most current first.

California Code of Regulations (CCR) Title 24, Part 6

The Title 24 Part 6 standards have been developed by the CEC primarily for energy conservation and is described in more detail above in Section 5.1 under Energy Conservation Management. It should be noted that implementation of the Title 24 Part 6 building standards would also reduce GHG emissions, since energy usage is the primary source of human generated GHG emissions.

California Code of Regulations (CCR) Title 24, Part 11

The CalGreen Building standards have been developed by the CEC primarily for energy conservation and is described in more detail above in Section 5.1 under Energy Conservation Management. It should be noted that implementation of the CalGreen Building standards would also reduce GHG emissions, since energy usage is the primary source of human generated GHG emissions.

Senate Bill 100

SB 100 requires that by December 1, 2045 that 100 percent of retail sales of electricity to be generated from renewable or zero-carbon emission sources of electricity and is described in more detail above in Section 5.1 under Energy Conservation Management.

Executive Order B-48-18 and Assembly Bill 2127

Executive Order B-48-18 and AB 2127 provides measures to put at least five million zero-emission vehicles on California roads by 2030 and to install 200 hydrogen fueling stations and 250,000 electric vehicle chargers by 2025 and is described in more detail above in Section 5.1 under Energy Conservation Management.

Executive Order B-30-15, Senate Bill 32 and Assembly Bill 197

The California Governor issued Executive Order B-30-15 on April 29, 2015 that aims to reduce California's GHG emissions 40 percent below 1990 levels by 2030. This executive order aligns California's GHG reduction targets with those of other international governments, such as the European Union that set the same target for 2030 in October, 2014. This target will make it possible to reach the ultimate goal of reducing GHG emissions 80 percent under 1990 levels by 2050 that is based on scientifically established levels needed in the U.S.A to limit global warming below 2 degrees Celsius – the warming threshold at which scientists say there will likely be major climate disruptions such as super droughts and rising sea levels. Assembly Bill 197 (AB 197) (September 8, 2016) and Senate Bill 32 (SB 32) (September 8, 2016) codified into statute the GHG emissions reduction targets of at least 40 percent below 1990 levels by 2030 as detailed in Executive Order B-30-15. AB 197 also requires additional GHG emissions reporting that is broken down to sub-county levels and requires CARB to consider the social costs of emissions impacting disadvantaged communities.

Executive Order B-29-15

The California Governor issued Executive Order B-29-15 on April 1, 2015 and directed the State Water Resources Control Board to impose restrictions to achieve a statewide 25% reduction in urban water usage and directed the Department of Water Resources to replace 50 million square feet of lawn with drought tolerant landscaping through an update to the State's Model Water Efficient Landscape

Ordinance. The Ordinance also requires installation of more efficient irrigation systems, promotion of greywater usage and onsite stormwater capture, and limits the turf planted in new residential landscapes to 25 percent of the total area and restricts turf from being planted in median strips or in parkways unless the parkway is next to a parking strip and a flat surface is required to enter and exit vehicles. Executive Order B-29-15 would reduce GHG emissions associated with the energy used to transport and filter water.

Assembly Bill 341 and Senate Bills 939 and 1374

Senate Bill 939 (SB 939) requires that each jurisdiction in California to divert at least 50 percent of its waste away from landfills, whether through waste reduction, recycling or other means. Senate Bill 1374 (SB 1374) requires the California Integrated Waste Management Board to adopt a model ordinance by March 1, 2004 suitable for adoption by any local agency to require 50 to 75 percent diversion of construction and demolition of waste materials from landfills. Assembly Bill 341 (AB 341) was adopted in 2011 and builds upon the waste reduction measures of SB 939 and 1374, and sets a new target of a 75 percent reduction in solid waste generated by the year 2020.

Senate Bill 375

Senate Bill 375 (SB 375) was adopted September 2008 in order to support the State's climate action goals to reduce GHG emissions through coordinated regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. SB 375 requires CARB to set regional targets for GHG emissions reductions from passenger vehicle use. In 2010, CARB established targets for 2020 and 2035 for each Metropolitan Planning Organizations (MPO) within the State. It was up to each MPO to adopt a sustainable communities strategy (SCS) that will prescribe land use allocation in that MPOs Regional Transportation Plan (RTP) to meet CARB's 2020 and 2035 GHG emission reduction targets. These reduction targets are required to be updated every eight years and the most current targets are detailed at: <https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets>, which provides GHG emissions reduction targets for SCAG of 8 percent by 2020 and 19 percent by 2035.

The *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)*, adopted by SCAG April, 2016 provides a 2020 GHG emission reduction target of 8 percent and a 2035 GHG emission reduction target of 18 percent. SCAG will need to develop additional strategies in its next revision of the RTP/SCS in order to meet CARB's new 19 percent GHG emission reduction target for 2035. CARB is also charged with reviewing SCAG's RTP/SCS for consistency with its assigned targets.

City and County land use policies, including General Plans, are not required to be consistent with the RTP and associated SCS. However, new provisions of CEQA incentivize, through streamlining and other provisions, qualified projects that are consistent with an approved SCS and categorized as "transit priority projects."

Assembly Bill 1109

AB 1109 requires reductions in energy usage for lighting and is described in more detail above in Section 5.1 under Energy Conservation Management.

Executive Order S-1-07

Executive Order S-1-07 was issued in 2007 and proclaims that the transportation sector is the main source of GHG emissions in the State, since it generates more than 40 percent of the State's GHG emissions. It establishes a goal to reduce the carbon intensity of transportation fuels sold in the State by at least ten percent by 2020. This Executive Order also directs CARB to determine whether this Low Carbon Fuel Standard (LCFS) could be adopted as a discrete early-action measure as part of the effort to meet the mandates in AB 32.

In 2009 CARB approved the proposed regulation to implement the LCFS. The standard was challenged in the courts, but has been in effect since 2011 and was re-approved by the CARB in 2015. The LCFS is anticipated to reduce GHG emissions by about 16 MMT per year by 2020. The LCFS is designed to provide a framework that uses market mechanisms to spur the steady introduction of lower carbon fuels. The framework establishes performance standards that fuel producers and importers must meet annually. Reformulated gasoline mixed with corn-derived ethanol and low-sulfur diesel fuel represent the baseline fuels. Lower carbon fuels may be ethanol, biodiesel, renewable diesel, or blends of these fuels with gasoline or diesel. Compressed natural gas and liquefied natural gas also may be low-carbon fuels. Hydrogen and electricity, when used in fuel cells or electric vehicles, are also considered as low-carbon fuels.

Senate Bill 97

Senate Bill 97 (SB 97) was adopted August 2007 and acknowledges that climate change is a prominent environmental issue that requires analysis under CEQA. SB 97 directed the Governor's Office of Planning and Research (OPR), which is part of the State Natural Resources Agency, to prepare, develop, and transmit to CARB guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA, by July 1, 2009. The Natural Resources Agency was required to certify and adopt those guidelines by January 1, 2010.

Pursuant to the requirements of SB 97 as stated above, on December 30, 2009 the Natural Resources Agency adopted amendments to the State CEQA guidelines that addresses GHG emissions. The CEQA Guidelines Amendments changed 14 sections of the CEQA Guidelines and incorporated GHG language throughout the Guidelines. However, no GHG emissions thresholds of significance were provided and no specific mitigation measures were identified. The GHG emission reduction amendments went into effect on March 18, 2010 and are summarized below:

- Climate Action Plans and other greenhouse gas reduction plans can be used to determine whether a project has significant impacts, based upon its compliance with the plan.
- Local governments are encouraged to quantify the GHG emissions of proposed projects, noting that they have the freedom to select the models and methodologies that best meet their needs and circumstances. The section also recommends consideration of several qualitative factors that may be used in the determination of significance, such as the extent to which the given project complies with state, regional, or local GHG reduction plans and policies. OPR does not set or dictate specific thresholds of significance. Consistent with existing CEQA Guidelines, OPR encourages local governments to develop and publish their own thresholds of significance for GHG impacts assessment.
- When creating their own thresholds of significance, local governments may consider the thresholds of significance adopted or recommended by other public agencies, or recommended by experts.

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- New amendments include guidelines for determining methods to mitigate the effects of GHG emissions in Appendix F of the CEQA Guidelines.
 - OPR is clear to state that “to qualify as mitigation, specific measures from an existing plan must be identified and incorporated into the project; general compliance with a plan, by itself, is not mitigation.”
 - OPR’s emphasizes the advantages of analyzing GHG impacts on an institutional, programmatic level. OPR therefore approves tiering of environmental analyses and highlights some benefits of such an approach.
 - Environmental impact reports must specifically consider a project's energy use and energy efficiency potential.

Assembly Bill 32

In 2006, the California State Legislature adopted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires CARB, to adopt rules and regulations that would achieve GHG emissions equivalent to statewide levels in 1990 by 2020 through an enforceable statewide emission cap which will be phased in starting in 2012. Emission reductions shall include carbon sequestration projects that would remove carbon from the atmosphere and utilize best management practices that are technologically feasible and cost effective.

In 2007 CARB released the calculated Year 1990 GHG emissions of 431 million metric tons of CO₂e (MMTCO₂e). The 2020 target of 431 MMTCO₂e requires the reduction of 78 MMTCO₂e, or approximately 16 percent from the State’s projected 2020 business as usual emissions of 509 MMTCO₂e (CARB, 2014). Under AB 32, CARB was required to adopt regulations by January 1, 2011 to achieve reductions in GHGs to meet the 1990 cap by 2020. Early measures CARB took to lower GHG emissions included requiring operators of the largest industrial facilities that emit 25,000 metric tons of CO₂ in a calendar year to submit verification of GHG emissions by December 1, 2010. The CARB Board also approved nine discrete early action measures that include regulations affecting landfills, motor vehicle fuels, refrigerants in cars, port operations and other sources, all of which became enforceable on or before January 1, 2010.

CARB’s Scoping Plan that was adopted in 2009, proposes a variety of measures including: strengthening energy efficiency and building standards; targeted fees on water and energy use; a market-based cap-and-trade system; achieving a 33 percent renewable energy mix; and a fee regulation to fund the program. The 2014 update to the Scoping Plan identifies strategies moving beyond the 2020 targets to the year 2050.

The Cap and Trade Program established under the Scoping Plan sets a statewide limit on sources responsible for 85 percent of California’s GHG emissions, and has established a market for long-term investment in energy efficiency and cleaner fuels since 2012.

Executive Order S-3-05

In 2005 the California Governor issued Executive Order S 3-05, GHG Emission, which established the following reduction targets:

- 2010: Reduce greenhouse gas emissions to 2000 levels;
- 2020: Reduce greenhouse gas emissions to 1990 levels;

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- 2050: Reduce greenhouse gas emissions to 80 percent below 1990 levels.

The Executive Order directed the secretary of the California Environmental Protection Agency (CalEPA) to coordinate a multi-agency effort to reduce GHG emissions to the target levels. To comply with the Executive Order, the secretary of CalEPA created the California Climate Action Team (CAT), made up of members from various state agencies and commissions. The team released its first report in March 2006. The report proposed to achieve the targets by building on the voluntary actions of businesses, local governments, and communities and through State incentive and regulatory programs. The State achieved its first goal of reducing GHG emissions to 2000 levels by 2010.

Assembly Bill 1493

AB 1493 or the Pavley Bill sets tailpipe GHG emissions limits for passenger vehicles in California as well as fuel economy standards and is described in more detail above in Section 5.1 under Energy Conservation Management.

6.4 Regional – Southern California

The SCAQMD is the agency principally responsible for comprehensive air pollution control in the South Coast Air Basin. To that end, as a regional agency, the SCAQMD works directly with the Southern California Association of Governments (SCAG), county transportation commissions, and local governments and cooperates actively with all federal and state agencies.

South Coast Air Quality Management District

SCAQMD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emission sources, and enforces such measures through educational programs or fines, when necessary. SCAQMD is directly responsible for reducing emissions from stationary, mobile, and indirect sources. The SCAQMD is also responsible for GHG emissions for projects where it is the lead agency. However, for other projects in the SCAB where it is not the lead agency, it is limited to providing resources to other lead agencies in order to assist them in determining GHG emission thresholds and GHG reduction measures. In order to assist local agencies with direction on GHG emissions, the SCAQMD organized a working group and adopted Rules 2700, 2701, and 2702, which are described below.

SCAQMD Working Group

Since neither CARB nor the OPR has developed GHG emissions threshold, the SCAQMD formed a Working Group to develop significance thresholds related to GHG emissions. At the September 28, 2010 Working Group meeting, the SCAQMD released its most current version of the draft GHG emissions thresholds, which recommends a tiered approach that either provides a quantitative annual thresholds of 3,500 MTCO₂e for residential uses, 1,400 MTCO₂e for commercial uses, and 3,000 MTCO₂e for mixed uses. An alternative annual threshold of 3,000 MTCO₂e for all land use types is also proposed.

Southern California Association of Governments

The SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG is the federally designated Metropolitan Planning Organization (MPO) for the majority of the southern California region and is the largest MPO in the nation. With respect to air quality planning, SCAG has prepared the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), adopted April, 2016 and the *2015 Federal Transportation Improvement*

Program (FTIP), adopted October 2013, which addresses regional development and growth forecasts. Although the RTP/SCS and FTIP are primarily planning documents for future transportation projects a key component of these plans are to integrate land use planning with transportation planning that promotes higher density infill development in close proximity to existing transit service. These plans form the basis for the land use and transportation components of the AQMP, which are utilized in the preparation of air quality forecasts and in the consistency analysis included in the AQMP. The RTP/SCS, FTIP, and AQMP are based on projections originating within the City and County General Plans.

6.5 Local – City of Orange

Local jurisdictions, such as the City of Orange (City), have the authority and responsibility to reduce GHG emissions through their police power and decision-making authority. Specifically, the City is responsible for the assessment and mitigation of GHG emissions resulting from its land use decisions. In accordance with CEQA requirements and the CEQA review process, the City assesses the global climate change potential of new development projects, requires mitigation of potentially significant global climate change impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation.

In order to meet the State GHG emissions reduction goals, the City has developed the *City of Orange Local CEQA Guidelines*, April 11, 2006 and the *Greenhouse Gas Emission (GHG) Analysis – Interim Guidance Memo* (GHG Interim Guidance Memo), September 30, 2008. The GHG Interim Guidance Memo provides a GHG emission significance threshold of 10,000 metric tons of CO₂e (MTCO₂e) per year to determine the significance of an individual project's contribution to the global GHG emissions environment. This threshold has also been utilized and adopted as an interim GHG emission threshold in the *Orange General Plan Program Environmental Impact Report*, March 2010. This threshold is defined as interim since it shall be preempted when the SCAQMD adopts GHG emissions thresholds for all projects. Currently, SCAQMD has only adopted a GHG emission threshold of 10,000 MTCO₂e for industrial projects where SCAQMD is the lead agency.

7.0 ATMOSPHERIC SETTING

7.1 South Coast Air Basin

The project site is located within Orange County, which is part of the South Coast Air Basin (Air Basin) that includes the non-desert portions of Riverside, San Bernardino, and Los Angeles Counties and all of Orange County. The Air Basin is located on a coastal plain with connecting broad valleys and low hills to the east. Regionally, the Air Basin is bounded by the Pacific Ocean to the southwest and high mountains to the east forming the inland perimeter.

7.2 Local Climate

Orange County is located on a coastal plain with connecting broad valleys and low hills to the east. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. Occasional periods of strong Santa Ana winds and winter storms interrupt the otherwise mild weather pattern.

Although the Air Basin has a semi-arid climate, the air near the surface is typically moist because of the presence of a shallow marine layer. Except for infrequent periods when dry air is brought into the Air Basin by offshore winds, the ocean effect is dominant. Periods of heavy fog are frequent and low stratus clouds, often referred to as “high fog” are a characteristic climate feature.

Winds are an important parameter in characterizing the air quality environment of a project site because they determine the regional pattern of air pollution transport and control the rate of dispersion near a source. Daytime winds in Orange County are usually light breezes from off the coast as air moves regionally onshore from the cool Pacific Ocean. These winds are usually the strongest in the dry summer months. Nighttime winds in Orange County are a result mainly from the drainage of cool air off of the mountains to the east and they occur more often during the winter months and are usually lighter than the daytime winds. Between the periods of dominant airflow, periods of air stagnation may occur, both in the morning and evening hours. Whether such a period of stagnation occurs is one of the critical determinants of air quality conditions on any given day.

During the winter and fall months, surface high-pressure systems north of the Air Basin combined with other meteorological conditions, can result in very strong winds, called “Santa Ana Winds”, from the northeast. These winds normally have durations of a few days before predominant meteorological conditions are reestablished. The highest wind speed typically occurs during the afternoon due to daytime thermal convection caused by surface heating. This convection brings about a downward transfer of momentum from stronger winds aloft. It is not uncommon to have sustained winds of 60 miles per hour with higher gusts during a Santa Ana Wind event.

The temperature and precipitation levels for Santa Ana Fire Station, which is the nearest weather station to the project site with historical data is shown below in Table D. Table D shows that August is typically the warmest month and December is typically the coolest month. Rainfall in the project area varies considerably in both time and space. Almost all the annual rainfall comes from the fringes of mid-latitude storms from late November to early April, with summers being almost completely dry.

Table D – Monthly Climate Data

Month	Average Maximum Temperature (°F)	Average Minimum Temperature (°F)	Average Total Precipitation (inches)
January	68.1	43.1	2.73
February	68.9	44.9	3.05
March	70.7	46.7	2.21
April	73.1	50.0	1.05
May	75.2	54.0	0.25
June	78.6	57.4	0.06
July	83.5	60.9	0.02
August	84.7	61.6	0.06
September	83.9	59.3	0.22
October	79.4	54.5	0.49
November	74.2	47.5	1.28
December	68.8	43.6	2.28
Annual	75.8	52.0	13.69

Source: <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca7888>

7.3 Monitored Local Air Quality

The air quality at any site is dependent on the regional air quality and local pollutant sources. Regional air quality is determined by the release of pollutants throughout the Air Basin. Estimates of the existing emissions in the Air Basin provided in the 2012 AQMP, indicate that collectively, mobile sources account for 59 percent of the VOC, 88 percent of the NOx emissions and 40 percent of directly emitted PM2.5, with another 10 percent of PM2.5 from road dust. The 2016 AQMP found that since 2012 AQMP projections were made stationary source VOC emissions have decreased by approximately 12 percent, but mobile VOC emissions have increased by 5 percent. The percentage of NOx emissions remain unchanged between the 2012 and 2016 projections.

SCAQMD has divided the Air Basin into 38 air-monitoring areas with a designated ambient air monitoring station representative of each area. The project site is located on the northwestern edge of air monitoring area 21, which covers the southeastern portion of Orange County. The nearest air monitoring station to the project site is the Anaheim-Pampas Lane Monitoring Station (Anaheim Station), which is located approximately 6.5 miles west of the project site at 1630 Pampas Lane, Anaheim. The monitoring data is presented in Table E and shows the most recent three years of monitoring data from CARB. CO measurements have not been provided, since CO is currently in attainment in the Air Basin and monitoring of CO within the Air Basin ended on March 31, 2013.

Table E – Local Area Air Quality Monitoring Summary

Pollutant (Standard)	Year ¹		
	2016	2017	2018
Ozone: ¹			
Maximum 1-Hour Concentration (ppm)	0.103	0.090	0.112
Days > CAAQS (0.09 ppm)	2	0	1
Maximum 8-Hour Concentration (ppm)	0.074	0.076	0.071
Days > NAAQS (0.070 ppm)	4	4	1
Days > CAAQs (0.070 ppm)	0	2	0
Nitrogen Dioxide: ¹			
Maximum 1-Hour Concentration (ppb)	64.3	81.2	66.0
Days > NAAQS (100 ppb)	0	0	0
Days > CAAQS (180 ppb)	0	0	0
Inhalable Particulates (PM10): ¹			
Maximum 24-Hour National Measurement (ug/m ³)	74.0	95.7	94.6
Days > NAAQS (150 ug/m ³)	0	0	0
Days > CAAQS (50 ug/m ³)	3	5	2
Annual Arithmetic Mean (AAM) (ug/m ³)	28.0	26.9	27.7
Annual > NAAQS (50 ug/m ³)	No	No	No
Annual > CAAQS (20 ug/m ³)	Yes	Yes	Yes
Ultra-Fine Particulates (PM2.5): ¹			
Maximum 24-Hour National Measurement (ug/m ³)	44.4	53.9	63.1
Days > NAAQS (35 ug/m ³)	1	7	7
Annual Arithmetic Mean (AAM) (ug/m ³)	9.4	ND	12.3
Annual > NAAQS and CAAQS (12 ug/m ³)	No	ND	No

Notes: Exceedances are listed in **bold**. CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard; ppm = parts per million; ppb = parts per billion; ND = no data available.

¹ Data obtained from the Anaheim Station.

Source: <http://www.arb.ca.gov/adam/>

Ozone

During the last three years, the State 1-hour concentration standard for ozone has been exceeded between 0 and 2 days each year at the Anaheim Station. The State 8-hour ozone standard has been exceeded between 0 and 2 days each year over the last three years at the Anaheim Station. The Federal 8-hour ozone standard has been exceeded between 1 and 4 days each year over the last three years at the Anaheim Station. Ozone is a secondary pollutant as it is not directly emitted. Ozone is the result of chemical reactions between other pollutants, most importantly hydrocarbons and NO₂, which occur only in the presence of bright sunlight. Pollutants emitted from upwind cities react during transport downwind to produce the oxidant concentrations experienced in the area. Many areas of Southern California contribute to the ozone levels experienced at this monitoring station, with the more significant areas being those directly upwind.

Nitrogen Dioxide

The Anaheim Station did not record an exceedance of either the Federal or State 1-hour NO₂ standards for the last three years.

Particulate Matter

The State 24-hour concentration standard for PM₁₀ has been exceeded between 2 and 4 days each year over the past three years at the Anaheim Station. Over the past three years the Federal 24-hour standard for PM₁₀ has not been exceeded at the Anaheim Station. The annual PM₁₀ concentration at the Anaheim Station has exceeded the State standard for the past three years and has not exceeded the Federal standard for the past three years.

Over the past three years the 24-hour concentration standard for PM_{2.5} has been exceeded between 1 and 7 days in the year 2018 over the past three years at the Anaheim Station. The annual PM_{2.5} concentrations at the Anaheim Station has not exceeded either the State or Federal standard for the past three years. Particulate levels in the area are due to natural sources, grading operations, and motor vehicles.

According to the EPA, some people are much more sensitive than others to breathing fine particles (PM₁₀ and PM_{2.5}). People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worsening illness and premature death due to breathing these fine particles. People with bronchitis can expect aggravated symptoms from breathing in fine particles. Children may experience decline in lung function due to breathing in PM₁₀ and PM_{2.5}. Other groups considered sensitive are smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive, because many breathe through their mouths during exercise.

7.4 Toxic Air Contaminant Levels in the Air Basin

In order to determine the Air Basin-wide risks associated with major airborne carcinogens, the SCAQMD conducted the Multiple Air Toxics Exposure Study (MATES) studies. According to the SCAQMD's MATES-IV study, the project site has an estimated cancer risk of 355 per million persons chance of cancer. In comparison, the average cancer risk for the Air Basin is 991 per million persons, which is based on the use of age-sensitivity factors detailed in the OEHHA Guidelines (OEHHA, 2015).

In order to provide a perspective of risk, it is often estimated that the incidence in cancer over a lifetime for the U.S. population ranges between 1 in 3 to 4 and 1 in 3, or a risk of about 300,000 per million persons. The MATES-III study referenced a Harvard Report on Cancer Prevention, which estimated that of cancers associated with known risk factors, about 30 percent were related to tobacco, about 30 percent were related to diet and obesity, and about 2 percent were associated with environmental pollution related exposures that includes hazardous air pollutants.

8.0 MODELING PARAMETERS AND ASSUMPTIONS

8.1 CalEEMod Model Input Parameters

The criteria air pollution and GHG emissions impacts created by the proposed project have been analyzed through use of CalEEMod Version 2016.3.2. CalEEMod is a computer model published by the SCAQMD for estimating air pollutant emissions. The CalEEMod program uses the EMFAC2014 computer program to calculate the emission rates specific for Orange County for employee, vendor and haul truck vehicle trips and the OFFROAD2011 computer program to calculate emission rates for heavy equipment operations. EMFAC2014 and OFFROAD2011 are computer programs generated by CARB that calculates composite emission rates for vehicles. Emission rates are reported by the program in grams per trip and grams per mile or grams per running hour.

The project characteristics in the CalEEMod model were set to a project location of Orange County, a Climate Zone of 8, utility company of Southern California Edison and an opening year of 2022 was utilized in this analysis.

Land Use Parameters

The proposed project would consist of removal of existing parking the project site, grading of the project site, and building construction of Fire Station No. 1 & Headquarters, and retrofitting the reserve apparatus building. A total of 82 parking spaces would be provided for the proposed residents and visitors, of which 21 staff parking and 5 visitor parking spaces would be on the Fire Station site and 54 staff parking spaces and 2 visitor parking spaces would be provided on the Parking site. The proposed project’s land use parameters that were entered into the CalEEMod model are shown in Table F.

Table F – CalEEMod Land Use Parameters

Proposed Land Use	Land Use Subtype in CalEEMod	Land Use Size ¹	Lot Acreage ²	Building/Paving ³ (square feet)
Fire Station No. 1 & Headquarters ⁴	Government Office Building	27.93 TSF	0.81	27,927
Reserve Apparatus Building	Unrefrigerated Warehouse-No Rail	3.78 TSF	0.2	3,780
West Parking Lot	Parking Lot	56 PS	1.23	22,400
HQ Parking Lot	Parking Lot	26 PS	0.51	10,400

Notes:

¹ TSF = Thousand Square Feet; PS = Parking Space

² Lot acreage calculated based on the total project area of 1.52-acres for Fire Station No.1/Headquarters and 1.23-acres for West parking lot.

³ Building/Paving square feet represent area where architectural coatings will be applied.

⁴Includes 16,574 square feet for Fire Station No. 1 and 11,353 square feet for Headquarters

Construction Parameters

Construction activities have been modeled as starting in January 2021 and taking 19 months to complete. The construction-related GHG emissions were based on a 30-year amortization rate as recommended in the SCAQMD GHG Working Group meeting on November 19, 2009. The phases of construction activities that have been analyzed are detailed below and include: 1) Demolition; 2) Grading, 3) Building construction, 4) Application of architectural coatings, and 5) Paving. Since the project site is currently utilized by the City for parking and storage, the site preparation activities that consist of removal of rocks and tree stumps would occur during the demolition phase and not as a separate phase for the proposed project.

Demolition

Approximately a quarter of the 1.52 acre site is paved and the entire 1.23 acre west parking area is paved. Although some of this pavement may be saved, in order to provide a conservative analysis it has been assumed 1.61 acres (70,132 square feet) of pavement would be demolished as part of the proposed project. The pavement was assumed to be an average of 4-inches thick and weigh 145 pounds per square foot, which results in 1,695 tons of pavement that would be removed from the project site. This would require a total of 168 haul truck trips (average 8.4 haul truck trips per day over duration of demolition phase).

The demolition phase has been modeled as starting in January 2021 and occurring over four weeks. The demolition activities would require 13 worker trips per day. In order to account for water truck emissions, six vendor truck emissions were added to the demolition phase. The onsite equipment would consist of one concrete/industrial saw, two rubber tired dozers, and three either tractors, loaders, or backhoes, which is based on the CalEEMod default equipment mix. The mitigation of water all exposed areas two times per day was chosen in order to account for the fugitive dust reduction that would occur through adhering to SCAQMD Rule 403, which requires that the Best Available Control Measures be utilized to reduce fugitive dust emissions.

Grading

The grading phase would occur after completion of the demolition phase and was modeled as occurring over four weeks. The onsite equipment utilized during the grading phase would consist of one grader, one rubber tired dozer, and two of either tractors, loaders, or backhoes, which is based on the CalEEMod default equipment mix. The grading activities would generate 10 worker trips per day. In order to account for water truck emissions, six daily vendor truck trips were added to the grading phase. The mitigation of water all exposed areas two times per day was chosen in order to account for the fugitive dust reduction that would occur through adhering to SCAQMD Rule 403, which requires that the Best Available Control Measures be utilized to reduce fugitive dust emissions.

Building Construction

The building construction would occur after the completion of the grading phase and was modeled as occurring over 13 months, which is based the schedule provided by the project applicant. The building construction phase would generate 24 worker trips and 11 vendor trips per day. The onsite equipment would consist of the simultaneous operation of one crane, two forklift, one generator, three welders, and one of either a tractor, loader, or backhoe, which is based on the CalEEMod default equipment mix.

Paving

The paving phase would consist of paving the onsite roads and parking lots. The paving phase was modeled as occurring over five weeks day and starting after completion of the building construction phase. The paving phase would generate 15 worker trips per day. The onsite equipment would consist of the simultaneous operation of one cement and mortar mixers, one paver, one paving equipment, two rollers, and one of either a tractor, loader or backhoe, which is based on the CalEEMod default equipment mix.

Architectural Coating

The application of architectural coatings was modeled as occurring after the paving phase and occurring over four weeks. The architectural coating phase was modeled based on covering 100 square feet of non-residential interior area, 47,561 square feet of non-residential exterior area, and 1,968 square feet of parking area. The architectural coating phase would generate 5 worker trips per day. The onsite equipment would consist of one air compressor, which is based on the CalEEMod default equipment mix.

Operational Emissions Modeling

The operations-related criteria air pollutant emissions and GHG emissions created by the proposed project have been analyzed through use of the CalEEMod model. The proposed project was analyzed in the CalEEMod model based on the land use parameters provided above.

Mobile Sources

Mobile sources include emissions generated from the additional vehicle trips that would occur through implementation of the proposed project. The CalEEMod default vehicle trip rates were utilized in the analysis. Since the proposed project consists of moving the existing Fire Station No. 1 and Headquarters from 176 S Grand Street to the proposed location, which is approximately 0.7 mile away, all vehicle trip lengths were changed to 0.7 mile, since that is the maximum or worst-case increase to the project generated trip lengths. No other changes were made to the default mobile source parameters in the CalEEMod model.

The CalEEMod model provides the selection of “mitigation” to account for project conditions that would result in less emissions than a project without these conditions, however it should be noted that this “mitigation” may represent current conditions, such as development that is in close proximity to an existing transit facility, where a project built at such location, would create less vehicle trips and associated emissions than a project that was not built in close proximity to an existing transit facility. The mobile source emissions analysis for the Project included the CalEEMod “mitigation” of improved pedestrian network onsite and connecting offsite, and increase transit accessibility with 0.01 mile to the nearest transit to account for the existing OCTA Chapman and Water bus stop located on the proposed Fire Station site.

Area Sources

Area sources include emissions from consumer products, landscape equipment, hearths and architectural coatings. The area source emissions were based on the on-going use of the proposed project in the CalEEMod model. According to the proposed project plans, no fireplaces or wood stoves would be installed into the proposed residential apartment units or common areas. As such the number of woodstoves and fireplaces was set to zero. No other changes were made to the default area source parameters in the CalEEMod model.

Energy Usage

Energy usage includes emissions from electricity and natural gas used onsite. The energy usage was based on the ongoing use of the proposed project in the CalEEMod Model. No changes were made to the default energy usage parameters in the CalEEMod model.

The new 2019 Title 24, Part 6 building energy efficiency standards went into effect January 1, 2020 and require new lighting energy improvements that are 30 percent more efficient than the prior 2016 building

standards. In order to account for the new standards, the CalEEMod “mitigation” of 30 percent lighting energy improvement was selected. A summary of the new 2019 Title 24 standards can be found at: [https://www.energy.ca.gov/title24/2019standards/documents/2018 Title 24 2019 Building Standards FAQ.pdf](https://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf).

Solid Waste

Waste includes the GHG emissions associated with the processing of waste from the proposed project as well as the GHG emissions from the waste once it is interred into a landfill. The analysis was based on the default CalEEMod waste generation rates of 51 tons of solid waste per year from the proposed project. No changes were made to the default solid waste parameters or mitigation measures in the CalEEMod model.

The CalEEMod “mitigation” of a 50 percent reduction in landfill waste was selected to account for implementation of AB 341 that provides strategies to reduce, recycle or compost solid waste by 75 percent by 2020. Only 50 percent was selected, since AB 341 builds upon the waste reduction measures of SB 939 and 1374 and therefore, it was assumed approximately 25 percent of the waste reduction target has already been accounted for in the CalEEMod model.

Water and Wastewater

Water includes the water used for the interior of the buildings as well as for landscaping and is based on the GHG emissions associated with the energy used to transport and filter the water. The analysis was based on the default CalEEMod water usage rate of 7,181,016 gallons per year of indoor water use and 4,526,916 gallons per year of outdoor water use. No changes were made to the default water and wastewater parameters in the CalEEMod model.

The CalEEMod “mitigation” of the use of low flow faucets, showers, and toilets and use of smart irrigation system controllers were selected to account for the implementation of the 2016 CCR Title 24 Part 11 (CalGreen) requirements.

Backup Diesel Generator

The proposed project would include the installation of a 250 kW 389 horsepower backup diesel-powered generator. Backup generators typically cycle on for 30 minutes on a weekly basis in order to keep the engine lubricated and ready to use in case of a power outage. The typical cycling of a backup generator would operate for approximately 26 hours per year. The backup diesel generator was modeled in CalEEMod based on a 389 horsepower engine, a 0.73 load factor, 0.5 hour per day, and 26 hours per year.

8.2 Energy Use Calculations

The proposed project is anticipated to consume energy during both construction and operation of the proposed project and the parameters utilized to calculate energy use from construction and operation of the proposed project are detailed separately below.

Construction-Related Energy Use

Construction of the proposed project is anticipated to use energy in the forms of petroleum fuel for both off-road equipment as well as from the transport of workers and materials to and from the project site and the calculations for each source are described below.

Off-Road Construction Equipment

The off-road construction equipment fuel usage was calculated through use of the CalEEMod model's default off-road equipment assumptions detailed above in Section 8.1. For each piece of off-road equipment, the fuel usage was calculated through use of the *2017 Off-road Diesel Emission Factors* spreadsheet, prepared by CARB (<https://ww3.arb.ca.gov/msei/ordiesel.htm>). The Spreadsheet provides the following formula to calculate fuel usage from off-road equipment:

$$\text{Fuel Used} = \text{Load Factor} \times \text{Horsepower} \times \text{Total Operational Hours} \times \text{BSFC} / \text{Unit Conversion}$$

Where:

Load Factor - Obtained from CalEEMod default values

Horsepower – Obtained from CalEEMod default values

Total Operational Hours – Calculated by multiplying CalEEMod default daily hours by CalEEMod default number of working days for each phase of construction

BSFC – Brake Specific Fuel Consumption (pounds per horsepower-hour) – If less than 100 Horsepower = 0.408, if greater than 100 Horsepower = 0.367

Unit Conversion – Converts pounds to gallons = 7.109

Table G shows the off-road construction equipment fuel calculations based on the above formula.

Table G – Off-Road Equipment and Fuel Consumption from Construction of the Proposed Project

Equipment Type	Equipment Quantity	Horsepower	Load Factor	Operating Hours per Day	Total Operational Hours ¹	Fuel Used (gallons)
Demolition						
Concrete/Industrial Saws	1	81	0.73	8	160	543
Rubber Tired Dozers	1	247	0.40	8	160	816
Tractors/Loaders/Backhoes	3	97	0.37	8	480	989
Grading						
Graders	1	187	0.41	8	160	633
Rubber Tired Dozers	1	247	0.4	8	160	816
Tractors/Loaders/Backhoes	2	97	0.37	7	280	577
Building Construction						
Cranes	1	231	0.29	8	2,320	8,023
Forklifts	2	89	0.2	7	4,060	4,148
Generators	1	84	0.74	8	2,320	8,277
Tractors/Loaders/Backhoes	1	97	0.37	6	1,740	3,584
Welders	3	46	0.45	8	6,960	8,269
Architectural Coating						
Air Compressor	1	78	0.48	6	180	387
Paving						
Cement and Mortar Mixers	1	9	0.56	8	240	69
Pavers	1	130	0.42	8	240	676
Paving Equipment	1	132	0.36	8	240	589
Rollers	2	80	0.38	8	480	837
Tractors/Loaders/Backhoes	1	97	0.37	8	240	494
Total Off-Road Equipment Fuel Used during Construction (gallons)						39,727

Notes:

¹ Based on: 20 days for Demolition; 20 days for Grading; 290 days for Building Construction; 30 days for Paving; and 30 days for Painting.

Source: CalEEMod Version 2016.3.2 (see Appendix A); CARB, 2017.

Table G shows that the off-road equipment utilized during construction of the proposed project would consume 39,727 gallons of fuel.

On-Road Construction-Related Vehicle Trips

The on-road construction-related vehicle trips fuel usage was calculated through use of the construction vehicle trip assumptions from the CalEEMod model run as detailed above in Section 8.1. The calculated total construction miles was then divided by the fleet average for all of Southern California miles per gallon rates for the year 2021 calculated through use of the EMFAC2017 model (<https://www.arb.ca.gov/emfac/2017/>) and the EMFAC2017 model printouts are shown in Appendix B. Table H shows the on-road construction vehicle trips modeled in CalEEMod and the fuel usage calculations.

Table H – On-Road Vehicle Trips and Fuel Consumption from Construction of the Proposed Project

Vehicle Trip Types	Daily Trips	Trip Length (miles)	Total Miles per Day	Total Miles per Phase ¹	Fleet Average Miles per Gallon ²	Fuel Used (gallons)
Demolition						
Worker Trips	13	14.7	191	3,822	25.3	151
Vendor Truck Trips	6	6.9	147	828	8.0	104
Haul Truck Trips	8.4	20	168	3,360	8.0	422
Grading						
Worker Trips	10	14.7	147	2,940	25.3	116
Vendor Truck Trips	6	6.9	41	828	8.0	104
Building Construction						
Worker Trips	24	14.7	353	102,312	25.3	4,051
Vendor Truck Trips	11	6.9	76	22,011	8.0	2,762
Paving						
Worker Trips	15	14.7	221	6,615	25.3	262
Architectural Coating						
Worker Trips	5	14.7	74	2,205	25.3	87
Total Fuel Used from On-Road Construction Vehicles (gallons)						8,060

Notes:

¹ Based on: 20 days for Demolition; 20 days for Grading; 290 days for Building Construction; 30 days for Paving; and 30 days for Painting.

² From EMFAC 2017 model (see Appendix B). Worker Trips based on entire fleet of gasoline vehicles and Vendor Trips based on only truck fleet of diesel vehicles.

Source: CalEEMod Version 2016.3.2; CARB, 2018.

Table H shows that the on-road construction-related vehicle trips would consume 8,060 gallons of fuel and as detailed above, Table G shows that the off-road construction equipment would consume 39,727 gallons of fuel. This would result in the total consumption of 47,787 gallons of petroleum fuel from construction of the proposed project.

Operations-Related Energy Use

The operation of the proposed project is anticipated to use energy in the forms of petroleum fuel, electricity, and natural gas, and the calculations for each source are described below.

Operational Petroleum Fuel

The on-road operations-related vehicle trips fuel usage was calculated through use of the total annual vehicle miles traveled assumptions from the CalEEMod model run as detailed above in Section 8.1, which found that operation of the proposed project would generate 159,227 vehicle miles traveled per year. The calculated total construction miles was then divided by the Southern California fleet average rate of 25.3 miles per gallon, which was calculated through use of the EMFAC2017 model and based on the year 2021. The EMFAC2017 model printouts are shown in Appendix B. Based on the above calculation methodology, operational vehicle trips generated from the proposed project would consume 6,305 gallons per year.

Operation of the proposed project would also consume diesel fuel from the operation of the backup generator. According to the Generac SD250 Data Sheet, a 250 kW generator consumes 14.8 gallons per hour with a 75 percent load. As detailed above in Section 8.1, the typical maintenance cycling of the proposed diesel generator is anticipated to run 26 hours per year. This would result in the consumption of 385 gallons of diesel per year.

Operational Electricity Use

The operations-related electricity usage was calculated in the CalEEMod model run that is detailed above in Section 8.1 that found the proposed Fire Station No. 1 and Headquarters will use 354,338 kilowatt hours (kWh) per year, the proposed parking lot on the Fire Station site will use 2,548 kWh per year, the proposed parking lot on the Parking site will use 5,488 kWh per year, and the reserve apparatus room will use 13,502 kWh per year. Based on the above, it is anticipated that the proposed project would utilize 375,876 kWh per year of electricity.

Operational Natural Gas Use

The operations-related natural gas usage was calculated in the CalEEMod model run that is provided in the Air Quality analysis that found proposed project will use 40,378 kilo British Thermal Units (kBTU) per, which is equivalent to 40 mega-British Thermal units (MBTU) per year of natural gas.

9.0 THRESHOLDS OF SIGNIFICANCE

9.1 Regional Air Quality

Many air quality impacts that derive from dispersed mobile sources, which are the dominant pollution generators in the Air Basin, often occurs hours later and miles away after photochemical processes have converted primary exhaust pollutants into secondary contaminants such as ozone. The incremental regional air quality impact of an individual project is generally very small and difficult to measure. Therefore, SCAQMD has developed significance thresholds based on the volume of pollution emitted rather than on actual ambient air quality because the direct air quality impact of a project is not quantifiable on a regional scale. The SCAQMD CEQA Handbook states that any project in the Air Basin with daily emissions that exceed any of the identified significance thresholds should be considered as having an individually and cumulatively significant air quality impact. For the purposes to this air quality impact analysis, a regional air quality impact would be considered significant if emissions exceed the SCAQMD significance thresholds identified in Table I.

Table I – SCAQMD Regional Criteria Pollutant Emission Thresholds of Significance

	Pollutant Emissions (pounds/day)						
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	Lead
Construction	75	100	550	150	150	55	3
Operation	55	55	550	150	150	55	3

Source: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2>

9.2 Local Air Quality

Project-related construction air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Air Basin. In order to assess local air quality impacts the SCAQMD has developed Localized Significant Thresholds (LSTs) to assess the project-related air emissions in the project vicinity. SCAQMD has also provided *Final Localized Significance Threshold Methodology* (LST Methodology), July 2008, which details the methodology to analyze local air emission impacts. The LST Methodology found that the primary emissions of concern are NO₂, CO, PM₁₀, and PM_{2.5}.

The LST Methodology provides Look-Up Tables with different thresholds based on the location and size of the project site and distance to the nearest sensitive receptors. As detailed above in Section 7.3, the project site is located in Air Monitoring Area 17, which covers Central Orange County. The Look-Up Tables provided in the LST Methodology include project site acreage sizes of 1-acre, 2-acres and 5-acres. The 2-acre project site values in the Look-Up Tables have been utilized in this analysis, since that is the nearest size available for the 2.75-acres from both project sites. The nearest sensitive receptors to the Fire Station site are homes located on the east side of Jameson Street, which are as near as 60 feet east of the Fire Station site. The nearest sensitive receptors to the Parking site are homes located as near as 30 feet southwest of the Parking site. According to LST Methodology, any receptor located closer than 25 meters (82 feet) shall be based on the 25 meter thresholds. Table J below shows the LSTs for NO_x, CO, PM₁₀ and PM_{2.5} for both construction and operational activities.

Table J – SCAQMD Local Air Quality Thresholds of Significance

Activity	Allowable Emissions (pounds/day) ¹			
	NOx	CO	PM10	PM2.5
Construction	115	715	6	4
Operation	115	715	2	1

Notes:

¹ The nearest offsite sensitive receptors are homes located 60 feet (18 meters) east of the Fire Station site and 30 feet (9 meters) southwest of the Parking site. According to SCAQMD methodology, all receptors closer than 25 meters are based on the 25 meter threshold.

Source: Calculated from SCAQMD’s Mass Rate Look-up Tables for two acres in Air Monitoring Area 17 Central Orange County.

9.3 Toxic Air Contaminants

According to the SCAQMD CEQA Handbook, any project that has the potential to expose the public to toxic air contaminants in excess of the following thresholds would be considered to have a significant air quality impact:

- If the Maximum Incremental Cancer Risk is 10 in one million or greater; or
- Toxic air contaminants from the proposed project would result in a Hazard Index increase of 1 or greater.

In order to determine if the proposed project may have a significant impact related to toxic air contaminants (TACs), the *Health Risk Assessment Guidance for analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*, (Diesel Analysis) prepared by SCAQMD, August 2003, recommends that if the proposed project is anticipated to create TACs through stationary sources or regular operations of diesel trucks on the project site, then the proximity of the nearest receptors to the source of the TAC and the toxicity of the hazardous air pollutant (HAP) should be analyzed through a comprehensive facility-wide health risk assessment (HRA).

9.4 Odor Impacts

The SCAQMD CEQA Handbook states that an odor impact would occur if the proposed project creates an odor nuisance pursuant to SCAQMD Rule 402, which states:

“A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.”

If the proposed project results in a violation of Rule 402 with regards to odor impacts, then the proposed project would create a significant odor impact.

9.5 Energy Conservation

The new 2018 amendments and additions to the CEQA Checklist now includes an Energy Section that analyzes the proposed project’s energy consumption in order to avoid or reduce inefficient, wasteful or unnecessary consumption of energy. Since the Energy Section was just added, no state or local agencies

have adopted specific criteria or thresholds to be utilized in an energy impact analysis. However, the 2018 *Guidelines for the Implementation of the California Environmental Quality Act*, provide the following direction on how to analyze a project's energy consumption:

"If analysis of the project's energy use reveals that the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy, or wasteful use of energy resources, the EIR shall mitigate that energy use. This analysis should include the project's energy use for all project phases and components, including transportation-related energy, during construction and operation. In addition to building code compliance, other relevant considerations may include, among others, the project's size, location, orientation, equipment use and any renewable energy features that could be incorporated into the project. (Guidance on information that may be included in such an analysis is presented in Appendix F.) This analysis is subject to the rule of reason and shall focus on energy use that is caused by the project. This analysis may be included in related analyses of air quality, greenhouse gas emissions, transportation or utilities in the discretion of the lead agency."

If the proposed project creates inefficient, wasteful or unnecessary consumption of energy during construction or operation activities or conflicts with a state or local plan for renewable energy or energy efficiency, then the proposed project would create a significant energy impact.

9.6 Greenhouse Gas Emissions

The proposed project is located within the jurisdiction of the SCAQMD. In order to identify significance criteria under CEQA for development projects, SCAQMD initiated a Working Group, which provided detailed methodology for evaluating significance under CEQA. At the September 28, 2010 Working Group meeting, the SCAQMD released its most current version of the draft GHG emissions thresholds, which recommends a tiered approach that provides a quantitative annual threshold of 3,000 MTCO_{2e} for all land use projects. Although the SCAQMD provided substantial evidence supporting the use of the above threshold, as of November 2017, the SCAQMD Board has not yet considered or approved the Working Group's thresholds.

It should be noted that SCAQMD's Working Group's thresholds were prepared prior to the issuance of Executive Order B-30-15 on April 29, 2015 that provided a reduction goal of 40 percent below 1990 levels by 2030. This target was codified into statute through passage of AB 197 and SB 32 in September 2016. However, to date no air district or local agency within California has provided guidance on how to address AB 197 and SB 32 with relation to land use projects. In addition, the California Supreme Court's ruling on *Cleveland National Forest Foundation v. San Diego Association of Governments* (Cleveland v. SANDAG), Filed July 13, 2017 stated:

SANDAG did not abuse its discretion in declining to adopt the 2050 goal as a measure of significance in light of the fact that the Executive Order does not specify any plan or implementation measures to achieve its goal. In its response to comments, the EIR said: "It is uncertain what role regional land use and transportation strategies can or should play in achieving the EO's 2050 emissions reduction target. A recent California Energy Commission report concludes, however, that the primary strategies to achieve this target should be major 'decarbonization' of electricity supplies and fuels, and major improvements in energy efficiency [citation]."

Although, the above court case was referencing California's GHG emission targets for the year 2050, at this time it is also unclear what role land use strategies can or should play in achieving the AB 197 and SB 32 reduction goal of 40 percent below 1990 levels by 2030. As such this analysis has relied on the SCAQMD Working Group's recommended thresholds. Therefore, the proposed project would be considered to create a significant cumulative GHG impact if the proposed project would exceed the annual threshold of 3,000 MTCO₂e.

The GHG emissions analysis for both construction and operation of the proposed project can be found below in Sections 10.8 and 10.9.

10.0 IMPACT ANALYSIS

10.1 CEQA Thresholds of Significance

Consistent with CEQA and the State CEQA Guidelines, a significant impact related to air quality, energy, and GHG emissions would occur if the proposed project is determined to:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard;
- Expose sensitive receptors to substantial pollutant concentrations;
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people;
- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation;
- Conflict with or obstruct a state or local plan for renewable energy;
- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

10.2 Air Quality Compliance

The proposed project would not conflict with or obstruct implementation of the SCAQMD Air Quality Management Plan (AQMP). The following section discusses the proposed project's consistency with the SCAQMD AQMP.

SCAQMD Air Quality Management Plan

The California Environmental Quality Act (CEQA) requires a discussion of any inconsistencies between a proposed project and applicable General Plans and regional plans (CEQA Guidelines Section 15125). The regional plan that applies to the proposed project includes the SCAQMD AQMP. Therefore, this section discusses any potential inconsistencies of the proposed project with the AQMP.

The purpose of this discussion is to set forth the issues regarding consistency with the assumptions and objectives of the AQMP and discuss whether the proposed project would interfere with the region's ability to comply with Federal and State air quality standards. If the decision-makers determine that the proposed project is inconsistent, the lead agency may consider project modifications or inclusion of mitigation to eliminate the inconsistency.

The SCAQMD CEQA Handbook states that "New or amended GP Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP." Strict consistency with all aspects of the plan is usually not required. A proposed project should be considered to be consistent with the AQMP if it furthers one or more policies and does not obstruct other policies. The SCAQMD CEQA Handbook identifies two key indicators of consistency:

-
- (1) Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
 - (2) Whether the project will exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

Both of these criteria are evaluated in the following sections.

Criterion 1 - Increase in the Frequency or Severity of Violations?

Based on the air quality modeling analysis contained in this report, short-term regional construction air emissions would not result in significant impacts based on SCAQMD regional thresholds of significance discussed above in Section 9.1 or local thresholds of significance discussed above in Section 9.2. The ongoing operation of the proposed project would generate air pollutant emissions that are inconsequential on a regional basis and would not result in significant impacts based on SCAQMD thresholds of significance discussed above in Section 9.1. The analysis for long-term local air quality impacts showed that local pollutant concentrations would not be projected to exceed the air quality standards. Therefore, a less than significant long-term impact would occur and no mitigation would be required.

Therefore, based on the information provided above, the proposed project would be consistent with the first criterion.

Criterion 2 - Exceed Assumptions in the AQMP?

Consistency with the AQMP assumptions is determined by performing an analysis of the proposed project with the assumptions in the AQMP. The emphasis of this criterion is to insure that the analyses conducted for the proposed project are based on the same forecasts as the AQMP. The AQMP is developed through use of the planning forecasts provided in the RTP/SCS and FTIP. The RTP/SCS is a major planning document for the regional transportation and land use network within Southern California. The RTP/SCS is a long-range plan that is required by federal and state requirements placed on SCAG and is updated every four years. The FTIP provides long-range planning for future transportation improvement projects that are constructed with state and/or federal funds within Southern California. Local governments are required to use these plans as the basis of their plans for the purpose of consistency with applicable regional plans under CEQA. For this project, the City of Orange General Plan's Land Use Plan defines the assumptions that are represented in AQMP.

The General Plan Land Use Element designation for this site is Public Facilities and Institutions (PFI) and is currently zoned as Office Professional (O-P) and Single Family Residential (R-1-6). The proposed project would include a zone amendment of the site to Public Institution (P-I) to better reflect the existing nature of the land uses in the neighborhood and to ensure that the proposed project is consistent with the General Plan. Since the proposed project is an allowed land use under the current General Plan land use designation and zoning, the proposed project is consistent with the current land use designation and zoning and is not anticipated to exceed the AQMP assumptions for the project site and is found to be consistent with the AQMP for the second criterion.

Based on the above, the proposed project will not result in an inconsistency with the SCAQMD AQMP. Therefore, a less than significant impact will occur in relation to implementation of the AQMP.

Level of Significance

Less than significant impact.

10.3 Cumulative Net Increase in Non-Attainment Pollution

The proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard. The following section calculates the potential air emissions associated with the construction and operations of the proposed project and compares the emissions to the SCAQMD standards.

Construction Emissions

The construction activities for the proposed project are anticipated to include demolition and grading of both project sites, building construction, paving of the onsite driveways and parking lots, and application of architectural coatings. The construction emissions have been analyzed for both regional and local air quality impacts.

Construction-Related Regional Impacts

The CalEEMod model has been utilized to calculate the construction-related regional emissions from the proposed project and the input parameters utilized in this analysis have been detailed in Section 7.1. The worst-case summer or winter daily construction-related criteria pollutant emissions from the proposed project for each phase of construction activities are shown below in Table K and the CalEEMod daily printouts are shown in Appendix A. Since it is possible that building construction, paving, and architectural coating activities may occur concurrently towards the end of the building construction phase, Table K also shows the combined regional criteria pollutant emissions from year 2022 building construction, paving and architectural coating phases of construction.

Table K – Construction-Related Regional Criteria Pollutant Emissions

Activity	Pollutant Emissions (pounds/day)					
	VOC	NOx	CO	SO ₂	PM10	PM2.5
Demolition¹						
Onsite	1.99	19.70	14.49	0.02	1.86	1.10
Offsite	0.13	2.73	1.13	0.00	0.34	0.01
Total	2.12	22.43	15.62	0.02	2.20	1.11
Grading¹						
Onsite	1.83	20.21	9.76	0.02	3.86	2.36
Offsite	0.06	0.59	0.45	0.00	0.15	0.04
Total	1.89	20.80	10.21	0.00	4.01	2.40
Building Construction (Year 2021)						
Onsite	2.05	16.03	14.56	0.03	0.82	0.78
Offsite	0.17	1.08	1.01	0.00	0.34	0.10
Total	2.22	17.11	15.57	0.03	1.16	0.88
Building Construction (Year 2022)						
Onsite	1.86	14.60	14.35	0.03	0.70	0.67
Offsite	0.12	1.03	0.00	0.00	0.34	0.09
Total	1.98	15.63	14.35	0.03	1.04	0.76
Paving						
Onsite	1.09	9.33	11.68	0.02	0.49	0.45

Activity	Pollutant Emissions (pounds/day)					
	VOC	NOx	CO	SO ₂	PM10	PM2.5
Offsite	0.05	0.03	0.43	0.00	0.04	0.05
Total	1.14	9.36	12.11	0.02	0.53	0.50
Architectural Coating						
Onsite	13.31	1.41	1.81	0.00	0.08	0.08
Offsite	0.02	0.01	0.14	0.00	0.06	0.02
Total	13.33	1.42	1.95	0.00	0.14	0.10
Combined Building Construction (Year 2022), Paving and Architectural Coatings						
Onsite	16.26	25.34	27.84	0.05	1.27	1.20
Offsite	0.36	2.15	1.58	0.00	0.78	0.26
Total	16.62	27.49	29.42	0.05	2.05	1.46
Maximum Daily Construction Emissions	16.62	27.49	29.42	0.05	4.01	2.40
SCQAMD Thresholds	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Notes:

¹ Demolition and Grading based on adherence to fugitive dust suppression requirements from SCAQMD Rule 403.

² Onsite emissions from equipment not operated on public roads.

³ Offsite emissions from vehicles operating on public roads.

Source: CalEEMod Version 2016.3.2.

Table K shows that none of the analyzed criteria pollutants would exceed the regional emissions thresholds during either demolition, grading, or the combined building construction, paving and architectural coatings phases. Therefore, a less than significant regional air quality impact would occur from construction of the proposed project.

Construction-Related Local Impacts

Construction-related air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Air Basin.

The local air quality emissions from construction were analyzed through utilizing the methodology described in *Localized Significance Threshold Methodology* (LST Methodology), prepared by SCAQMD, revised October 2009. The LST Methodology found the primary criteria pollutant emissions of concern are NOx, CO, PM10, and PM2.5. In order to determine if any of these pollutants require a detailed analysis of the local air quality impacts, each phase of construction was screened using the SCAQMD's Mass Rate LST Look-up Tables. The Look-up Tables were developed by the SCAQMD in order to readily determine if the daily onsite emissions of CO, NOx, PM10, and PM2.5 from the proposed project could result in a significant impact to the local air quality.

Table L shows the onsite emissions from the CalEEMod model for the different construction phases and the calculated localized emissions thresholds that have been detailed above in Section 8.2. Since it is possible that building construction, paving, and architectural coating activities may occur concurrently towards the end of the building construction phase, Table L also shows the combined local criteria pollutant emissions from year 2022 building construction, paving and architectural coating phases of construction.

Table L – Construction-Related Local Criteria Pollutant Emissions

Phase	Pollutant Emissions (pounds/day) ¹			
	NOx	CO	PM10	PM2.5
Demolition ²	20.04	14.63	1.90	1.10
Grading ²	20.28	9.82	3.88	2.37
Building Construction (Year 2021)	16.17	14.69	0.86	0.79
Combined Building Construction (Year 2021), Paving and Architectural Coatings	25.61	28.04	1.37	1.23
Maximum Daily Construction Emissions	20.28	14.63	3.88	2.37
SCAQMD Local Construction Thresholds³	115	715	6	4
Exceeds Threshold?	No	No	No	No

Notes:

¹ The Pollutant Emissions include 100% of the On-Site emissions (off-road equipment and fugitive dust) and 1/8 of the Off-Site emissions (on road trucks and worker vehicles), in order to account for the on-road emissions that occur within a ¼ mile of the project site.

² Demolition and Grading phases based on adherence to fugitive dust suppression requirements from SCAQMD Rule 403.

³ The nearest offsite sensitive receptors are homes located 60 feet (18 meters) east of the Fire Station site and 30 feet (9 meters) southwest of the Parking site. According to SCAQMD methodology, all receptors closer than 25 meters are based on the 25 meter threshold.

Source: Calculated from SCAQMD’s Mass Rate Look-up Tables for two acres in Air Monitoring Area 17 Central Orange County.

The data provided in Table L shows that none of the analyzed criteria pollutants would exceed the local emissions thresholds during either demolition, grading, or the combined building construction, paving, and architectural coatings phases. Therefore, a less than significant local air quality impact would occur from construction of the proposed project.

Operational Emissions

The on-going operation of the proposed project would result in a long-term increase in air quality emissions. This increase would be due to emissions from the project-generated vehicle trips, emissions from energy usage, onsite area source emissions created from the on-going use of the proposed project, and from the proposed 125 kilowatt backup diesel generator. The following section provides an analysis of potential long-term air quality impacts due to regional air quality and local air quality impacts with the on-going operations of the proposed project.

Operations-Related Regional Criteria Pollutant Analysis

The operations-related regional criteria air quality impacts created by the proposed project have been analyzed through use of the CalEEMod model and the input parameters utilized in this analysis have been detailed in Section 8.1. The worst-case summer or winter VOC, NOx, CO, SO₂, PM10, and PM2.5 daily emissions created from the proposed project’s long-term operations have been calculated and are summarized below in Table M and the CalEEMod daily emissions printouts are shown in Appendix A.

The data provided in Table M shows that none of the analyzed criteria pollutants would exceed the regional emissions thresholds. Therefore, a less than significant regional air quality impact would occur from operation of the proposed project.

Table M – Operational Regional Criteria Pollutant Emissions

Activity	Pollutant Emissions (pounds/day)					
	VOC	NOx	CO	SO ₂	PM10	PM2.5
Area Sources ¹	0.72	0.00	0.01	0.00	0.00	0.00
Energy Usage ²	0.01	0.07	0.06	0.00	0.01	0.01
Mobile Sources ³	1.71	4.87	8.08	0.01	0.49	0.14
Backup Generator ⁴	0.16	0.44	0.40	0.00	0.02	0.02
Total Emissions	2.60	5.38	8.55	0.01	0.52	0.17
SCQAMD Operational Thresholds	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Notes:

¹ Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.

² Energy usage consist of emissions from natural gas usage.

³ Mobile sources consist of emissions from vehicles and road dust.

⁴ Backup Generator based on a 125 kW (190 Horsepower) diesel generator that has a cycling schedule of 30 minutes per week.

Source: Calculated from CalEEMod Version 2016.3.2 and CAPCOA, 1997.

In *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502 (also referred to as “*Friant Ranch*”), the California Supreme Court held that when an EIR concluded that when a project would have significant impacts to air quality impacts, an EIR should “make a reasonable effort to substantively connect a project’s air quality impacts to likely health consequences.” In order to determine compliance with this Case, the Court developed a multi-part test that includes the following:

- 1) The air quality discussion shall describe the specific health risks created from each criteria pollutant, including diesel particulate matter.

This Analysis details the specific health risks created from each criteria pollutant above in Section 4.1 and specifically in Table B. In addition, the specific health risks created from diesel particulate matter is detailed above in Section 2.2 of this analysis. As such, this analysis meets the part 1 requirements of the *Friant Ranch* Case.

- 2) The analysis shall identify the magnitude of the health risks created from the Project. The Ruling details how to identify the magnitude of the health risks. Specifically, on page 24 of the ruling it states “The Court of Appeal identified several ways in which the EIR could have framed the analysis so as to adequately inform the public and decision makers of possible adverse health effects. The County could have, for example, identified the Project’s impact on the days of nonattainment per year.”

Table M above shows that the primary source of operational air emissions would be created from mobile source emissions that would be generated throughout the Air Basin. As such, any adverse health impacts created from the proposed project should be assessed on a basin-wide level. As indicated above in Table B, the Air Basin has been designated by EPA for the national standards as a non-attainment area for ozone, PM2.5, and partial non-attainment for lead. In addition, PM10 has been designated by the State as non-attainment. It should be noted that VOC and NOx are ozone precursors, as such they have been considered as non-attainment pollutants. According to the 2016 AQMP, in 2016 the total emissions of: VOC was 500 tons per year; NOx was 522 tons per year; SOx was 18 tons per year; and PM2.5 was 66 tons per year. Since the 2016 AQMP did not calculate total PM10 emissions, the total PM10 emissions were obtained from *The California Almanac of Emissions and Air Quality 2013 Edition*, prepared by CARB, for

the year 2020. The project contribution to each criteria pollutant in the South Coast Air Basin is shown in Table N.

Table N – Project’s Contribution to Criteria Pollutants in the South Coast Air Basin

Emissions Source	Pollutant Emissions (pounds/day)					
	VOC	NOx	CO	SO ₂	PM10	PM2.5
Project Emissions ¹	2.60	5.38	8.55	0.01	0.52	0.17
Total Emissions in Air Basin ²	1,000,000	1,044,000	4,246,000	36,000	322,000	132,000
Project’s Percent of Air Emissions	0.0003%	0.0005%	0.0002%	0.00003%	0.0002%	0.0001%
SCQAMD Operational Thresholds	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Notes:

¹ From the project’s total operational emissions shown above in Table M.

² VOC, NOx, CO, SO₂ and PM2.5 from 2016 AQMP and PM10 from the California Almanac of Emissions and Air Quality 2013 Edition.

As shown in Table N, the project would increase criteria pollutant emissions by as much as 0.0005 percent for NOx in the South Coast Air Basin. Due to these nominal increases in the Air Basin-wide criteria pollutant emissions, no increases in days of non-attainment are anticipated to occur from operation of the proposed project. As such, this analysis meets the part 2 requirements of the Friant Ranch Case and therefore no further analysis is required. As such, operation of the project is not anticipated to result in a quantitative increase in premature deaths, asthma in children, days children will miss school, asthma-related emergency room visits, or an increase in acute bronchitis among children due to the criteria pollutants created by the proposed project. Impacts would be less than significant.

Operations-Related Local Air Quality Impacts

Project-related air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Air Basin. The proposed project has been analyzed for the potential local CO emission impacts from the project-generated vehicular trips and from the potential local air quality impacts from on-site operations. The following analyzes the vehicular CO emissions and local impacts from on-site operations.

Local CO Hotspot Impacts from Project-Generated Vehicular Trips

CO is the pollutant of major concern along roadways because the most notable source of CO is motor vehicles. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network and are used as an indicator of potential local air quality impacts. Local air quality impacts can be assessed by comparing future without and with project CO levels to the State and Federal CO standards of 20 ppm over one hour or 9 ppm over eight hours.

At the time of the 1993 Handbook, the Air Basin was designated nonattainment under the CAAQS and NAAQS for CO. With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the Air Basin and in the state have steadily declined. According to the SCAQMD Air Quality Data Tables, in 2007 Central Orange County had maximum CO concentrations of 4.0 ppm for 1 hour and 2.9 ppm for 8-hours and in 2018 Central Orange County had maximum CO concentrations of 2.3 ppm for 1-hour and 1.9 ppm for 8-hours, which represent decreases in CO concentrations of 43 percent and 34 percent, respectively between 2018 and 2007. In 2007, the Air

Basin was designated in attainment for CO under both the CAAQS and NAAQS. SCAQMD conducted a CO hot spot analysis for attainment at the busiest intersections in Los Angeles¹ during the peak morning and afternoon periods and did not predict a violation of CO standards. Since the nearby intersections to the proposed project are much smaller with less traffic than what was analyzed by the SCAQMD and since the CO concentrations are now at least 34 percent lower than when CO was designated in attainment in 2007, no local CO Hotspot are anticipated to be created from the proposed project and no CO Hotspot modeling was performed. Therefore, a less than significant long-term air quality impact is anticipated to local air quality with the on-going use of the proposed project.

Local Criteria Pollutant Impacts from Onsite Operations

Project-related air emissions from onsite sources such as architectural coatings, landscaping equipment, and onsite usage of natural gas appliances may have the potential to create emissions areas that exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Air Basin.

The local air quality emissions from onsite operations were analyzed using the SCAQMD’s Mass Rate LST Look-up Tables and the methodology described in LST Methodology. The Look-up Tables were developed by the SCAQMD in order to readily determine if the daily emissions of CO, NOx, PM10, and PM2.5 from the proposed project could result in a significant impact to the local air quality. Table N shows the onsite emissions from the CalEEMod model that includes area sources, energy usage, and vehicles operating in the immediate vicinity of the project site and the calculated emissions thresholds.

Table O – Operations-Related Local Criteria Pollutant Emissions

Onsite Emission Source	Pollutant Emissions (pounds/day)			
	NOx	CO	PM10	PM2.5
Area Sources	0.00	0.01	0.00	0.00
Energy Usage	0.07	0.06	0.01	0.01
Mobile Sources	0.61	1.01	0.06	0.02
Backup Generator	0.44	0.40	0.02	0.02
Total Emissions	1.12	1.48	0.09	0.05
SCAQMD Local Operational Thresholds¹	115	715	2	1
Exceeds Threshold?	No	No	No	No

Notes:

¹ The nearest offsite sensitive receptors are homes located 60 feet (18 meters) east of the Fire Station site and 30 feet (9 meters) southwest of the Parking site. According to SCAQMD methodology, all receptors closer than 25 meters are based on the 25 meter threshold.

Source: Calculated from SCAQMD’s Mass Rate Look-up Tables for two acres in Air Monitoring Area 17 Central Orange County.

The data provided in Table N shows that the on-going operations of the proposed project would not exceed the local NOx, CO, PM10 and PM2.5 thresholds of significance discussed above in Section 9.2. Therefore, the on-going operations of the proposed project would create a less than significant operations-related impact to local air quality due to onsite emissions and no mitigation would be required.

¹The four intersections analyzed by the SCAQMD were: Long Beach Boulevard and Imperial Highway; Wilshire Boulevard and Veteran Avenue; Sunset Boulevard and Highland Avenue; and La Cienega Boulevard and Century Boulevard. The busiest intersection evaluated (Wilshire and Veteran) had a daily traffic volume of approximately 100,000 vehicles per day with LOS E in the morning and LOS F in the evening peak hour.

Therefore, the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant.

Level of Significance

Less than significant impact.

10.4 Sensitive Receptors

The proposed project would not expose sensitive receptors to substantial pollutant concentrations. The local concentrations of criteria pollutant emissions produced in the nearby vicinity of the proposed project, which may expose sensitive receptors to substantial concentrations have been calculated above in Section 10.3 for both construction and operations, which are discussed separately below. The discussion below also includes an analysis of the potential impacts from toxic air contaminant emissions. The nearest sensitive receptors to the Fire Station site are homes located on the east side of Jameson Street, which are as near as 60 feet east of the Fire Station site. The nearest sensitive receptors to the Parking site are homes located as near as 30 feet southwest of the Parking site.

Construction-Related Sensitive Receptor Impacts

The construction activities for the proposed project are anticipated to include anticipated to include demolition and grading of both project sites, building construction, paving of the onsite driveways and parking lots, and application of architectural coatings. Construction activities may expose sensitive receptors to substantial pollutant concentrations of localized criteria pollutant concentrations and from toxic air contaminant emissions created from onsite construction equipment, which are described below.

Local Criteria Pollutant Impacts from Construction

The local air quality impacts from construction of the proposed project has been analyzed above in Section 10.3 and found that the construction of the proposed project would not exceed the local NO_x, CO, PM₁₀ and PM_{2.5} thresholds of significance discussed above in Section 9.2. Therefore, construction of the proposed project would create a less than significant construction-related impact to local air quality and no mitigation would be required.

Toxic Air Contaminants Impacts from Construction

The greatest potential for toxic air contaminant emissions would be related to diesel particulate matter (DPM) emissions associated with heavy equipment operations during construction of the proposed project. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of “individual cancer risk”. “Individual Cancer Risk” is the likelihood that a person exposed to concentrations of toxic air contaminants over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. It should be noted that the most current cancer risk assessment methodology recommends analyzing a 30 year exposure period for the nearby sensitive receptors (OEHHA, 2015).

Given the relatively limited number of heavy-duty construction equipment, the varying distances that construction equipment would operate to the nearby sensitive receptors, and the short-term construction schedule, the proposed project would not result in a long-term (i.e., 30 or 70 years) substantial source of toxic air contaminant emissions and corresponding individual cancer risk. In addition, California Code of Regulations Title 13, Article 4.8, Chapter 9, Section 2449 regulates emissions from off-road diesel equipment in California. This regulation limits idling of equipment to no more than five minutes, requires

equipment operators to label each piece of equipment and provide annual reports to CARB of their fleet's usage and emissions. This regulation also requires systematic upgrading of the emission Tier level of each fleet, and currently no commercial operator is allowed to purchase Tier 0 or Tier 1 equipment and by January 2023 no commercial operator is allowed to purchase Tier 2 equipment. In addition to the purchase restrictions, equipment operators need to meet fleet average emissions targets that become more stringent each year between years 2014 and 2023. As of January, 2019, 25 percent or more of all contractors' equipment fleets must be Tier 2 or higher. Therefore, no significant short-term toxic air contaminant impacts would occur during construction of the proposed project. As such, construction of the proposed project would result in a less than significant exposure of sensitive receptors to substantial pollutant concentrations.

Operations-Related Sensitive Receptor Impacts

The on-going operations of the proposed project may expose sensitive receptors to substantial pollutant concentrations of local CO emission impacts from the project-generated vehicular trips and from the potential local air quality impacts from onsite operations. The following analyzes the vehicular CO emissions. Local criteria pollutant impacts from onsite operations, and toxic air contaminant impacts.

Local CO Hotspot Impacts from Project-Generated Vehicle Trips

CO is the pollutant of major concern along roadways because the most notable source of CO is motor vehicles. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network and are used as an indicator of potential impacts to sensitive receptors. The analysis provided above in Section 9.3 shows that no local CO Hotspots are anticipated to be created at any nearby intersections from the vehicle traffic generated by the proposed project. Therefore, operation of the proposed project would result in a less than significant exposure of offsite sensitive receptors to substantial pollutant concentrations.

Local Criteria Pollutant Impacts from Onsite Operations

The local air quality impacts from the operation of the proposed project would occur from onsite sources such as architectural coatings, landscaping equipment, and onsite usage of natural gas appliances. The analysis provided above in Section 10.3 found that the operation of the proposed project would not exceed the local NO_x, CO, PM₁₀ and PM_{2.5} thresholds of significance discussed above in Section 9.2. Therefore, the on-going operations of the proposed project would create a less than significant operations-related impact to local air quality due to on-site emissions and no mitigation would be required.

Operations-Related Toxic Air Contaminant Impacts

Particulate matter (PM) from diesel exhaust is the predominant TAC in most areas and according to *The California Almanac of Emissions and Air Quality 2013 Edition*, prepared by CARB, about 80 percent of the outdoor TAC cancer risk is from diesel exhaust. Some chemicals in diesel exhaust, such as benzene and formaldehyde have been listed as carcinogens by State Proposition 65 and the Federal Hazardous Air Pollutants program. Due to the nominal number of diesel truck trips that are anticipated to be generated by the proposed project, a less than significant TAC impact would occur during the on-going operations of the proposed project and no mitigation would be required.

Operation of the Proposed Project would create TAC emissions from operation of a 250 kilowatt (389 horsepower) backup diesel generator equipped with a diesel particulate filter (DPF) that will limit DPM

created from the backup generator. Backup generators typically cycle on for 30 minutes on a weekly basis in order to keep the engine lubricated and ready to use in case of a power outage. The typical cycling of a backup generator would operate for approximately 26 hours per year. SCAQMD Rule 1110.2 exempts emergency standby generators that operate less than 200 hours per year from obtaining an air permit. The SCAQMD has developed the operating hour exemption limits based on levels that were determined to result in the generation of inconsequential emissions from backup generators. As such, the cancer risk created from the backup generator's TAC emissions to the nearby sensitive receptors is anticipated to be negligible. Therefore, through adherence to the backup generator operating time limits detailed in Rule 1110.2, less than significant long-term toxic air contaminant impacts would occur during operation of the Proposed Project.

Therefore, operation of the proposed project would result in a less than significant exposure of sensitive receptors to substantial pollutant concentrations.

Level of Significance

Less than significant impact.

10.5 Odor Emissions

The proposed project would not create objectionable odors affecting a substantial number of people. Individual responses to odors are highly variable and can result in a variety of effects. Generally, the impact of an odor results from a variety of factors such as frequency, duration, offensiveness, location, and sensory perception. The frequency is a measure of how often an individual is exposed to an odor in the ambient environment. The intensity refers to an individual's or group's perception of the odor strength or concentration. The duration of an odor refers to the elapsed time over which an odor is experienced. The offensiveness of the odor is the subjective rating of the pleasantness or unpleasantness of an odor. The location accounts for the type of area in which a potentially affected person lives, works, or visits; the type of activity in which he or she is engaged; and the sensitivity of the impacted receptor.

Sensory perception has four major components: detectability, intensity, character, and hedonic tone. The detection (or threshold) of an odor is based on a panel of responses to the odor. There are two types of thresholds: the odor detection threshold and the recognition threshold. The detection threshold is the lowest concentration of an odor that will elicit a response in a percentage of the people that live and work in the immediate vicinity of the project site and is typically presented as the mean (or 50 percent of the population). The recognition threshold is the minimum concentration that is recognized as having a characteristic odor quality, this is typically represented by recognition by 50 percent of the population. The intensity refers to the perceived strength of the odor. The odor character is what the substance smells like. The hedonic tone is a judgment of the pleasantness or unpleasantness of the odor. The hedonic tone varies in subjective experience, frequency, odor character, odor intensity, and duration. Potential odor impacts have been analyzed separately for construction and operations below.

Construction-Related Odor Impacts

Potential sources that may emit odors during construction activities include the application of coatings such as asphalt pavement, paints and solvents and from emissions from diesel equipment. The objectionable odors that may be produced during the construction process would be temporary and would not likely be noticeable for extended periods of time beyond the project site's boundaries. Due to the transitory nature of construction odors, a less than significant odor impact would occur and no mitigation would be required.

Operations-Related Odor Impacts

Potential sources of odor emission during operation of the Proposed Project would include diesel emissions from the fire trucks and backup generator as well as odors from trash storage areas. All fire trucks that operate on the project site will be required to meet State emissions standards that require the use of diesel particulate filters that would minimize odors created from the fire trucks. The operation of the backup diesel generator would be limited to 200 hours or less per year and would include an exhaust stack with a diesel particulate filter that would limit the exhaust and associated odors created from the generator to negligible levels. Pursuant to City regulations, permanent trash enclosures that protect trash bins from rain as well as limit air circulation would be required for the trash storage areas. Due to the distance of the nearest sensitive receptor from the project site and through compliance with SCAQMD's rules that include Rule 402 (odor regulations) and Rule 1110.2 (backup generator regulations) and the City's trash storage regulations, a less than significant impact related to odors would occur during the on-going operations of the proposed project. Operational-related odor impacts would be less than significant and no mitigation would be required. Therefore, a less than significant odor impact would occur and no mitigation would be required.

Level of Significance

Less than significant impact.

10.6 Energy Consumption

The proposed project would impact energy resources during construction and operation. Energy resources that would be potentially impacted include electricity, natural gas, and petroleum based fuel supplies and distribution systems. This analysis includes a discussion of the potential energy impacts of the proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. The following section calculates the potential energy consumption associated with the construction and operations of the proposed project and provides a determination if any energy utilized by the proposed project is wasteful, inefficient, or unnecessary consumption of energy resources.

Construction Energy

The construction activities for the proposed project are anticipated to include demolition and grading of both project sites, building construction, paving of the onsite driveways and parking lots, and application of architectural coatings. The proposed project would consume energy resources during construction in three (3) general forms:

1. Petroleum-based fuels used to power off-road construction vehicles and equipment on the Project Site, construction worker travel to and from the Project Site, as well as delivery and haul truck trips (e.g. hauling of demolition material to off-site reuse and disposal facilities);
2. Electricity associated with the conveyance of water that would be used during Project construction for dust control (supply and conveyance) and electricity to power any necessary lighting during construction, electronic equipment, or other construction activities necessitating electrical power; and,
3. Energy used in the production of construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Construction-Related Electricity

During construction the proposed project would consume electricity to construct the new structures and infrastructure. Electricity would be supplied to the project site by Southern California Edison (SCE) and would be obtained from the existing electrical lines in the vicinity of the project site. The use of electricity from existing power lines rather than temporary diesel or gasoline powered generators would minimize impacts on energy use. Electricity consumed during project construction would vary throughout the construction period based on the construction activities being performed. Various construction activities include electricity associated with the conveyance of water that would be used during project construction for dust control (supply and conveyance) and electricity to power any necessary lighting during construction, electronic equipment, or other construction activities necessitating electrical power. Such electricity demand would be temporary, nominal, and would cease upon the completion of construction. Overall, construction activities associated with the proposed project would require limited electricity consumption that would not be expected to have an adverse impact on available electricity supplies and infrastructure. Therefore, the use of electricity during project construction would not be wasteful, inefficient, or unnecessary.

Since there are power poles running along the east side of the project site, it is anticipated that only nominal improvements would be required to SCE distribution lines and equipment with development of the proposed project. Where feasible, the new service installations and connections would be scheduled and implemented in a manner that would not result in electrical service interruptions to other properties. Compliance with City guidelines and requirements would ensure that the proposed project fulfills its responsibilities relative to infrastructure installation, coordinates any electrical infrastructure removals or relocations, and limits any impacts associated with construction of the project. Construction of the project's electrical infrastructure is not anticipated to adversely affect the electrical infrastructure serving the surrounding uses or utility system capacity.

Construction-Related Natural Gas

Construction of the proposed project typically would not involve the consumption of natural gas. Natural gas would not be supplied to support construction activities, thus there would be no demand generated by construction. Since the project site is currently developed that currently has natural gas service to the project site, construction of the proposed project would be limited to installation of new natural gas connections within the project site. Development of the proposed project would likely not require extensive infrastructure improvements to serve the project site. Construction-related energy usage impacts associated with the installation of natural gas connections are expected to be confined to trenching in order to place the lines below surface. In addition, prior to ground disturbance, the proposed project would notify and coordinate with SoCalGas to identify the locations and depth of all existing gas lines and avoid disruption of gas service. Therefore, construction-related impacts to natural gas supply and infrastructure would be less than significant.

Construction-Related Petroleum Fuel Use

Petroleum-based fuel usage represents the highest amount of transportation energy potentially consumed during construction, which would be utilized by both off-road equipment operating on the project site and on-road automobiles transporting workers to and from the project site and on-road trucks transporting equipment and supplies to the project site.

The off-road construction equipment fuel usage was calculated through use of the off-road equipment assumptions and fuel use assumptions shown above in Section 8.3, which found that the off-road equipment utilized during construction of the proposed Project would consume 39,727 gallons of fuel. The on-road construction trips fuel usage was calculated through use of the construction vehicle trip assumptions and fuel use assumptions shown above in Section 8.3, which found that the on-road trips generated from construction of the proposed Project would consume 8,064 gallons of fuel. As such, the combined fuel used from off-road construction equipment and on-road construction trips for the proposed Project would result in the consumption of 47,787 gallons of petroleum fuel.

Construction activities associated with the proposed project would be required to adhere to all State and SCAQMD regulations for off-road equipment and on-road trucks, which provide minimum fuel efficiency standards. As such, construction activities for the proposed project would not result in the wasteful, inefficient, and unnecessary consumption of energy resources. Impacts regarding transportation energy would be less than significant. Development of the Project would not result in the need to manufacture construction materials or create new building material facilities specifically to supply the proposed project. It is difficult to measure the energy used in the production of construction materials such as asphalt, steel, and concrete, it is reasonable to assume that the production of building materials such as concrete, steel, etc., would employ all reasonable energy conservation practices in the interest of minimizing the cost of doing business.

Operational Energy

The on-going operation of the proposed project would require the use of energy resources for multiple purposes including, but not limited to, heating/ventilating/air conditioning (HVAC), refrigeration, lighting, appliances, and electronics. Energy would also be consumed during operations related to water usage, solid waste disposal, landscape equipment and vehicle trips.

Operations-Related Electricity

Operation of the proposed project would result in consumption of electricity at the project site. As detailed above in Section 8.3 the proposed project would consume 375,876 kilowatt-hours per year of electricity. It should be noted that, the proposed project would comply with all Federal, State, and City requirements related to the consumption of electricity, that includes CCR Title 24, Part 6 *Building Energy Efficiency Standards* and CCR Title 24, Part 11: *California Green Building Standards*. The CCR Title 24, Part 6 and Part 11 standards require numerous energy efficiency measures to be incorporated into the proposed buildings, including enhanced insulation, use of energy efficient lighting and appliances as well as requiring a variety of other energy-efficiency measures to be incorporated into all of the proposed structures. Therefore, it is anticipated the proposed project will be designed and built to minimize electricity use and that existing and planned electricity capacity and electricity supplies would be sufficient to support the proposed project's electricity demand. Thus, impacts with regard to electrical supply and infrastructure capacity would be less than significant and no mitigation measures would be required.

Operations-Related Natural Gas

Operation of the proposed project would result in increased consumption of natural gas at the project site. As detailed above in Section 8.3 the proposed project would consume 40 MBTU per year of natural gas. It should be noted that, the proposed project would comply with all Federal, State, and City requirements related to the consumption of natural gas, that includes CCR Title 24, Part 6 *Building Energy Efficiency Standards* and CCR Title 24, Part 11: *California Green Building Standards*. The CCR Title 24, Part

6 and Part 11 standards require numerous energy efficiency measures to be incorporated into the proposed structures, including enhanced insulation as well as use of efficient natural gas appliances and HVAC units. Therefore, it is anticipated the proposed project will be designed and built to minimize natural gas use and that existing and planned natural gas capacity and natural gas supplies would be sufficient to support the proposed project’s natural gas demand. Thus, impacts with regard to natural gas supply and infrastructure capacity would be less than significant and no mitigation measures would be required.

Operations-Related Vehicular Petroleum Fuel Usage

Operation of the proposed project would result in increased consumption of petroleum-based fuels related to vehicular travel to and from the project site. As detailed above in Section 8.3 the proposed project would consume 6,305 gallons of petroleum fuel per year from vehicle travel and 385 gallons of diesel per year from the operation of the backup generator. It should be noted that, the proposed project would comply with all Federal, State, and City requirements related to the consumption of transportation energy that includes California Code of Regulations Title 24, Part 11 California Green Building Standards that require the proposed project to provide both long-term and short-term bicycle parking spaces that will promote the use of alternative transportation. Therefore, it is anticipated the proposed project will be designed and built to minimize transportation energy through the promotion of the use of clean air vehicles, including electric-powered vehicles and it is anticipated that existing and planned capacity and supplies of transportation fuels would be sufficient to support the proposed project’s demand. Thus, impacts with regard transportation energy supply and infrastructure capacity would be less than significant and no mitigation measures would be required.

In conclusion, the proposed project would comply with regulatory compliance measures outlined by the State and City related to Air Quality, Greenhouse Gas Emissions (GHG), Transportation/Circulation, and Water Supply. Additionally, the proposed project would be constructed in accordance with all applicable City Building and Fire Codes. Therefore, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. Impacts would be less than significant.

Level of Significance

Less than significant impact.

10.7 Energy Plan Consistency

The proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The applicable energy plan for the proposed project is the City of Orange General Plan, March 2010, that provides an Energy Resources Component. The proposed project’s consistency with the applicable energy-related policies in the General Plan are shown in Table P.

Table P – Proposed Project Compliance with City General Plan Energy Policies

General Plan Energy Policy	Proposed Project Consistency with General Plan Policies
NR Goal 2.0: Protect air, water, and energy resources from pollution and overuse.	Consistent. The proposed project would not overuse air, water, and energy resources.
Policy 2.1: Cooperate with the South Coast Air Quality Management District (SCAQMD) and other regional	Consistent. The proposed project is consistent with the SCAQMD air quality management plan.

General Plan Energy Policy	Proposed Project Consistency with General Plan Policies
agencies to implement and enforce regional air quality management plans.	
Policy 2.2: Support alternative transportation modes, alternative technologies, and bicycle- and pedestrian-friendly neighborhoods to reduce emissions related to vehicular travel.	Consistent. The proposed project has a bus stop on the project site that would promote the use of alternative transportation to the project.
Policy 2.6: Encourage sustainable building and site designs for new construction and renovation projects.	Consistent. The proposed project has taken into account site designs for sustainability.
Policy 2.7: Coordinate with energy suppliers to ensure adequate energy supplies to meet community needs, and to promote energy conservation and public education programs for that purpose.	Not Applicable. This policy is only applicable to the City to work with energy suppliers.
Policy 2.9: Promote City operations as a model for energy efficiency and green building.	Consistent. The proposed project has been designed to meet green building standards.
Policy 2.10: Work toward replacing existing City vehicles with ultra low or zero emission vehicles. At a minimum, new City vehicles shall be low emission vehicles as defined by the California Air Resources Board, except if certain vehicle types are not available in the marketplace. Public safety vehicles are exempted from this requirement.	Not Applicable. This is a City requirement for City vehicles to be ultra low to zero emissions vehicles, which is not a part of the project.
INF Goal 3.0: Ensure adequate maintenance of public rights-of-way to enhance public safety and improve circulation.	Not Applicable. This is a City requirement, however the project does provide adequate rights-of-way.
Policy 3.4: Investigate the feasibility of using energy-efficient street lights to conserve energy.	Not Applicable. This is a City requirement to place energy efficient street lights.
INF Goal 4.0: Ensure adequate provision of electricity, natural gas, telephone and data services and cable television.	Consistent. The proposed project has been designed to ensure adequate capacity of electricity, natural gas, data and cable television can be supplied to the project.
Policy 4.4: Encourage integrated and cost-effective design and technology features within new development to minimize demands on dry utility networks.	Consistent. The proposed project will be constructed using the most current design and technologies for dry utility networks.

Source: City of Orange, 2010.

As shown in Table P, the proposed project would be consistent with all applicable energy-related policies provided in the City’s General Plan. Therefore, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Impacts would be less than significant.

Level of Significance

Less than significant impact.

10.8 Generation of Greenhouse Gas Emissions

The proposed project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. The proposed project would consist of development of the proposed Fire Station No. 1 & Headquarters. The proposed project is anticipated to generate GHG emissions from area sources, energy usage, mobile sources, waste disposal, water usage, backup generator, and construction equipment. The project’s GHG emissions have been calculated with the

CalEEMod model based on the construction and operational parameters detailed above in Section 8.1. A summary of the results is shown below in Table Q and the CalEEMod model run is provided in Appendix C.

Table Q – Project Related Greenhouse Gas Annual Emissions

Category	Greenhouse Gas Emissions (Metric Tons per Year)			
	CO ₂	CH ₄	N ₂ O	CO ₂ e
Area Sources ¹	0.00	0.00	0.00	0.00
Energy Usage ²	134.18	0.01	0.00	134.69
Mobile Sources ³	128.14	0.01	0.00	128.45
Backup Generator ⁴	1.88	0.00	0.00	1.89
Solid Waste ⁵	3.00	0.18	0.00	7.42
Water and Wastewater ⁶	34.25	0.17	0.01	39.73
Construction ⁷	5.05	0.00	0.00	15.12
Total GHG Emissions	306.50	0.37	0.01	327.30
SCAQMD Draft Threshold of Significance				3,000
Exceed Thresholds?				No

Notes:

¹ Area sources consist of GHG emissions from consumer products, architectural coatings, and landscaping equipment.

² Energy usage consists of GHG emissions from electricity and natural gas usage.

³ Mobile sources consist of GHG emissions from vehicles.

⁴ Backup Generator based on a 125 kW (190 Horsepower) diesel generator that has a cycling schedule of 30 minutes per week.

⁵ Waste includes the CO₂ and CH₄ emissions created from the solid waste placed in landfills.

⁶ Water includes GHG emissions from electricity used for transport of water and processing of wastewater.

⁷ Construction emissions amortized over 30 years as recommended in the SCAQMD GHG Working Group on November 19, 2009.

Source: CalEEMod Version 2016.3.2.

The data provided in Table Q shows that the proposed project would create 327.30 MTCO₂e per year. According to the SCAQMD draft threshold of significance detailed above in Section 9.6, a cumulative global climate change impact would occur if the GHG emissions created from the on-going operations would exceed 3,000 MTCO₂e per year. Therefore, a less than significant generation of greenhouse gas emissions would occur from development of the proposed project. Impacts would be less than significant.

Level of Significance

Less than significant impact.

10.9 Greenhouse Gas Plan Consistency

The proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing GHG emissions. The proposed project consists of the development of the proposed Fire Station No. 1 & Headquarters. As detailed above in Section 10.8, the proposed project is anticipated to create 327.30 MTCO₂e per year, which is well below the SCAQMD draft threshold of significance of 3,000 MTCO₂e per year. The SCAQMD developed this threshold through a Working Group, which also developed detailed methodology for evaluating significance under CEQA. At the September 28, 2010 Working Group meeting, the SCAQMD released its most current version of the draft GHG emissions thresholds, which recommends a tiered approach that provides a quantitative annual threshold of 3,000 MTCO₂e for all land use type projects, which was based on substantial evidence supporting the use of the recommended thresholds. Therefore, the proposed project would not conflict

with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

Level of Significance

Less than significant impact.

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APPENDIX A

CalEEMod Model Daily Printouts

Orange Fire Station No. 1 and Headquarters - Orange County, Summer

Orange Fire Station No. 1 and Headquarters Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	27.93	1000sqft	0.81	27,927.00	0
Unrefrigerated Warehouse-No Rail	3.78	1000sqft	0.20	3,780.00	0
Parking Lot	56.00	Space	1.23	22,400.00	0
Parking Lot	26.00	Space	0.51	10,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2022

Utility Company Southern California Edison

CO2 Intensity (lb/MW/hr)	702.44	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006
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1.3 User Entered Comments & Non-Default Data

Orange Fire Station No. 1 and Headquarters - Orange County, Summer

Project Characteristics -

Land Use - HQ Site 1.52 acres and West Parking Lot 1.23 acres

Construction Phase - Construction starting January 2021 and finishing July 2022

Trips and VMT - 6 vendor trucks per day added to Demolition and Grading to account for water truck emission.

Demolition - 1,695 Tons of parking lot debris to be removed from site

Grading -

Construction Off-road Equipment Mitigation - Water 2x per day selected to account for SCAQMD Rule 403 minimum requirements.

Mobile Land Use Mitigation - Improve Pedestrian Network onsite and connecting offsite. 0.01 miles to bus stop OCTA Chapman and Water.

Energy Mitigation - Per 2019 Title 24 requirements a 30% improvement to lighting energy was selected

Water Mitigation - Install low-flow fixtures and water-efficient irrigation

Waste Mitigation - 50% reduction in solid waste selected to account for AB 341

Stationary Sources - Emergency Generators and Fire Pumps - Emergency Backup Generator - 250 kW or 389 Hp, 0.5 hour/day and 26 hour per year

Vehicle Trips - Trip Lengths set to 0.7 mile to account for relocation of existing Fire Station No. 1 and Headquarters

Orange Fire Station No. 1 and Headquarters - Orange County, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	6.00	20.00
tblConstructionPhase	NumDays	220.00	290.00
tblConstructionPhase	NumDays	10.00	30.00
tblConstructionPhase	NumDays	10.00	30.00
tblLandUse	LandUseSquareFeet	27,930.00	27,927.00
tblLandUse	LotAcreage	0.64	0.81
tblLandUse	LotAcreage	0.09	0.20
tblLandUse	LotAcreage	0.23	0.51
tblLandUse	LotAcreage	0.50	1.23
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	26.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblVehicleTrips	CC_TL	8.40	0.70
tblVehicleTrips	CC_TL	8.40	0.70
tblVehicleTrips	CNW_TL	6.90	0.70
tblVehicleTrips	CNW_TL	6.90	0.70
tblVehicleTrips	CW_TL	16.60	0.70
tblVehicleTrips	CW_TL	16.60	0.70

2.0 Emissions Summary

Orange Fire Station No. 1 and Headquarters - Orange County, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

Year	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2021	2.1610	22.4233	15.6267	0.0333	6.7025	1.0497	7.6201	3.4082	0.9799	4.2524	0.0000	3,328.5768	3,328.5768	0.6829	0.0000	3,345.6495
2022	10.3233	15.6278	15.3039	0.0301	0.3385	0.7058	1.0443	0.0914	0.6765	0.7678	0.0000	2,825.2174	2,825.2174	0.5449	0.0000	2,836.9434
Maximum	10.3233	22.4233	15.6267	0.0333	6.7025	1.0497	7.6201	3.4082	0.9799	4.2524	0.0000	3,328.5768	3,328.5768	0.6829	0.0000	3,345.6495

Mitigated Construction

Year	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2021	2.1610	22.4233	15.6267	0.0333	3.0987	1.0497	4.0163	1.5560	0.9799	2.4003	0.0000	3,328.5768	3,328.5768	0.6829	0.0000	3,345.6495
2022	10.3233	15.6278	15.3039	0.0301	0.3385	0.7058	1.0443	0.0914	0.6765	0.7678	0.0000	2,825.2174	2,825.2174	0.5449	0.0000	2,836.9434
Maximum	10.3233	22.4233	15.6267	0.0333	3.0987	1.0497	4.0163	1.5560	0.9799	2.4003	0.0000	3,328.5768	3,328.5768	0.6829	0.0000	3,345.6495

Percent Reduction	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
0.00	0.00	0.00	0.00	0.00	51.18	0.00	41.59	52.92	0.00	36.89	0.00	0.00	0.00	0.00	0.00	0.00

Orange Fire Station No. 1 and Headquarters - Orange County, Summer

**2.2 Overall Operational
Unmitigated Operational**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day															
Area	0.7235	1.1000e-004	0.0116	0.0000	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	0.0249	0.0249	0.0249	7.0000e-005		0.0265
Energy	7.9800e-003	0.0726	0.0609	4.4000e-004	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	87.0615	87.0615	87.0615	1.6700e-003	1.6000e-003	87.5788
Mobile	1.7275	4.9535	7.5024	0.0126	0.6358	0.0149	0.6507	0.1700	0.0138	0.1838	1,295.6187	1,295.6187	1,295.6187	0.1060		1,298.2683
Stationary	0.1559	0.4357	0.3975	7.5000e-004	0.0229	0.0229	0.0229	0.0229	0.0229	0.0229	79.7538	79.7538	79.7538	0.0112		80.0334
Total	2.6149	5.4619	7.9725	0.0138	0.6358	0.0434	0.6791	0.1700	0.0423	0.2123	1,462.4589	1,462.4589	1,462.4589	0.1189	1.6000e-003	1,465.9070

Orange Fire Station No. 1 and Headquarters - Orange County, Summer

**2.2 Overall Operational
Mitigated Operational**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day															
Area	0.7235	1.1000e-004	0.0116	0.0000	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	0.0249	0.0249	0.0249	7.0000e-005		0.0265
Energy	7.9800e-003	0.0726	0.0609	4.4000e-004	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	87.0615	87.0615	87.0615	1.6700e-003	1.6000e-003	87.5788
Mobile	1.7137	4.8736	7.1144	0.0109	0.4719	0.0138	0.4857	0.1262	0.0127	0.1389	1,120.5678	1,120.5678	1,120.5678	0.0997		1,123.0609
Stationary	0.1559	0.4357	0.3975	7.5000e-004	0.0229	0.0229	0.0229	0.0229	0.0229	0.0229	79.7538	79.7538	79.7538	0.0112		80.0334
Total	2.6011	5.3820	7.5845	0.0121	0.4719	0.0422	0.5142	0.1262	0.0412	0.1674	1,287.4080	1,287.4080	1,287.4080	0.1126	1.6000e-003	1,290.6996

ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.53	4.87	12.53	25.77	2.65	24.29	25.77	2.53	21.14	0.00	11.97	11.97	5.26	0.00	11.95

3.0 Construction Detail

Construction Phase

Orange Fire Station No. 1 and Headquarters - Orange County, Summer

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2021	1/28/2021	5	20	
2	Grading	Grading	1/29/2021	2/25/2021	5	20	
3	Building Construction	Building Construction	2/26/2021	4/7/2022	5	290	
4	Paving	Paving	4/8/2022	5/19/2022	5	30	
5	Architectural Coating	Architectural Coating	5/20/2022	6/30/2022	5	30	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 1.74

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 47,561; Non-Residential Outdoor: 15,854; Striped Parking Area: 1,968 (Architectural Coating – sqft)

OffRoad Equipment

Orange Fire Station No. 1 and Headquarters - Orange County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	6.00	168.00	14.70	14.70	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	6.00	0.00	14.70	14.70	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	24.00	11.00	0.00	14.70	14.70	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	14.70	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	14.70	14.70	20.00	LD_Mix	HDT_Mix	HHDT

Orange Fire Station No. 1 and Headquarters - Orange County, Summer

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2021

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Fugitive Dust					1.8136	0.0000	1.8136	0.2746	0.0000	0.2746			0.0000			0.0000
Off-Road	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409		0.9715	0.9715		2,322.717	2,322.717	0.5940		2,337.565
Total	1.9930	19.6966	14.4925	0.0241	1.8136	1.0409	2.8545	0.2746	0.9715	1.2461		2,322.717	2,322.717	0.5940		2,337.565

Orange Fire Station No. 1 and Headquarters - Orange County, Summer

3.2 Demolition - 2021

Unmitigated Construction Off-Site

Category	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0605	2.1354	0.5866	6.3400e-003	0.1463	6.7100e-003	0.1530	0.0400	6.4200e-003	0.0465		707.7990	707.7990	0.0734		709.6336
Vendor	0.0160	0.5629	0.1527	1.4800e-003	0.0383	1.1700e-003	0.0395	0.0110	1.1200e-003	0.0122		161.2755	161.2755	0.0127		161.5917
Worker	0.0469	0.0284	0.3949	1.3700e-003	0.1453	9.4000e-004	0.1463	0.0385	8.7000e-004	0.0394		136.7852	136.7852	2.9300e-003		136.8885
Total	0.1234	2.7267	1.1341	9.1900e-003	0.3299	8.8200e-003	0.3387	0.0896	8.4100e-003	0.0980		1,005.8597	1,005.8597	0.0890		1,008.0837

Mitigated Construction On-Site

Category	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.8161	0.0000	0.8161	0.1236	0.0000	0.1236			0.0000			0.0000
Off-Road	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409	0.9715		0.9715	0.0000	2,322.7171	2,322.7171	0.5940		2,337.5658
Total	1.9930	19.6966	14.4925	0.0241	0.8161	1.0409	1.8570	0.1236	0.9715	1.0950	0.0000	2,322.7171	2,322.7171	0.5940		2,337.5658

Orange Fire Station No. 1 and Headquarters - Orange County, Summer

3.2 Demolition - 2021

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0605	2.1354	0.5866	6.3400e-003	0.1463	6.7100e-003	0.1530	0.0400	6.4200e-003	0.0465	707.7990	707.7990	707.7990	0.0734		709.6336
Vendor	0.0160	0.5629	0.1527	1.4800e-003	0.0383	1.1700e-003	0.0395	0.0110	1.1200e-003	0.0122	161.2755	161.2755	161.2755	0.0127		161.5917
Worker	0.0469	0.0284	0.3949	1.3700e-003	0.1453	9.4000e-004	0.1463	0.0385	8.7000e-004	0.0394	136.7852	136.7852	136.7852	2.9300e-003		136.8885
Total	0.1234	2.7267	1.1341	9.1900e-003	0.3299	8.8200e-003	0.3387	0.0896	8.4100e-003	0.0980	1,005.8597	1,005.8597	1,005.8597	0.0890		1,008.0837

3.3 Grading - 2021

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158	0.8425		0.8425			1,995.6114	0.6454		2,011.7470
Total	1.8271	20.2135	9.7604	0.0206	6.5523	0.9158	7.4681	3.3675	0.8425	4.2100		1,995.6114	1,995.6114	0.6454		2,011.7470

Orange Fire Station No. 1 and Headquarters - Orange County, Summer

3.3 Grading - 2021

Unmitigated Construction Off-Site

Category	lb/day																
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0160	0.5629	0.1527	1.4800e-003	0.0383	1.1700e-003	0.0395	0.0110	1.1200e-003	0.0122	161.2755	161.2755	161.2755	0.0127		161.5917	
Worker	0.0361	0.0218	0.3037	1.0600e-003	0.1118	7.2000e-004	0.1125	0.0296	6.7000e-004	0.0303	105.2194	105.2194	105.2194	2.2500e-003		105.2758	
Total	0.0521	0.5847	0.4564	2.5400e-003	0.1501	1.8900e-003	0.1520	0.0407	1.7900e-003	0.0425	266.4949	266.4949	266.4949	0.0149		266.8674	

Mitigated Construction On-Site

Category	lb/day																
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Fugitive Dust					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000	
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158	0.8425	0.8425	0.8425	0.0000	1,995.6114	1,995.6114	0.6454		2,011.7470	
Total	1.8271	20.2135	9.7604	0.0206	2.9486	0.9158	3.8643	1.5154	0.8425	2.3579	0.0000	1,995.6114	1,995.6114	0.6454		2,011.7470	

Orange Fire Station No. 1 and Headquarters - Orange County, Summer

3.3 Grading - 2021

Mitigated Construction Off-Site

lb/day																	
Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000
Vendor	0.0160	0.5629	0.1527	1.4800e-003	0.0383	1.1700e-003	0.0395	0.0110	1.1200e-003	0.0122	161.2755	161.2755	161.2755	0.0127			161.5917
Worker	0.0361	0.0218	0.3037	1.0600e-003	0.1118	7.2000e-004	0.1125	0.0296	6.7000e-004	0.0303	105.2194	105.2194	105.2194	2.2500e-003			105.2758
Total	0.0521	0.5847	0.4564	2.5400e-003	0.1501	1.8900e-003	0.1520	0.0407	1.7900e-003	0.0425	266.4949	266.4949	266.4949	0.0149			266.8674

3.4 Building Construction - 2021

Unmitigated Construction On-Site

lb/day																	
Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831			2,288.9355	0.4503			2,300.1935
Total	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831			2,288.9355	0.4503			2,300.1935

Orange Fire Station No. 1 and Headquarters - Orange County, Summer

3.4 Building Construction - 2021
Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
lb/day																	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000
Vendor	0.0294	1.0320	0.2799	2.7100e-003	0.0703	2.1400e-003	0.0724	0.0202	2.0500e-003	0.0223	295.6718	295.6718	295.6718	0.0232			296.2514
Worker	0.0866	0.0524	0.7290	2.5300e-003	0.2683	1.7400e-003	0.2700	0.0711	1.6000e-003	0.0727	252.5266	252.5266	252.5266	5.4100e-003			252.6618
Total	0.1160	1.0844	1.0088	5.2400e-003	0.3385	3.8800e-003	0.3424	0.0914	3.6500e-003	0.0950	548.1984	548.1984	548.1984	0.0286			548.9132

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
lb/day																	
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831	0.0000	2,288.9355	2,288.9355	0.4503			2,300.1935
Total	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831	0.0000	2,288.9355	2,288.9355	0.4503			2,300.1935

Orange Fire Station No. 1 and Headquarters - Orange County, Summer

3.4 Building Construction - 2021
Mitigated Construction Off-Site

lb/day																	
Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000
Vendor	0.0294	1.0320	0.2799	2.7100e-003	0.0703	2.1400e-003	0.0724	0.0202	2.0500e-003	0.0223	295.6718	295.6718	295.6718	0.0232			296.2514
Worker	0.0866	0.0524	0.7290	2.5300e-003	0.2683	1.7400e-003	0.2700	0.0711	1.6000e-003	0.0727	252.5266	252.5266	252.5266	5.4100e-003			252.6618
Total	0.1160	1.0844	1.0088	5.2400e-003	0.3385	3.8800e-003	0.3424	0.0914	3.6500e-003	0.0950	548.1984	548.1984	548.1984	0.0286			548.9132

3.4 Building Construction - 2022
Unmitigated Construction On-Site

lb/day																	
Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Off-Road	1.8555	14.6040	14.3533	0.0250	0.7022	0.7022	0.7022	0.6731	0.6731	0.6731	2,289.2813	2,289.2813	2,289.2813	0.4417			2,300.3230
Total	1.8555	14.6040	14.3533	0.0250	0.7022	0.7022	0.7022	0.6731	0.6731	0.6731	2,289.2813	2,289.2813	2,289.2813	0.4417			2,300.3230

Orange Fire Station No. 1 and Headquarters - Orange County, Summer

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

lb/day																	
Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000
Vendor	0.0276	0.9763	0.2702	2.6800e-003	0.0703	1.8600e-003	0.0721	0.0202	1.7800e-003	0.0220	292.7679	292.7679	292.7679	0.0225			293.3293
Worker	0.0819	0.0475	0.6804	2.4400e-003	0.2683	1.7000e-003	0.2700	0.0711	1.5700e-003	0.0727	243.1683	243.1683	243.1683	4.9100e-003			243.2911
Total	0.1095	1.0238	0.9506	5.1200e-003	0.3385	3.5600e-003	0.3421	0.0914	3.3500e-003	0.0947		535.9362	535.9362	0.0274			536.6204

Mitigated Construction On-Site

lb/day																	
Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Off-Road	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731	0.0000	2,289.2813	2,289.2813	0.4417			2,300.3230
Total	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731	0.0000	2,289.2813	2,289.2813	0.4417			2,300.3230

Orange Fire Station No. 1 and Headquarters - Orange County, Summer

3.4 Building Construction - 2022
Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
lb/day																	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000
Vendor	0.0276	0.9763	0.2702	2.6800e-003	0.0703	1.8600e-003	0.0721	0.0202	1.7800e-003	0.0220	292.7679	292.7679	292.7679	0.0225			293.3293
Worker	0.0819	0.0475	0.6804	2.4400e-003	0.2683	1.7000e-003	0.2700	0.0711	1.5700e-003	0.0727	243.1683	243.1683	243.1683	4.9100e-003			243.2911
Total	0.1095	1.0238	0.9506	5.1200e-003	0.3385	3.5600e-003	0.3421	0.0914	3.3500e-003	0.0947		535.9362	535.9362	0.0274			536.6204

3.5 Paving - 2022
Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
lb/day																	
Off-Road	0.9412	9.3322	11.6970	0.0179		0.4879	0.4879		0.4500	0.4500		1,709.6892	1,709.6892	0.5419			1,723.2356
Paving	0.1520					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.0931	9.3322	11.6970	0.0179		0.4879	0.4879		0.4500	0.4500		1,709.6892	1,709.6892	0.5419			1,723.2356

Orange Fire Station No. 1 and Headquarters - Orange County, Summer

3.5 Paving - 2022

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0512	0.0297	0.4252	1.5200e-003	0.1677	1.0600e-003	0.1687	0.0445	9.8000e-004	0.0455	151.9802	151.9802	3.0700e-003	152.0569		
Total	0.0512	0.0297	0.4252	1.5200e-003	0.1677	1.0600e-003	0.1687	0.0445	9.8000e-004	0.0455	151.9802	151.9802	3.0700e-003	152.0569		

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Off-Road	0.9412	9.3322	11.6970	0.0179	0.4879	0.4879	0.4879	0.4500	0.4500	0.4500	0.0000	1,709.6892	1,709.6892	0.5419		1,723.2356
Paving	0.1520				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Total	1.0931	9.3322	11.6970	0.0179	0.4879	0.4879	0.4879	0.4500	0.4500	0.4500	0.0000	1,709.6892	1,709.6892	0.5419		1,723.2356

Orange Fire Station No. 1 and Headquarters - Orange County, Summer

3.5 Paving - 2022

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
lb/day																	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000
Worker	0.0512	0.0297	0.4252	1.5200e-003	0.1677	1.0600e-003	0.1687	0.0445	9.8000e-004	0.0455		151.9802	151.9802	3.0700e-003			152.0569
Total	0.0512	0.0297	0.4252	1.5200e-003	0.1677	1.0600e-003	0.1687	0.0445	9.8000e-004	0.0455		151.9802	151.9802	3.0700e-003			152.0569

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
lb/day																	
Archit. Coating	10.1017					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183			281.9062
Total	10.3062	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183			281.9062

Orange Fire Station No. 1 and Headquarters - Orange County, Summer

3.6 Architectural Coating - 2022
Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Worker	0.0171	9.8900e-003	0.1417	5.1000e-004	0.0559	3.5000e-004	0.0562	0.0148	3.3000e-004	0.0152	50.6601	50.6601	50.6601	1.0200e-003		50.6856
Total	0.0171	9.8900e-003	0.1417	5.1000e-004	0.0559	3.5000e-004	0.0562	0.0148	3.3000e-004	0.0152	50.6601	50.6601	50.6601	1.0200e-003		50.6856

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Archit. Coating	10.1017					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	10.3062	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062

Orange Fire Station No. 1 and Headquarters - Orange County, Summer

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0171	9.8900e-003	0.1417	5.1000e-004	0.0559	3.5000e-004	0.0562	0.0148	3.3000e-004	0.0152	50.6601	50.6601	50.6601	1.0200e-003		50.6856
Total	0.0171	9.8900e-003	0.1417	5.1000e-004	0.0559	3.5000e-004	0.0562	0.0148	3.3000e-004	0.0152	50.6601	50.6601	50.6601	1.0200e-003		50.6856

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

Orange Fire Station No. 1 and Headquarters - Orange County, Summer

Category	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated	1.7137	4.8736	7.1144	0.0109	0.4719	0.0138	0.4857	0.1262	0.0127	0.1389	1,120.5678	1,120.5678	1,120.5678	0.0997		1,123.0609
Unmitigated	1.7275	4.9535	7.5024	0.0126	0.6358	0.0149	0.6507	0.1700	0.0138	0.1838	1,295.6187	1,295.6187	1,295.6187	0.1060		1,298.2683

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT		
Government Office Building	1,925.21	0.00	0.00	212,987	158,102		
Parking Lot	0.00	0.00	0.00				
Parking Lot	0.00	0.00	0.00				
Unrefrigerated Warehouse-No Rail	6.35	6.35	6.35	1,516	1,125		
Total	1,931.57	6.35	6.35	214,502	159,227		

4.3 Trip Type Information

Land Use	Miles				Trip %				Trip Purpose %			
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Government Office Building	0.70	0.70	0.70	33.00	62.00	5.00				50	34	16
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00				0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00				0	0	0
Unrefrigerated Warehouse-No	0.70	0.70	0.70	59.00	0.00	41.00				92	5	3

4.4 Fleet Mix

Orange Fire Station No. 1 and Headquarters - Orange County, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Government Office Building	0.561378	0.043284	0.209473	0.111826	0.015545	0.005795	0.025829	0.017125	0.001747	0.001542	0.004926	0.000594	0.000934
Parking Lot	0.561378	0.043284	0.209473	0.111826	0.015545	0.005795	0.025829	0.017125	0.001747	0.001542	0.004926	0.000594	0.000934
Unrefrigerated Warehouse-No Rail	0.561378	0.043284	0.209473	0.111826	0.015545	0.005795	0.025829	0.017125	0.001747	0.001542	0.004926	0.000594	0.000934

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
NaturalGas Mitigated	7.9800e-003	0.0726	0.0609	4.4000e-004	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	87.0615	87.0615	87.0615	1.6700e-003	1.6000e-003	87.5788
NaturalGas Unmitigated	7.9800e-003	0.0726	0.0609	4.4000e-004	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	87.0615	87.0615	87.0615	1.6700e-003	1.6000e-003	87.5788

Orange Fire Station No. 1 and Headquarters - Orange County, Summer

5.2 Energy by Land Use - Natural Gas

Unmitigated

Land Use	Natural Gas Use kBTU/yr	lb/day											CO ₂ e				
		ROG	NOx	CO	SO ₂	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO ₂		NBio- CO ₂	Total CO ₂	CH ₄	N ₂ O
Government Office Building	699.323	7.5400e-003	0.0686	0.0576	4.1000e-004	5.2100e-003	5.2100e-003	5.2100e-003	5.2100e-003	5.2100e-003	5.2100e-003	0.0000	0.0000	82.2733	1.5800e-003	1.5100e-003	82.7622
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	40.6997	4.4000e-004	3.9900e-003	3.3500e-003	2.0000e-005	3.0000e-004	4.7882	4.7882	9.0000e-005	9.0000e-005	4.8167						
Total		7.9800e-003	0.0726	0.0609	4.3000e-004	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	0.0000	0.0000	87.0615	1.6700e-003	1.6000e-003	87.5788

Mitigated

Land Use	Natural Gas Use kBTU/yr	lb/day											CO ₂ e				
		ROG	NOx	CO	SO ₂	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO ₂		NBio- CO ₂	Total CO ₂	CH ₄	N ₂ O
Government Office Building	699.323	7.5400e-003	0.0686	0.0576	4.1000e-004	5.2100e-003	5.2100e-003	5.2100e-003	5.2100e-003	5.2100e-003	5.2100e-003	0.0000	0.0000	82.2733	1.5800e-003	1.5100e-003	82.7622
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	40.6997	4.4000e-004	3.9900e-003	3.3500e-003	2.0000e-005	3.0000e-004	4.7882	4.7882	9.0000e-005	9.0000e-005	4.8167						
Total		7.9800e-003	0.0726	0.0609	4.3000e-004	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	0.0000	0.0000	87.0615	1.6700e-003	1.6000e-003	87.5788

Orange Fire Station No. 1 and Headquarters - Orange County, Summer

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day															
Mitigated	0.7235	1.1000e-004	0.0116	0.0000	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	0.0249	0.0249	0.0249	7.0000e-005		0.0265
Unmitigated	0.7235	1.1000e-004	0.0116	0.0000	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	0.0249	0.0249	0.0249	7.0000e-005		0.0265

Orange Fire Station No. 1 and Headquarters - Orange County, Summer

6.2 Area by SubCategory

Unmitigated

SubCategory	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Architectural Coating	0.0830				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6394				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Landscaping	1.0800e-003	1.1000e-004	0.0116	0.0000	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	0.0249	0.0249	0.0249	7.0000e-005		0.0265
Total	0.7235	1.1000e-004	0.0116	0.0000	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	0.0249	0.0249	0.0249	7.0000e-005		0.0265

Mitigated

SubCategory	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Architectural Coating	0.0830				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6394				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Landscaping	1.0800e-003	1.1000e-004	0.0116	0.0000	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	0.0249	0.0249	0.0249	7.0000e-005		0.0265
Total	0.7235	1.1000e-004	0.0116	0.0000	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	0.0249	0.0249	0.0249	7.0000e-005		0.0265

7.0 Water Detail

Orange Fire Station No. 1 and Headquarters - Orange County, Summer

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.5	26	190	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
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Orange Fire Station No. 1 and Headquarters - Orange County, Summer

10.1 Stationary Sources

Unmitigated/Mitigated

Equipment Type	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day															
Emergency Generator - Diesel (175 - 300 HP)	0.1559	0.4357	0.3975	7.5000e-004	0.0229	0.0229	0.0229	0.0229	0.0229	0.0229			79.7538	0.0112		80.0334
Total	0.1559	0.4357	0.3975	7.5000e-004	0.0229	0.0229	0.0229	0.0229	0.0229	0.0229			79.7538	0.0112		80.0334

11.0 Vegetation

Orange Fire Station No. 1 and Headquarters - Orange County, Winter

Orange Fire Station No. 1 and Headquarters
Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	27.93	1000sqft	0.81	27,927.00	0
Unrefrigerated Warehouse-No Rail	3.78	1000sqft	0.20	3,780.00	0
Parking Lot	56.00	Space	1.23	22,400.00	0
Parking Lot	26.00	Space	0.51	10,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2022

Utility Company Southern California Edison

CO2 Intensity (lb/MW/hr)	702.44	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006
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1.3 User Entered Comments & Non-Default Data

Orange Fire Station No. 1 and Headquarters - Orange County, Winter

Project Characteristics -

Land Use - HQ Site 1.52 acres and West Parking Lot 1.23 acres

Construction Phase - Construction starting January 2021 and finishing July 2022

Trips and VMT - 6 vendor trucks per day added to Demolition and Grading to account for water truck emission.

Demolition - 1,695 Tons of parking lot debris to be removed from site

Grading -

Construction Off-road Equipment Mitigation - Water 2x per day selected to account for SCAQMD Rule 403 minimum requirements.

Mobile Land Use Mitigation - Improve Pedestrian Network onsite and connecting offsite. 0.01 miles to bus stop OCTA Chapman and Water.

Energy Mitigation - Per 2019 Title 24 requirements a 30% improvement to lighting energy was selected

Water Mitigation - Install low-flow fixtures and water-efficient irrigation

Waste Mitigation - 50% reduction in solid waste selected to account for AB 341

Stationary Sources - Emergency Generators and Fire Pumps - Emergency Backup Generator - 250 kW or 389 Hp, 0.5 hour/day and 26 hour per year

Vehicle Trips - Trip Lengths set to 0.7 mile to account for relocation of existing Fire Station No. 1 and Headquarters

Orange Fire Station No. 1 and Headquarters - Orange County, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	6.00	20.00
tblConstructionPhase	NumDays	220.00	290.00
tblConstructionPhase	NumDays	10.00	30.00
tblConstructionPhase	NumDays	10.00	30.00
tblLandUse	LandUseSquareFeet	27,930.00	27,927.00
tblLandUse	LotAcreage	0.64	0.81
tblLandUse	LotAcreage	0.09	0.20
tblLandUse	LotAcreage	0.23	0.51
tblLandUse	LotAcreage	0.50	1.23
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	26.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblVehicleTrips	CC_TL	8.40	0.70
tblVehicleTrips	CC_TL	8.40	0.70
tblVehicleTrips	CNW_TL	6.90	0.70
tblVehicleTrips	CNW_TL	6.90	0.70
tblVehicleTrips	CW_TL	16.60	0.70
tblVehicleTrips	CW_TL	16.60	0.70

2.0 Emissions Summary

Orange Fire Station No. 1 and Headquarters - Orange County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

Year	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2021	2.1739	22.4500	15.6402	0.0331	6.7025	1.0499	7.6201	3.4082	0.9800	4.2525	0.0000	3,306.562 ₉	3,306.562 ₉	0.6850	0.0000	3,323.688 ₂
2022	10.3256	15.6295	15.2761	0.0300	0.3385	0.7058	1.0444	0.0914	0.6765	0.7679	0.0000	2,804.984 ₄	2,804.984 ₄	0.5448	0.0000	2,816.730 ₀
Maximum	10.3256	22.4500	15.6402	0.0331	6.7025	1.0499	7.6201	3.4082	0.9800	4.2525	0.0000	3,306.562₉	3,306.562₉	0.6850	0.0000	3,323.688₂

Mitigated Construction

Year	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2021	2.1739	22.4500	15.6402	0.0331	3.0987	1.0499	4.0164	1.5560	0.9800	2.4004	0.0000	3,306.562 ₉	3,306.562 ₉	0.6850	0.0000	3,323.688 ₂
2022	10.3256	15.6295	15.2761	0.0300	0.3385	0.7058	1.0444	0.0914	0.6765	0.7679	0.0000	2,804.984 ₄	2,804.984 ₄	0.5448	0.0000	2,816.730 ₀
Maximum	10.3256	22.4500	15.6402	0.0331	3.0987	1.0499	4.0164	1.5560	0.9800	2.4004	0.0000	3,306.562₉	3,306.562₉	0.6850	0.0000	3,323.688₂

Percent Reduction	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
0.00	0.00	0.00	0.00	0.00	51.18	0.00	41.59	52.92	0.00	36.89	0.00	0.00	0.00	0.00	0.00	0.00

Orange Fire Station No. 1 and Headquarters - Orange County, Winter

**2.2 Overall Operational
Unmitigated Operational**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Area	0.7235	1.1000e-004	0.0116	0.0000	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	0.0249	0.0249	0.0249	7.0000e-005		0.0265
Energy	7.9800e-003	0.0726	0.0609	4.4000e-004	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	87.0615	87.0615	87.0615	1.6700e-003	1.6000e-003	87.5788
Mobile	1.7009	4.9029	8.4387	0.0119	0.6358	0.0154	0.6511	0.1700	0.0142	0.1842	1,221.9167	1,221.9167	1,221.9167	0.1155		1,224.8038
Stationary	0.1559	0.4357	0.3975	7.5000e-004	0.0229	0.0229	0.0229	0.0229	0.0229	0.0229	79.7538	79.7538	79.7538	0.0112		80.0334
Total	2.5863	5.4113	8.9088	0.0131	0.6358	0.0438	0.6796	0.1700	0.0427	0.2127	1,388.7569	1,388.7569	1,388.7569	0.1284	1.6000e-003	1,392.4425

Orange Fire Station No. 1 and Headquarters - Orange County, Winter

**2.2 Overall Operational
Mitigated Operational**

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day															
Area	0.7235	1.1000e-004	0.0116	0.0000	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	0.0249	0.0249	0.0249	7.0000e-005		0.0265
Energy	7.9800e-003	0.0726	0.0609	4.4000e-004	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	87.0615	87.0615	87.0615	1.6700e-003	1.6000e-003	87.5788
Mobile	1.6873	4.8183	8.0845	0.0103	0.4719	0.0142	0.4861	0.1262	0.0131	0.1393	1,054.3799	1,054.3799	1,054.3799	0.1094		1,057.1142
Stationary	0.1559	0.4357	0.3975	7.5000e-004	0.0229	0.0229	0.0229	0.0229	0.0229	0.0229	79.7538	79.7538	79.7538	0.0112		80.0334
Total	2.5747	5.3267	8.5546	0.0115	0.4719	0.0427	0.5146	0.1262	0.0416	0.1678	1,221.2201	1,221.2201	1,221.2201	0.1223	1.6000e-003	1,224.7529

Percent Reduction	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	0.52	1.56	3.98	12.57	25.77	2.65	24.28	25.77	2.53	21.10	0.00	12.06	12.06	4.76	0.00	12.04

3.0 Construction Detail

Construction Phase

Orange Fire Station No. 1 and Headquarters - Orange County, Winter

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2021	1/28/2021	5	20	
2	Grading	Grading	1/29/2021	2/25/2021	5	20	
3	Building Construction	Building Construction	2/26/2021	4/7/2022	5	290	
4	Paving	Paving	4/8/2022	5/19/2022	5	30	
5	Architectural Coating	Architectural Coating	5/20/2022	6/30/2022	5	30	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 1.74

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 47,561; Non-Residential Outdoor: 15,854; Striped Parking Area: 1,968 (Architectural Coating – sqft)

OffRoad Equipment

Orange Fire Station No. 1 and Headquarters - Orange County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	6.00	168.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	24.00	11.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Orange Fire Station No. 1 and Headquarters - Orange County, Winter

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2021

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day															
Fugitive Dust					1.8136	0.0000	1.8136	0.2746	0.0000	0.2746			0.0000			0.0000
Off-Road	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409	0.9715	0.9715	0.9715		2,322.717	2,322.717	0.5940		2,337.565
Total	1.9930	19.6966	14.4925	0.0241	1.8136	1.0409	2.8545	0.2746	0.9715	1.2461		2,322.717	2,322.717	0.5940		2,337.565

Orange Fire Station No. 1 and Headquarters - Orange County, Winter

3.2 Demolition - 2021

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0620	2.1606	0.6158	6.2400e-003	0.1463	6.8300e-003	0.1531	0.0400	6.5400e-003	0.0466		697.0743	697.0743	0.0750		698.9499
Vendor	0.0168	0.5616	0.1675	1.4400e-003	0.0383	1.2100e-003	0.0396	0.0110	1.1600e-003	0.0122		157.3134	157.3134	0.0133		157.6450
Worker	0.0531	0.0312	0.3644	1.3000e-003	0.1453	9.4000e-004	0.1463	0.0385	8.7000e-004	0.0394		129.4582	129.4582	2.7700e-003		129.5275
Total	0.1319	2.7534	1.1477	8.9800e-003	0.3299	8.9800e-003	0.3389	0.0896	8.5700e-003	0.0982		983.8459	983.8459	0.0911		986.1224

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Fugitive Dust					0.8161	0.0000	0.8161	0.1236	0.0000	0.1236			0.0000			0.0000
Off-Road	1.9930	19.6966	14.4925	0.0241		1.0409	1.0409	0.9715	0.9715	0.9715	0.0000	2,322.717	2,322.717	0.5940		2,337.5658
Total	1.9930	19.6966	14.4925	0.0241	0.8161	1.0409	1.8570	0.1236	0.9715	1.0950	0.0000	2,322.717	2,322.717	0.5940		2,337.5658

Orange Fire Station No. 1 and Headquarters - Orange County, Winter

3.2 Demolition - 2021

Mitigated Construction Off-Site

Category	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0620	2.1606	0.6158	6.2400e-003	0.1463	6.8300e-003	0.1531	0.0400	6.5400e-003	0.0466		697.0743	697.0743	0.0750		698.9499
Vendor	0.0168	0.5616	0.1675	1.4400e-003	0.0383	1.2100e-003	0.0396	0.0110	1.1600e-003	0.0122		157.3134	157.3134	0.0133		157.6450
Worker	0.0531	0.0312	0.3644	1.3000e-003	0.1453	9.4000e-004	0.1463	0.0385	8.7000e-004	0.0394		129.4582	129.4582	2.7700e-003		129.5275
Total	0.1319	2.7534	1.1477	8.9800e-003	0.3299	8.9800e-003	0.3389	0.0896	8.5700e-003	0.0982		983.8459	983.8459	0.0911		986.1224

3.3 Grading - 2021

Unmitigated Construction On-Site

Category	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158	0.8425	0.8425	0.8425		1,995.6114	1,995.6114	0.6454		2,011.7470
Total	1.8271	20.2135	9.7604	0.0206	6.5523	0.9158	7.4681	3.3675	0.8425	4.2100		1,995.6114	1,995.6114	0.6454		2,011.7470

Orange Fire Station No. 1 and Headquarters - Orange County, Winter

3.3 Grading - 2021

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Vendor	0.0168	0.5616	0.1675	1.4400e-003	0.0383	1.2100e-003	0.0396	0.0110	1.1600e-003	0.0122		157.3134	157.3134	0.0133		157.6450
Worker	0.0409	0.0240	0.2803	1.0000e-003	0.1118	7.2000e-004	0.1125	0.0296	6.7000e-004	0.0303		99.5832	99.5832	2.1300e-003		99.6365
Total	0.0577	0.5856	0.4478	2.4400e-003	0.1501	1.9300e-003	0.1521	0.0407	1.8300e-003	0.0425		256.8966	256.8966	0.0154		257.2815

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Fugitive Dust					2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158	0.8425	0.8425	0.8425	0.0000	1,995.6114*	1,995.6114	0.6454		2,011.7470
Total	1.8271	20.2135	9.7604	0.0206	2.9486	0.9158	3.8643	1.5154	0.8425	2.3579	0.0000	1,995.6114	1,995.6114	0.6454		2,011.7470

Orange Fire Station No. 1 and Headquarters - Orange County, Winter

3.3 Grading - 2021

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
lb/day																	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000
Vendor	0.0168	0.5616	0.1675	1.4400e-003	0.0383	1.2100e-003	0.0396	0.0110	1.1600e-003	0.0122	157.3134	157.3134	157.3134	0.0133			157.6450
Worker	0.0409	0.0240	0.2803	1.0000e-003	0.1118	7.2000e-004	0.1125	0.0296	6.7000e-004	0.0303	99.5832	99.5832	99.5832	2.1300e-003			99.6365
Total	0.0577	0.5856	0.4478	2.4400e-003	0.1501	1.9300e-003	0.1521	0.0407	1.8300e-003	0.0425		256.8966	256.8966	0.0154			257.2815

3.4 Building Construction - 2021

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
lb/day																	
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173	0.7831	0.7831	0.7831		2,288.9355	2,288.9355	0.4503			2,300.1935
Total	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173	0.7831	0.7831	0.7831		2,288.9355	2,288.9355	0.4503			2,300.1935

Orange Fire Station No. 1 and Headquarters - Orange County, Winter

3.4 Building Construction - 2021
Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Vendor	0.0308	1.0295	0.3070	2.6500e-003	0.0703	2.2200e-003	0.0725	0.0202	2.1300e-003	0.0224	288.4079	288.4079	288.4079	0.0243		289.0159
Worker	0.0981	0.0576	0.6726	2.4000e-003	0.2683	1.7400e-003	0.2700	0.0711	1.6000e-003	0.0727	238.9997	238.9997	238.9997	5.1200e-003		239.1277
Total	0.1289	1.0871	0.9797	5.0500e-003	0.3385	3.9600e-003	0.3425	0.0914	3.7300e-003	0.0951	527.4076	527.4076	527.4076	0.0294		528.1435

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831	0.0000	2,288.9355	2,288.9355	0.4503		2,300.1935
Total	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831	0.0000	2,288.9355	2,288.9355	0.4503		2,300.1935

Orange Fire Station No. 1 and Headquarters - Orange County, Winter

3.4 Building Construction - 2021
Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Vendor	0.0308	1.0295	0.3070	2.6500e-003	0.0703	2.2200e-003	0.0725	0.0202	2.1300e-003	0.0224	288.4079	288.4079	288.4079	0.0243		289.0159
Worker	0.0981	0.0576	0.6726	2.4000e-003	0.2683	1.7400e-003	0.2700	0.0711	1.6000e-003	0.0727	238.9997	238.9997	238.9997	5.1200e-003		239.1277
Total	0.1289	1.0871	0.9797	5.0500e-003	0.3385	3.9600e-003	0.3425	0.0914	3.7300e-003	0.0951	527.4076	527.4076	527.4076	0.0294		528.1435

3.4 Building Construction - 2022
Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Off-Road	1.8555	14.6040	14.3533	0.0250	0.7022	0.7022	0.7022	0.6731	0.6731	0.6731	2,289,281	3	2,289,281	0.4417		2,300.323
Total	1.8555	14.6040	14.3533	0.0250	0.7022	0.7022	0.7022	0.6731	0.6731	0.6731	2,289,281	3	2,289,281	0.4417		2,300.323

Orange Fire Station No. 1 and Headquarters - Orange County, Winter

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

lb/day																	
Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000
Vendor	0.0290	0.9733	0.2961	2.6200e-003	0.0703	1.9400e-003	0.0722	0.0202	1.8500e-003	0.0221	285.5482	285.5482	285.5482	0.0235			286.1360
Worker	0.0929	0.0522	0.6268	2.3100e-003	0.2683	1.7000e-003	0.2700	0.0711	1.5700e-003	0.0727	230.1549	230.1549	230.1549	4.6400e-003			230.2710
Total	0.1219	1.0255	0.9229	4.9300e-003	0.3385	3.6400e-003	0.3422	0.0914	3.4200e-003	0.0948	515.7031	515.7031	515.7031	0.0282			516.4070

Mitigated Construction On-Site

lb/day																	
Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Off-Road	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731	0.0000	2,289.2813	2,289.2813	0.4417			2,300.3230
Total	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731	0.0000	2,289.2813	2,289.2813	0.4417			2,300.3230

Orange Fire Station No. 1 and Headquarters - Orange County, Winter

3.4 Building Construction - 2022
Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Vendor	0.0290	0.9733	0.2961	2.6200e-003	0.0703	1.9400e-003	0.0722	0.0202	1.8500e-003	0.0221	285.5482	285.5482	285.5482	0.0235		286.1360
Worker	0.0929	0.0522	0.6268	2.3100e-003	0.2683	1.7000e-003	0.2700	0.0711	1.5700e-003	0.0727	230.1549	230.1549	230.1549	4.6400e-003		230.2710
Total	0.1219	1.0255	0.9229	4.9300e-003	0.3385	3.6400e-003	0.3422	0.0914	3.4200e-003	0.0948		515.7031	515.7031	0.0282		516.4070

3.5 Paving - 2022
Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Off-Road	0.9412	9.3322	11.6970	0.0179		0.4879	0.4879		0.4500	0.4500		1,709.6892	1,709.6892	0.5419		1,723.2356
Paving	0.1520					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0931	9.3322	11.6970	0.0179		0.4879	0.4879		0.4500	0.4500		1,709.6892	1,709.6892	0.5419		1,723.2356

Orange Fire Station No. 1 and Headquarters - Orange County, Winter

3.5 Paving - 2022

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0581	0.0326	0.3918	1.4400e-003	0.1677	1.0600e-003	0.1687	0.0445	9.8000e-004	0.0455	143.8468	143.8468	2.9000e-003	143.8468	143.9194	143.9194
Total	0.0581	0.0326	0.3918	1.4400e-003	0.1677	1.0600e-003	0.1687	0.0445	9.8000e-004	0.0455	143.8468	143.8468	2.9000e-003	143.8468	143.9194	143.9194

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Off-Road	0.9412	9.3322	11.6970	0.0179	0.4879	0.4879	0.4879	0.4500	0.4500	0.4500	0.0000	1,709.6892	1,709.6892	0.5419	0.5419	1,723.2356
Paving	0.1520				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.0931	9.3322	11.6970	0.0179	0.4879	0.4879	0.4879	0.4500	0.4500	0.4500	0.0000	1,709.6892	1,709.6892	0.5419	0.5419	1,723.2356

Orange Fire Station No. 1 and Headquarters - Orange County, Winter

3.5 Paving - 2022

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0581	0.0326	0.3918	1.4400e-003	0.1677	1.0600e-003	0.1687	0.0445	9.8000e-004	0.0455	143.8468	143.8468	143.8468	2.9000e-003	143.9194	143.9194
Total	0.0581	0.0326	0.3918	1.4400e-003	0.1677	1.0600e-003	0.1687	0.0445	9.8000e-004	0.0455	143.8468	143.8468	143.8468	2.9000e-003	143.9194	143.9194

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Archit. Coating	10.1017					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003	0.0817	0.0817	0.0817	0.0817	0.0817	0.0817	281.4481	281.4481	281.4481	0.0183		281.9062
Total	10.3062	1.4085	1.8136	2.9700e-003	0.0817	0.0817	0.0817	0.0817	0.0817	0.0817	281.4481	281.4481	281.4481	0.0183		281.9062

Orange Fire Station No. 1 and Headquarters - Orange County, Winter

3.6 Architectural Coating - 2022
Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
lb/day																	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000
Worker	0.0194	0.0109	0.1306	4.8000e-004	0.0559	3.5000e-004	0.0562	0.0148	3.3000e-004	0.0152	47.9489	47.9489	47.9489	9.7000e-004			47.9731
Total	0.0194	0.0109	0.1306	4.8000e-004	0.0559	3.5000e-004	0.0562	0.0148	3.3000e-004	0.0152	47.9489	47.9489	47.9489	9.7000e-004			47.9731

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
lb/day																	
Archit. Coating	10.1017					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183			281.9062
Total	10.3062	1.4085	1.8136	2.9700e-003	0.0817	0.0817	0.0817	0.0817	0.0817	0.0817	0.0000	281.4481	281.4481	0.0183			281.9062

Orange Fire Station No. 1 and Headquarters - Orange County, Winter

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
	lb/day																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0194	0.0109	0.1306	4.8000e-004	0.0559	3.5000e-004	0.0562	0.0148	3.3000e-004	0.0152	47.9489	47.9489	9.7000e-004	9.7000e-004		47.9731	47.9731
Total	0.0194	0.0109	0.1306	4.8000e-004	0.0559	3.5000e-004	0.0562	0.0148	3.3000e-004	0.0152	47.9489	47.9489	9.7000e-004	9.7000e-004		47.9731	47.9731

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

- Increase Transit Accessibility
- Improve Pedestrian Network

Orange Fire Station No. 1 and Headquarters - Orange County, Winter

Category	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated	1.6873	4.8183	8.0845	0.0103	0.4719	0.0142	0.4861	0.1262	0.0131	0.1393	1,054,379	9	1,054,379	0.1094		1,057.1142
Unmitigated	1.7009	4.9029	8.4387	0.0119	0.6358	0.0154	0.6511	0.1700	0.0142	0.1842	1,221,916	7	1,221,916	0.1155		1,224.8038

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT		
Government Office Building	1,925.21	0.00	0.00	212,987	158,102		
Parking Lot	0.00	0.00	0.00				
Parking Lot	0.00	0.00	0.00				
Unrefrigerated Warehouse-No Rail	6.35	6.35	6.35	1,516	1,125		
Total	1,931.57	6.35	6.35	214,502	159,227		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Government Office Building	0.70	0.70	0.70	33.00	62.00	5.00	50	34	16
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.70	0.70	0.70	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Orange Fire Station No. 1 and Headquarters - Orange County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Government Office Building	0.561378	0.043284	0.209473	0.111826	0.015545	0.005795	0.025829	0.017125	0.001747	0.001542	0.004926	0.000594	0.000934
Parking Lot	0.561378	0.043284	0.209473	0.111826	0.015545	0.005795	0.025829	0.017125	0.001747	0.001542	0.004926	0.000594	0.000934
Unrefrigerated Warehouse-No Rail	0.561378	0.043284	0.209473	0.111826	0.015545	0.005795	0.025829	0.017125	0.001747	0.001542	0.004926	0.000594	0.000934

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
NaturalGas Mitigated	7.9800e-003	0.0726	0.0609	4.4000e-004	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	87.0615	87.0615	87.0615	1.6700e-003	1.6000e-003	87.5788
NaturalGas Unmitigated	7.9800e-003	0.0726	0.0609	4.4000e-004	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	87.0615	87.0615	87.0615	1.6700e-003	1.6000e-003	87.5788

Orange Fire Station No. 1 and Headquarters - Orange County, Winter

5.2 Energy by Land Use - Natural Gas

Unmitigated

Land Use	Natural Gas Use kBTU/yr	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																	
Government Office Building	699.323	7.5400e-003	0.0686	0.0576	4.1000e-004	5.2100e-003	5.2100e-003	5.2100e-003	5.2100e-003	5.2100e-003	5.2100e-003	82.2733	82.2733	82.2733	1.5800e-003	1.5100e-003	82.7622
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	40.6997	4.4000e-004	3.9900e-003	3.3500e-003	2.0000e-005	3.0000e-004	3.0000e-004	3.0000e-004	3.0000e-004	3.0000e-004	3.0000e-004	4.7882	4.7882	4.7882	9.0000e-005	9.0000e-005	4.8167
Total		7.9800e-003	0.0726	0.0609	4.3000e-004	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	87.0615	87.0615	87.0615	1.6700e-003	1.6000e-003	87.5788

Mitigated

Land Use	Natural Gas Use kBTU/yr	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																	
Government Office Building	699.323	7.5400e-003	0.0686	0.0576	4.1000e-004	5.2100e-003	5.2100e-003	5.2100e-003	5.2100e-003	5.2100e-003	5.2100e-003	82.2733	82.2733	82.2733	1.5800e-003	1.5100e-003	82.7622
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	40.6997	4.4000e-004	3.9900e-003	3.3500e-003	2.0000e-005	3.0000e-004	3.0000e-004	3.0000e-004	3.0000e-004	3.0000e-004	3.0000e-004	4.7882	4.7882	4.7882	9.0000e-005	9.0000e-005	4.8167
Total		7.9800e-003	0.0726	0.0609	4.3000e-004	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	5.5100e-003	87.0615	87.0615	87.0615	1.6700e-003	1.6000e-003	87.5788

Orange Fire Station No. 1 and Headquarters - Orange County, Winter

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day															
Mitigated	0.7235	1.1000e-004	0.0116	0.0000	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	0.0249	0.0249	0.0249	7.0000e-005	0.0265	
Unmitigated	0.7235	1.1000e-004	0.0116	0.0000	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	0.0249	0.0249	0.0249	7.0000e-005	0.0265	

Orange Fire Station No. 1 and Headquarters - Orange County, Winter

6.2 Area by SubCategory

Unmitigated

SubCategory	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Architectural Coating	0.0830				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6394				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Landscaping	1.0800e-003	1.1000e-004	0.0116	0.0000	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	0.0249	0.0249	0.0249	7.0000e-005		0.0265
Total	0.7235	1.1000e-004	0.0116	0.0000	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	0.0249	0.0249	0.0249	7.0000e-005		0.0265

Mitigated

SubCategory	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day																
Architectural Coating	0.0830				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6394				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Landscaping	1.0800e-003	1.1000e-004	0.0116	0.0000	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	0.0249	0.0249	0.0249	7.0000e-005		0.0265
Total	0.7235	1.1000e-004	0.0116	0.0000	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	4.0000e-005	0.0249	0.0249	0.0249	7.0000e-005		0.0265

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

- Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.5	26	190	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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Orange Fire Station No. 1 and Headquarters - Orange County, Winter

10.1 Stationary Sources

Unmitigated/Mitigated

Equipment Type	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day															
Emergency Generator - Diesel (175 - 300 HP)	0.1559	0.4357	0.3975	7.5000e-004	0.0229	0.0229	0.0229	0.0229	0.0229	0.0229		79.7538	79.7538	0.0112		80.0334
Total	0.1559	0.4357	0.3975	7.5000e-004	0.0229	0.0229	0.0229	0.0229	0.0229	0.0229		79.7538	79.7538	0.0112		80.0334

11.0 Vegetation

APPENDIX B

EMFAC2017 Model Printouts

EMFAC2017 (v1.0.2) Emissions Inventory

Region Type: Air Basin

Region: SOUTH COAST

Calendar Year: 2021

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Cat	Model Year	Speed	Fuel	Population	VMT	Trips	Fuel Consumption
SOUTH CO,	2021	HHDT	Aggregated	Aggregated	GAS	81	7629	1628	1.9
SOUTH CO,	2021	LDA	Aggregated	Aggregated	GAS	6276234	246181276	29647186	8195.8
SOUTH CO,	2021	LDT1	Aggregated	Aggregated	GAS	695146	26066042	3200417	1009.6
SOUTH CO,	2021	LDT2	Aggregated	Aggregated	GAS	2144804	81991236	10052342	3441.7
SOUTH CO,	2021	LHDT1	Aggregated	Aggregated	GAS	172430	6230805	2568953	598.1
SOUTH CO,	2021	LHDT2	Aggregated	Aggregated	GAS	28914	1014315	430773	111.8
SOUTH CO,	2021	MCY	Aggregated	Aggregated	GAS	279209	1958677	558419	53.9
SOUTH CO,	2021	MDV	Aggregated	Aggregated	GAS	1520877	54421173	7026646	2808.6
SOUTH CO,	2021	MH	Aggregated	Aggregated	GAS	34556	327721	3457	64.5
SOUTH CO,	2021	MHDT	Aggregated	Aggregated	GAS	24684	1325210	493870	264.5
SOUTH CO,	2021	OBUS	Aggregated	Aggregated	GAS	5845	246477	116955	49.6
SOUTH CO,	2021	SBUS	Aggregated	Aggregated	GAS	2415	98099	9660	10.9
SOUTH CO,	2021	UBUS	Aggregated	Aggregated	GAS	944	88729	3776	18.5

vehicle miles per day (All Categories) 419957391 16,629 1,000 gall per day
16,629,188 gallons per day

Fleet Avg Miles per gallon 25.3

EMFAC2017 (v1.0.2) Emissions Inventory

Region Type: Air Basin

Region: SOUTH COAST

Calendar Year: 2021

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y	Vehicle Cal	Model Yea	Speed	Fuel	Population	VMT	Trips	Fuel Consumption
SOUTH CO,	2021	HHDT	Aggregatec	Aggregatec	DSL	96727	11545820	974406	1774
SOUTH CO,	2021	LDA	Aggregatec	Aggregatec	DSL	53710	2185239	254840	46
SOUTH CO,	2021	LDT1	Aggregatec	Aggregatec	DSL	406	9520	1420	0
SOUTH CO,	2021	LDT2	Aggregatec	Aggregatec	DSL	12472	548394	61718	16
SOUTH CO,	2021	LHDT1	Aggregatec	Aggregatec	DSL	109610	4489670	1378756	211
SOUTH CO,	2021	LHDT2	Aggregatec	Aggregatec	DSL	43242	1730629	543933	90
SOUTH CO,	2021	MDV	Aggregatec	Aggregatec	DSL	29604	1222112	145605	46
SOUTH CO,	2021	MH	Aggregatec	Aggregatec	DSL	11829	115366	1183	11
SOUTH CO,	2021	MHDT	Aggregatec	Aggregatec	DSL	119075	7535147	1192855	727
SOUTH CO,	2021	OBUS	Aggregatec	Aggregatec	DSL	4131	308887	40390	38
SOUTH CO,	2021	SBUS	Aggregatec	Aggregatec	DSL	6314	199477	72863	27
SOUTH CO,	2021	UBUS	Aggregatec	Aggregatec	DSL	14	1478	57	0

Diesel Truck (HHDT, MDV, MHDT) vehicle miles per day 20,303,080 2,548 1,000 gall per day
2,547,681 gallons per day

Diesel Truck Fleet Avg Miles per gallon 8.0

APPENDIX C

CalEEMod Model Annual Printouts

Orange Fire Station No. 1 and Headquarters - Orange County, Annual

Orange Fire Station No. 1 and Headquarters
Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	27.93	1000sqft	0.81	27,927.00	0
Unrefrigerated Warehouse-No Rail	3.78	1000sqft	0.20	3,780.00	0
Parking Lot	56.00	Space	1.23	22,400.00	0
Parking Lot	26.00	Space	0.51	10,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2022

Utility Company Southern California Edison

CO2 Intensity (lb/MW/hr)	702.44	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006
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1.3 User Entered Comments & Non-Default Data

Orange Fire Station No. 1 and Headquarters - Orange County, Annual

Project Characteristics -

Land Use - HQ Site 1.52 acres and West Parking Lot 1.23 acres

Construction Phase - Construction starting January 2021 and finishing July 2022

Trips and VMT - 6 vendor trucks per day added to Demolition and Grading to account for water truck emission.

Demolition - 1,695 Tons of parking lot debris to be removed from site

Grading -

Construction Off-road Equipment Mitigation - Water 2x per day selected to account for SCAQMD Rule 403 minimum requirements.

Mobile Land Use Mitigation - Improve Pedestrian Network onsite and connecting offsite. 0.01 miles to bus stop OCTA Chapman and Water.

Energy Mitigation - Per 2019 Title 24 requirements a 30% improvement to lighting energy was selected

Water Mitigation - Install low-flow fixtures and water-efficient irrigation

Waste Mitigation - 50% reduction in solid waste selected to account for AB 341

Stationary Sources - Emergency Generators and Fire Pumps - Emergency Backup Generator - 250 kW or 389 Hp, 0.5 hour/day and 26 hour per year

Vehicle Trips - Trip Lengths set to 0.7 mile to account for relocation of existing Fire Station No. 1 and Headquarters

Orange Fire Station No. 1 and Headquarters - Orange County, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	6.00	20.00
tblConstructionPhase	NumDays	220.00	290.00
tblConstructionPhase	NumDays	10.00	30.00
tblConstructionPhase	NumDays	10.00	30.00
tblLandUse	LandUseSquareFeet	27,930.00	27,927.00
tblLandUse	LotAcreage	0.64	0.81
tblLandUse	LotAcreage	0.09	0.20
tblLandUse	LotAcreage	0.23	0.51
tblLandUse	LotAcreage	0.50	1.23
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	26.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblVehicleTrips	CC_TL	8.40	0.70
tblVehicleTrips	CC_TL	8.40	0.70
tblVehicleTrips	CNW_TL	6.90	0.70
tblVehicleTrips	CNW_TL	6.90	0.70
tblVehicleTrips	CW_TL	16.60	0.70
tblVehicleTrips	CW_TL	16.60	0.70

2.0 Emissions Summary

Orange Fire Station No. 1 and Headquarters - Orange County, Annual

2.1 Overall Construction
Unmitigated Construction

Year	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2021	0.2790	2.3265	1.9762	3.8900e-003	0.1251	0.1104	0.2356	0.0476	0.1052	0.1528	0.0000	333.6701	333.6701	0.0602	0.0000	335.1759
2022	0.2399	0.7016	0.7378	1.3800e-003	0.0148	0.0329	0.0477	3.9800e-003	0.0313	0.0353	0.0000	117.7756	117.7756	0.0224	0.0000	118.3347
Maximum	0.2790	2.3265	1.9762	3.8900e-003	0.1251	0.1104	0.2356	0.0476	0.1052	0.1528	0.0000	333.6701	333.6701	0.0602	0.0000	335.1759

Mitigated Construction

Year	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2021	0.2790	2.3265	1.9762	3.8900e-003	0.0791	0.1104	0.1896	0.0276	0.1052	0.1328	0.0000	333.6698	333.6698	0.0602	0.0000	335.1756
2022	0.2399	0.7016	0.7378	1.3800e-003	0.0148	0.0329	0.0477	3.9800e-003	0.0313	0.0353	0.0000	117.7754	117.7754	0.0224	0.0000	118.3346
Maximum	0.2790	2.3265	1.9762	3.8900e-003	0.0791	0.1104	0.1896	0.0276	0.1052	0.1328	0.0000	333.6698	333.6698	0.0602	0.0000	335.1756

ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	16.24	38.80	0.00	10.65	0.00	0.00	0.00	0.00	0.00	0.00

Orange Fire Station No. 1 and Headquarters - Orange County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2021	3-31-2021	0.7068	0.7068
2	4-1-2021	6-30-2021	0.6264	0.6264
3	7-1-2021	9-30-2021	0.6333	0.6333
4	10-1-2021	12-31-2021	0.6338	0.6338
5	1-1-2022	3-31-2022	0.5659	0.5659
6	4-1-2022	6-30-2022	0.3777	0.3777
		Highest	0.7068	0.7068

**2.2 Overall Operational
Unmitigated Operational**

Category	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Area	0.1320	1.0000e-005	1.4500e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	2.8200e-003	2.8200e-003	1.0000e-005	0.0000	3.0100e-003
Energy	1.4600e-003	0.0132	0.0111	8.0000e-005	1.0100e-003	1.0100e-003	1.0100e-003	1.0100e-003	1.0100e-003	1.0100e-003	0.0000	147.5670	147.5670	5.7700e-003	1.4000e-003	148.1290
Mobile	0.2101	0.6458	1.0713	1.5900e-003	0.0814	1.9600e-003	0.0833	0.0218	1.8200e-003	0.0236	0.0000	148.1528	148.1528	0.0132	0.0000	148.4815
Stationary	4.0500e-003	0.0113	0.0103	2.0000e-005	6.0000e-004	6.0000e-004	6.0000e-004	6.0000e-004	6.0000e-004	6.0000e-004	0.0000	1.8811	1.8811	2.6000e-004	0.0000	1.8877
Waste					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5.9923	0.0000	5.9923	0.3541	0.0000	14.8457
Water					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.0376	38.6845	40.7221	0.2109	5.2700e-003	47.5652
Total	0.3476	0.6704	1.0942	1.6900e-003	0.0814	3.5800e-003	0.0849	0.0218	3.4400e-003	0.0252	8.0299	336.2883	344.3182	0.5842	6.6700e-003	360.9120

Orange Fire Station No. 1 and Headquarters - Orange County, Annual

**2.2 Overall Operational
Mitigated Operational**

Category	tons/yr											MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Area	0.1320	1.0000e-005	1.4500e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	2.8200e-003	2.8200e-003	1.0000e-005	0.0000	0.0000	3.0100e-003
Energy	1.4600e-003	0.0132	0.0111	8.0000e-005	1.0100e-003	1.0100e-003	1.0100e-003	1.0100e-003	1.0100e-003	1.0100e-003	0.0000	134.1761	134.1761	5.2200e-003	1.2900e-003	1.2900e-003	134.6902
Mobile	0.2083	0.6345	1.0240	1.3800e-003	0.0604	1.8100e-003	0.0622	0.0162	1.6800e-003	0.0179	0.0000	128.1390	128.1390	0.0124	0.0000	0.0000	128.4495
Stationary	4.0500e-003	0.0113	0.0103	2.0000e-005	6.0000e-004	6.0000e-004	6.0000e-004	6.0000e-004	6.0000e-004	6.0000e-004	0.0000	1.8811	1.8811	2.6000e-004	0.0000	0.0000	1.8877
Waste					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.9962	0.0000	2.9962	0.1771	0.0000	0.0000	7.4228
Water					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.6301	32.6209	34.2510	0.1688	4.2300e-003	0.0000	39.7314
Total	0.3458	0.6591	1.0469	1.4800e-003	0.0604	3.4300e-003	0.0638	0.0162	3.3000e-003	0.0195	4.6263	296.8200	301.4462	0.3638	5.5200e-003	0.0000	312.1847

Percent Reduction	tons/yr											MT/yr				
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
0.51		1.68	4.32	12.43	25.77	4.19	24.86	25.79	4.07	22.83	42.39	11.74	12.45	37.74	17.24	13.50

3.0 Construction Detail

Construction Phase

Orange Fire Station No. 1 and Headquarters - Orange County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2021	1/28/2021	5	20	
2	Grading	Grading	1/29/2021	2/25/2021	5	20	
3	Building Construction	Building Construction	2/26/2021	4/7/2022	5	290	
4	Paving	Paving	4/8/2022	5/19/2022	5	30	
5	Architectural Coating	Architectural Coating	5/20/2022	6/30/2022	5	30	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 1.74

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 47,561; Non-Residential Outdoor: 15,854; Striped Parking Area: 1,968 (Architectural Coating – sqft)

OffRoad Equipment

Orange Fire Station No. 1 and Headquarters - Orange County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	6.00	168.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	24.00	11.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Orange Fire Station No. 1 and Headquarters - Orange County, Annual

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2021

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
MT/yr																
Fugitive Dust					0.0181	0.0000	0.0181	2.7500e-003	0.0000	2.7500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0199	0.1970	0.1449	2.4000e-004		0.0104	0.0104	9.7100e-003	0.0000	9.7100e-003	0.0000	21.0713	21.0713	5.3900e-003	0.0000	21.2060
Total	0.0199	0.1970	0.1449	2.4000e-004	0.0181	0.0104	0.0286	2.7500e-003	9.7100e-003	0.0125	0.0000	21.0713	21.0713	5.3900e-003	0.0000	21.2060

Orange Fire Station No. 1 and Headquarters - Orange County, Annual

3.2 Demolition - 2021

Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	6.1000e-004	0.0220	5.9900e-003	6.0000e-005	1.4400e-003	7.0000e-005	1.5100e-003	3.9000e-004	6.0000e-005	4.6000e-004	0.0000	6.3802	6.3802	6.7000e-004	0.0000	6.3970
Vendor	1.6000e-004	5.7200e-003	1.6000e-003	1.0000e-005	3.8000e-004	1.0000e-005	3.9000e-004	1.1000e-004	1.0000e-005	1.2000e-004	0.0000	1.4480	1.4480	1.2000e-004	0.0000	1.4509
Worker	4.8000e-004	3.2000e-004	3.7300e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1924	1.1924	3.0000e-005	0.0000	1.1930
Total	1.2500e-003	0.0281	0.0113	8.0000e-005	3.2500e-003	9.0000e-005	3.3400e-003	8.8000e-004	8.0000e-005	9.7000e-004	0.0000	9.0205	9.0205	8.2000e-004	0.0000	9.0409

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					8.1600e-003	0.0000	8.1600e-003	1.2400e-003	0.0000	1.2400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0199	0.1970	0.1449	2.4000e-004	0.0104	0.0104	0.0104	9.7100e-003	0.0000	9.7100e-003	0.0000	21.0713	21.0713	5.3900e-003	0.0000	21.2060
Total	0.0199	0.1970	0.1449	2.4000e-004	8.1600e-003	0.0104	0.0186	1.2400e-003	9.7100e-003	0.0110	0.0000	21.0713	21.0713	5.3900e-003	0.0000	21.2060

Orange Fire Station No. 1 and Headquarters - Orange County, Annual

3.2 Demolition - 2021

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	6.1000e-004	0.0220	5.9900e-003	6.0000e-005	1.4400e-003	7.0000e-005	1.5100e-003	3.9000e-004	6.0000e-005	4.6000e-004	0.0000	6.3802	6.3802	6.7000e-004	0.0000	6.3970
Vendor	1.6000e-004	5.7200e-003	1.6000e-003	1.0000e-005	3.8000e-004	1.0000e-005	3.9000e-004	1.1000e-004	1.0000e-005	1.2000e-004	0.0000	1.4480	1.4480	1.2000e-004	0.0000	1.4509
Worker	4.8000e-004	3.2000e-004	3.7300e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1924	1.1924	3.0000e-005	0.0000	1.1930
Total	1.2500e-003	0.0281	0.0113	8.0000e-005	3.2500e-003	9.0000e-005	3.3400e-003	8.8000e-004	8.0000e-005	9.7000e-004	0.0000	9.0205	9.0205	8.2000e-004	0.0000	9.0409

3.3 Grading - 2021

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0183	0.2021	0.0976	2.1000e-004		9.1600e-003	9.1600e-003	8.4200e-003	8.4200e-003	8.4200e-003	0.0000	18.1039	18.1039	5.8600e-003	0.0000	18.2503
Total	0.0183	0.2021	0.0976	2.1000e-004	0.0655	9.1600e-003	0.0747	0.0337	8.4200e-003	0.0421	0.0000	18.1039	18.1039	5.8600e-003	0.0000	18.2503

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3.3 Grading - 2021

Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6000e-004	5.7200e-003	1.6000e-003	1.0000e-005	3.8000e-004	1.0000e-005	3.9000e-004	1.1000e-004	1.0000e-005	1.2000e-004	0.0000	1.4480	1.4480	1.2000e-004	0.0000	1.4509
Worker	3.7000e-004	2.5000e-004	2.8700e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9172	0.9172	2.0000e-005	0.0000	0.9177
Total	5.3000e-004	5.9700e-003	4.4700e-003	2.0000e-005	1.4800e-003	2.0000e-005	1.5000e-003	4.0000e-004	2.0000e-005	4.2000e-004	0.0000	2.3652	2.3652	1.4000e-004	0.0000	2.3686

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Fugitive Dust					0.0295	0.0000	0.0295	0.0152	0.0000	0.0152	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0183	0.2021	0.0976	2.1000e-004	9.1600e-003	9.1600e-003	9.1600e-003	8.4200e-003	8.4200e-003	8.4200e-003	0.0000	18.1039	18.1039	5.8600e-003	0.0000	18.2502
Total	0.0183	0.2021	0.0976	2.1000e-004	0.0295	9.1600e-003	0.0387	0.0152	8.4200e-003	0.0236	0.0000	18.1039	18.1039	5.8600e-003	0.0000	18.2502

Orange Fire Station No. 1 and Headquarters - Orange County, Annual

3.3 Grading - 2021

Mitigated Construction Off-Site

Category	tons/yr										MT/yr						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6000e-004	5.7200e-003	1.6000e-003	1.0000e-005	3.8000e-004	1.0000e-005	3.9000e-004	1.1000e-004	1.0000e-005	1.2000e-004	0.0000	1.4480	1.4480	1.2000e-004	0.0000	0.0000	1.4509
Worker	3.7000e-004	2.5000e-004	2.8700e-003	1.0000e-005	1.1000e-003	1.0000e-005	1.1100e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9172	0.9172	2.0000e-005	0.0000	0.0000	0.9177
Total	5.3000e-004	5.9700e-003	4.4700e-003	2.0000e-005	1.4800e-003	2.0000e-005	1.5000e-003	4.0000e-004	2.0000e-005	4.2000e-004	0.0000	2.3652	2.3652	1.4000e-004	0.0000	0.0000	2.3686

3.4 Building Construction - 2021

Unmitigated Construction On-Site

Category	tons/yr										MT/yr						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Off-Road	0.2260	1.7710	1.6092	2.7600e-003		0.0903	0.0903		0.0865	0.0865	0.0000	229.4519	229.4519	0.0451	0.0000	0.0000	230.5804
Total	0.2260	1.7710	1.6092	2.7600e-003		0.0903	0.0903		0.0865	0.0865	0.0000	229.4519	229.4519	0.0451	0.0000	0.0000	230.5804

Orange Fire Station No. 1 and Headquarters - Orange County, Annual

3.4 Building Construction - 2021
Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.3100e-003	0.1158	0.0325	3.0000e-004	7.6500e-003	2.4000e-004	7.8900e-003	2.2100e-003	2.3000e-004	2.4400e-003	0.0000	29.3335	29.3335	2.3700e-003	0.0000	29.3928
Worker	9.7200e-003	6.5300e-003	0.0762	2.7000e-004	0.0291	1.9000e-004	0.0293	7.7300e-003	1.8000e-004	7.9100e-003	0.0000	24.3239	24.3239	5.2000e-004	0.0000	24.3369
Total	0.0130	0.1223	0.1087	5.7000e-004	0.0368	4.3000e-004	0.0372	9.9400e-003	4.1000e-004	0.0104	0.0000	53.6574	53.6574	2.8900e-003	0.0000	53.7297

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.2260	1.7710	1.6092	2.7600e-003		0.0903	0.0903		0.0865	0.0865	0.0000	229.4516	229.4516	0.0451	0.0000	230.5801
Total	0.2260	1.7710	1.6092	2.7600e-003		0.0903	0.0903		0.0865	0.0865	0.0000	229.4516	229.4516	0.0451	0.0000	230.5801

Orange Fire Station No. 1 and Headquarters - Orange County, Annual

3.4 Building Construction - 2021

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.3100e-003	0.1158	0.0325	3.0000e-004	7.6500e-003	2.4000e-004	7.8900e-003	2.2100e-003	2.3000e-004	2.4400e-003	0.0000	29.3335	29.3335	2.3700e-003	0.0000	29.3928
Worker	9.7200e-003	6.5300e-003	0.0762	2.7000e-004	0.0291	1.9000e-004	0.0293	7.7300e-003	1.8000e-004	7.9100e-003	0.0000	24.3239	24.3239	5.2000e-004	0.0000	24.3369
Total	0.0130	0.1223	0.1087	5.7000e-004	0.0368	4.3000e-004	0.0372	9.9400e-003	4.1000e-004	0.0104	0.0000	53.6574	53.6574	2.8900e-003	0.0000	53.7297

3.4 Building Construction - 2022

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.0640	0.5038	0.4952	8.6000e-004		0.0242	0.0242		0.0232	0.0232	0.0000	71.6496	71.6496	0.0138	0.0000	71.9952
Total	0.0640	0.5038	0.4952	8.6000e-004		0.0242	0.0242		0.0232	0.0232	0.0000	71.6496	71.6496	0.0138	0.0000	71.9952

Orange Fire Station No. 1 and Headquarters - Orange County, Annual

3.4 Building Construction - 2022
Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.7000e-004	0.0342	9.7800e-003	9.0000e-005	2.3900e-003	7.0000e-005	2.4500e-003	6.9000e-004	6.0000e-005	7.5000e-004	0.0000	9.0681	9.0681	7.2000e-004	0.0000	9.0861
Worker	2.8700e-003	1.8500e-003	0.0222	8.0000e-005	9.0900e-003	6.0000e-005	9.1500e-003	2.4100e-003	5.0000e-005	2.4700e-003	0.0000	7.3132	7.3132	1.5000e-004	0.0000	7.3169
Total	3.8400e-003	0.0360	0.0320	1.7000e-004	0.0115	1.3000e-004	0.0116	3.1000e-003	1.1000e-004	3.2200e-003	0.0000	16.3813	16.3813	8.7000e-004	0.0000	16.4029

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.0640	0.5038	0.4952	8.6000e-004		0.0242	0.0242	0.0232	0.0232	0.0232	0.0000	71.6496	71.6496	0.0138	0.0000	71.9951
Total	0.0640	0.5038	0.4952	8.6000e-004		0.0242	0.0242	0.0232	0.0232	0.0232	0.0000	71.6496	71.6496	0.0138	0.0000	71.9951

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3.4 Building Construction - 2022
Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.7000e-004	0.0342	9.7800e-003	9.0000e-005	2.3900e-003	7.0000e-005	2.4500e-003	6.9000e-004	6.0000e-005	7.5000e-004	0.0000	9.0681	9.0681	7.2000e-004	0.0000	9.0861
Worker	2.8700e-003	1.8500e-003	0.0222	8.0000e-005	9.0900e-003	6.0000e-005	9.1500e-003	2.4100e-003	5.0000e-005	2.4700e-003	0.0000	7.3132	7.3132	1.5000e-004	0.0000	7.3169
Total	3.8400e-003	0.0360	0.0320	1.7000e-004	0.0115	1.3000e-004	0.0116	3.1000e-003	1.1000e-004	3.2200e-003	0.0000	16.3813	16.3813	8.7000e-004	0.0000	16.4029

3.5 Paving - 2022
Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.0141	0.1400	0.1755	2.7000e-004	7.3200e-003	7.3200e-003	7.3200e-003	6.7500e-003	6.7500e-003	6.7500e-003	0.0000	23.2651	23.2651	7.3700e-003	0.0000	23.4494
Paving	2.2800e-003				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0164	0.1400	0.1755	2.7000e-004		7.3200e-003	7.3200e-003	6.7500e-003	6.7500e-003	6.7500e-003	0.0000	23.2651	23.2651	7.3700e-003	0.0000	23.4494

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3.5 Paving - 2022

Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.8000e-004	5.0000e-004	6.0300e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.9873	1.9873	4.0000e-005	0.0000	1.9883
Total	7.8000e-004	5.0000e-004	6.0300e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.9873	1.9873	4.0000e-005	0.0000	1.9883

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Off-Road	0.0141	0.1400	0.1755	2.7000e-004	7.3200e-003	7.3200e-003	7.3200e-003	6.7500e-003	6.7500e-003	6.7500e-003	0.0000	23.2650	23.2650	7.3700e-003	0.0000	23.4494
Paving	2.2800e-003				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0164	0.1400	0.1755	2.7000e-004	7.3200e-003	7.3200e-003	7.3200e-003	6.7500e-003	6.7500e-003	6.7500e-003	0.0000	23.2650	23.2650	7.3700e-003	0.0000	23.4494

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3.5 Paving - 2022

Mitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.8000e-004	5.0000e-004	6.0300e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.9873	1.9873	4.0000e-005	0.0000	1.9883
Total	7.8000e-004	5.0000e-004	6.0300e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.9873	1.9873	4.0000e-005	0.0000	1.9883

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Archit. Coating	0.1515					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0700e-003	0.0211	0.0272	4.0000e-005	1.2300e-003	1.2300e-003	1.2300e-003	1.2300e-003	1.2300e-003	1.2300e-003	0.0000	3.8299	3.8299	2.5000e-004	0.0000	3.8361
Total	0.1546	0.0211	0.0272	4.0000e-005	1.2300e-003	1.2300e-003	1.2300e-003	1.2300e-003	1.2300e-003	1.2300e-003	0.0000	3.8299	3.8299	2.5000e-004	0.0000	3.8361

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3.6 Architectural Coating - 2022
Unmitigated Construction Off-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.7000e-004	2.0100e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	0.0000	2.2000e-004	0.0000	0.6624	0.6624	1.0000e-005	0.0000	0.6628
Total	2.6000e-004	1.7000e-004	2.0100e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	0.0000	2.2000e-004	0.0000	0.6624	0.6624	1.0000e-005	0.0000	0.6628

Mitigated Construction On-Site

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Archit. Coating	0.1515					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0700e-003	0.0211	0.0272	4.0000e-005	1.2300e-003	1.2300e-003	1.2300e-003	1.2300e-003	1.2300e-003	1.2300e-003	0.0000	3.8299	3.8299	2.5000e-004	0.0000	3.8361
Total	0.1546	0.0211	0.0272	4.0000e-005	1.2300e-003	1.2300e-003	1.2300e-003	1.2300e-003	1.2300e-003	1.2300e-003	0.0000	3.8299	3.8299	2.5000e-004	0.0000	3.8361

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3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

Category	tons/yr										MT/yr						
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.7000e-004	2.0100e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	0.0000	2.2000e-004	0.0000	0.6624	0.6624	1.0000e-005	0.0000	0.0000	0.6628
Total	2.6000e-004	1.7000e-004	2.0100e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	0.0000	2.2000e-004	0.0000	0.6624	0.6624	1.0000e-005	0.0000	0.0000	0.6628

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

Orange Fire Station No. 1 and Headquarters - Orange County, Annual

Category	tons/yr													MT/yr			
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Mitigated	0.2083	0.6345	1.0240	1.3800e-003	0.0604	1.8100e-003	0.0622	0.0162	1.6800e-003	0.0179	0.0000	128.1390	128.1390	0.0124	0.0000	128.4495	
Unmitigated	0.2101	0.6458	1.0713	1.5900e-003	0.0814	1.9600e-003	0.0833	0.0218	1.8200e-003	0.0236	0.0000	148.1528	148.1528	0.0132	0.0000	148.4815	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT		
Government Office Building	1,925.21	0.00	0.00	212,987	158,102		
Parking Lot	0.00	0.00	0.00				
Parking Lot	0.00	0.00	0.00				
Unrefrigerated Warehouse-No Rail	6.35	6.35	6.35	1,516	1,125		
Total	1,931.57	6.35	6.35	214,502	159,227		

4.3 Trip Type Information

Land Use	Miles				Trip %				Trip Purpose %			
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Government Office Building	0.70	0.70	0.70	33.00	62.00	5.00				50	34	16
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00				0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00				0	0	0
Unrefrigerated Warehouse-No	0.70	0.70	0.70	59.00	0.00	41.00				92	5	3

4.4 Fleet Mix

Orange Fire Station No. 1 and Headquarters - Orange County, Annual

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Government Office Building	0.561378	0.043284	0.209473	0.111826	0.015545	0.005795	0.025829	0.017125	0.001747	0.001542	0.004926	0.000594	0.000934
Parking Lot	0.561378	0.043284	0.209473	0.111826	0.015545	0.005795	0.025829	0.017125	0.001747	0.001542	0.004926	0.000594	0.000934
Unrefrigerated Warehouse-No Rail	0.561378	0.043284	0.209473	0.111826	0.015545	0.005795	0.025829	0.017125	0.001747	0.001542	0.004926	0.000594	0.000934

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Category	tons/yr													MT/yr			
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Electricity Mitigated					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	119.7621	119.7621	4.9400e-003	1.0200e-003	120.1906	
Electricity Unmitigated					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	133.1530	133.1530	5.5000e-003	1.1400e-003	133.6294	
NaturalGas Mitigated	1.4600e-003	0.0132	0.0111	8.0000e-005	1.0100e-003	1.0100e-003	1.0100e-003	1.0100e-003	1.0100e-003	1.0100e-003	0.0000	14.4140	14.4140	2.8000e-004	2.6000e-004	14.4997	
NaturalGas Unmitigated	1.4600e-003	0.0132	0.0111	8.0000e-005	1.0100e-003	1.0100e-003	1.0100e-003	1.0100e-003	1.0100e-003	1.0100e-003	0.0000	14.4140	14.4140	2.8000e-004	2.6000e-004	14.4997	

Orange Fire Station No. 1 and Headquarters - Orange County, Annual

5.2 Energy by Land Use - Natural Gas

Unmitigated

Land Use	Natural Gas Use kBtu/yr	tons/yr										MT/yr					CO2e
		ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	
Government Office Building	255253	1.3800e-003	0.0125	0.0105	8.0000e-005	9.5000e-004	9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	13.6213	13.6213	2.6000e-004	2.5000e-004	13.7022
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	14855.4	8.0000e-005	7.3000e-004	6.1000e-004	0.0000	6.0000e-005	6.0000e-005	6.0000e-005	6.0000e-005	6.0000e-005	6.0000e-005	0.0000	0.7927	0.7927	2.0000e-005	1.0000e-005	0.7975
Total		1.4600e-003	0.0132	0.0111	8.0000e-005	1.0100e-003	1.0100e-003	1.0100e-003	1.0100e-003	1.0100e-003	1.0100e-003	0.0000	14.4140	14.4140	2.8000e-004	2.6000e-004	14.4997

Mitigated

Land Use	Natural Gas Use kBtu/yr	tons/yr										MT/yr					CO2e
		ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	
Government Office Building	255253	1.3800e-003	0.0125	0.0105	8.0000e-005	9.5000e-004	9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	0.0000	13.6213	13.6213	2.6000e-004	2.5000e-004	13.7022
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	14855.4	8.0000e-005	7.3000e-004	6.1000e-004	0.0000	6.0000e-005	6.0000e-005	6.0000e-005	6.0000e-005	6.0000e-005	6.0000e-005	0.0000	0.7927	0.7927	2.0000e-005	1.0000e-005	0.7975
Total		1.4600e-003	0.0132	0.0111	8.0000e-005	1.0100e-003	1.0100e-003	1.0100e-003	1.0100e-003	1.0100e-003	1.0100e-003	0.0000	14.4140	14.4140	2.8000e-004	2.6000e-004	14.4997

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Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr															
Mitigated	0.1320	1.0000e-005	1.4500e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	2.8200e-003	2.8200e-003	1.0000e-005	0.0000	3.0100e-003
Unmitigated	0.1320	1.0000e-005	1.4500e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	2.8200e-003	2.8200e-003	1.0000e-005	0.0000	3.0100e-003
	MT/yr															

6.2 Area by SubCategory

Unmitigated

SubCategory	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr															
Architectural Coating	0.0152					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1167					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.4000e-004	1.0000e-005	1.4500e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	2.8200e-003	2.8200e-003	1.0000e-005	0.0000	3.0100e-003
Total	0.1320	1.0000e-005	1.4500e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	2.8200e-003	2.8200e-003	1.0000e-005	0.0000	3.0100e-003
	MT/yr															

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6.2 Area by SubCategory

Mitigated

SubCategory	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Architectural Coating	0.0152					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1167					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.4000e-004	1.0000e-005	1.4500e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	2.8200e-003	2.8200e-003	1.0000e-005	0.0000	3.0100e-003
Total	0.1320	1.0000e-005	1.4500e-003	0.0000	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	1.0000e-005	0.0000	2.8200e-003	2.8200e-003	1.0000e-005	0.0000	3.0100e-003

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

Orange Fire Station No. 1 and Headquarters - Orange County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	34.2510	0.1688	4.2300e-003	39.7314
Unmitigated	40.7221	0.2109	5.2700e-003	47.5652

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Government Office Building	5.54857 / 3.40073	36.8182	0.1823	4.5700e-003	42.7358
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.874125 / 0	3.9039	0.0286	7.0000e-004	4.8293
Total		40.7221	0.2109	5.2700e-003	47.5652

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7.2 Water by Land Use

Mitigated

Land Use	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
	Mgal	MT/yr			
Government Office Building	4.43885 / 3.19329	31.1279	0.1459	3.6700e-003	35.8680
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.6993 / 0	3.1231	0.0229	5.6000e-004	3.8635
Total		34.2510	0.1688	4.2300e-003	39.7314

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Orange Fire Station No. 1 and Headquarters - Orange County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2.9962	0.1771	0.0000	7.4228
Unmitigated	5.9923	0.3541	0.0000	14.8457

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Government Office Building	25.97	5.2717	0.3116	0.0000	13.0604
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	3.55	0.7206	0.0426	0.0000	1.7853
Total		5.9923	0.3541	0.0000	14.8457

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8.2 Waste by Land Use

Mitigated

Land Use	Waste Disposed tons	Total CO2	CH4	N2O	CO2e
Government Office Building	12.985	2.6358	0.1558	0.0000	6.5302
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1.775	0.3603	0.0213	0.0000	0.8927
Total		2.9962	0.1771	0.0000	7.4228

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.5	26	190	0.73	Diesel

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Orange Fire Station No. 1 and Headquarters - Orange County, Annual

Equipment Type	Number
----------------	--------

10.1 Stationary Sources

Unmitigated/Mitigated

Equipment Type	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
MT/yr																
Emergency Generator - Diesel (175 - 300 HP)	4.0500e-003	0.0113	0.0103	2.0000e-005	6.0000e-004	6.0000e-004	6.0000e-004	6.0000e-004	6.0000e-004	6.0000e-004	0.0000	1.8811	1.8811	2.6000e-004	0.0000	1.8877
Total	4.0500e-003	0.0113	0.0103	2.0000e-005	6.0000e-004	6.0000e-004	6.0000e-004	6.0000e-004	6.0000e-004	6.0000e-004	0.0000	1.8811	1.8811	2.6000e-004	0.0000	1.8877

11.0 Vegetation

**GEOTECHNICAL INVESTIGATION
PROPOSED FIRE STATION 1 (SP-4071),
105 SOUTH WATER STREET,
CITY OF ORANGE, CALIFORNIA**

Prepared For:

WLC ARCHITECTS, INC.
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, California 91730

Project No. 12482.001

September 26, 2019



Leighton Consulting, Inc.

A LEIGHTON GROUP COMPANY



Leighton Consulting, Inc.
A LEIGHTON GROUP COMPANY

September 26, 2019

Project No. 12482.001

To: WLC Architects, Inc.
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, California 91730

Attention: Mr. Kelley Needham

Subject: Geotechnical Investigation, Proposed Fire Station 1 (SP-4071), 105 South Water Street, City of Orange, California

In accordance with our proposal dated March 22, 2019 and your authorization on July 28, 2019, Leighton Consulting, Inc. (Leighton) has conducted a geotechnical investigation for the proposed Fire Station 1 facility (SP-4071), located at 105 South Water Street in the City of Orange, California. The purpose of this study has been to evaluate the subsurface conditions at the site with respect to the proposed fire station development and to provide geotechnical recommendations for design and construction.

Based on this investigation, the proposed development of the fire station is feasible from a geotechnical standpoint. Significant geotechnical issues for this project are those related to the potential for strong seismic shaking and potentially compressible soils. Good planning and design of the project can limit the impact of these constraints. This report presents our findings, conclusions, and geotechnical recommendations for the project.

We appreciate the opportunity to work with you on this project. If you have any questions regarding this report, please call us at your convenience.



Respectfully submitted,

LEIGHTON CONSULTING, INC.

A handwritten signature in blue ink that reads "Jason D. Hertzberg".

Jason D. Hertzberg, GE 2711
Principal Engineer



A handwritten signature in blue ink that reads "Joe Roe".

Joe Roe PG, CEG 2456
Principal Geologist

MM/LP/JDH/JR/rsm

Distribution: (1) Addressee



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- Figure 1 - Site Location Map
- Figure 2 - Geotechnical Exploration Map
- Figure 2A - Geotechnical Cross Sections AA and BB
- Figure 3 - Regional Geology Map
- Figure 4 - Regional Fault and Historical Seismicity Map
- Figure 5 - Seismic Hazard Map
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GBA “Important Information about This Geotechnical Engineering Report”

Appendices

- Appendix A - References
- Appendix B - Exploration Logs
- Appendix C - Geotechnical Laboratory Test Results
- Appendix D - Summary of Seismic Hazard Analysis
- Appendix E - General Earthwork and Grading Specifications

1.0 INTRODUCTION

1.1 Site Location and Description

The site contains two (2) parcels located at the southeast corner of Chapman Avenue and South Water Street and at the northwest corner of Almond Avenue and South Water Street, in Orange, California. The site previously contained several buildings and appears to have been vacant since early 2010. Concrete slabs were observed in the northern and western regions with asphalt paved areas located throughout the northern parcel. The site is surrounded by office buildings and single-family residential homes to the north, east and west. The City of Orange Water Division Department of Public Works is located to the south. The parcel located northwest of South Water Street and Almond Avenue is currently occupied by a car dealership lot.

The site and surroundings are relatively flat, with site elevations ranging from about 214 to 219 feet above mean sea level, with drainage to the south. The site location (latitude 33.7873°, longitude -117.8411°) and immediate vicinity are shown on Figure 1, Site Location Map.

1.2 Proposed Improvements

Based on our review of the proposed site plan *Fire Station 1 Headquarters City of Orange Fire Department 105 South Water Street, Orange, CA*, prepared by WLC Architects dated July 30, 2019, the proposed fire station development includes a headquarters/administration building on the western portion and a separate reserve apparatus building on the southeast portion of the site.

We understand that the site will be designed in stages such that the City has the option to construct an operational Fire Station 1 first and the Fire Headquarters building portion added at a later date. The proposed fire station facility is composed of a two-story, approximate 24,300-square-foot building, of which approximately 5,700 square feet make up the main apparatus building portion.

Additional overflow parking will be constructed on the existing site located northwest of the intersection of Almond Avenue and South Water Street. We assume that remedial cuts and fills of 5 feet or less with localized deeper excavations to remove undocumented fill will be required to attain finish grades for the new structures.

1.3 Purpose of Exploration

The purpose of this study has been to evaluate the general geotechnical conditions at the site with respect to the proposed improvements and to provide geotechnical recommendations for design and construction.

Our geotechnical exploration included hollow-stem auger soil borings, laboratory testing and geotechnical analysis to evaluate existing conditions and develop the recommendations contained in this report. Infiltration testing was conducted to evaluate general infiltration characteristics at the locations and depths tested to support infiltration system design by the civil engineer.

1.4 Scope of Investigation

The scope of our study has included the following tasks:

- Geologic Hazards Review: We reviewed pertinent, readily available geologic and geotechnical literature covering the site. Our review included regional geologic maps and reports available from our in-house library. Key documents reviewed are referenced in Appendix A, *References*.
- Utility Coordination: We contacted Underground Service Alert (USA) prior to our subsurface exploration to have underground utilities located and marked.
- Field Exploration: Our field investigation included drilling, logging, and sampling of five (5) hollow-stem auger borings (LB-1 through LB-5) at representative locations in the areas of the proposed building to depths ranging from approximately 6 feet to 51.5 feet below the existing ground surface (bgs). Additionally, two hollow-stem auger borings (LB-6 and LB-7) were drilled, logged, and sampled in the area of the proposed overflow parking lot to depths of approximately 9 feet bgs. Encountered earth materials were logged in the field by our representative and described in accordance with the Unified Soil Classification System (ASTM D 2488). Relatively undisturbed soil samples were obtained at selected intervals within these borings using a California Ring Sampler. Standard Penetration Tests (SPT) were conducted at selected depths and samples were obtained from the SPT split-spoon sampler. Representative bulk samples were also collected at shallow depths from the borings.

Two infiltration tests were conducted within borings LB-4 and LB-5 to evaluate general infiltration rates of the subsurface soils with bottom depths of 14 feet bgs and 20.5 feet bgs.

All excavations were backfilled with the soil cuttings. An asphalt concrete patch was placed at the top of LB-6 and LB-7 to match the existing ground surface. Logs of the geotechnical borings are presented in Appendix B, *Exploration Logs*. Approximate boring locations are shown on Figure 2, *Exploration Location Map*.

- Geotechnical Laboratory Testing: Geotechnical laboratory tests were conducted on selected relatively undisturbed and bulk soil samples obtained during our field investigation. This testing program was designed to evaluate engineering characteristics of the onsite soils. Laboratory tests conducted during this investigation include:
 - In situ moisture content and dry density
 - Proctor Compaction Test
 - Sieve analysis
 - Atterberg Limits
 - Expansion Index
 - Water-soluble sulfate concentration in the soil
 - Resistivity, chloride content and pH

The in situ moisture content and dry density test results are shown on the boring logs in Appendix B. The other laboratory test results are presented in Appendix C, *Geotechnical Laboratory Test Results*.

- Engineering Analysis: Data obtained from our background review, field exploration and geotechnical laboratory testing was evaluated and analyzed to develop geotechnical conclusions and provide recommendations presented in this report.
- Report Preparation: Results of our geotechnical investigation have been summarized in this report, presenting our findings, conclusions and geotechnical recommendations for design and construction of the proposed Fire Station development as currently planned.

2.0 FINDINGS

2.1 Geologic Hazards Review

We have reviewed pertinent, readily available geologic and geotechnical literature covering the site. Our review included regional geologic maps and reports available from our library. Documents reviewed are listed in Appendix A, *References*. Potential geologic hazards are discussed in the following sections. Our review has considered California Geological Survey's Note 48, *Checklist of the Review of Engineering Geology and Seismology Reports for California Public Schools, Hospitals, and Essential Services Buildings*.

2.1.1 Site History

Our review of site history included analysis of historical topographic maps between the dates of 1896 and 2015 and historical aerial photographs between the dates of 1946 and 2016. The purpose of this evaluation was to help understand the origin of the current site profile, former site use, as well as past grading activities.

In its original undeveloped state, up until early 1930, the properties consisted of gently southerly sloping terrain, with the Santiago Creek drainage channel situated approximately 0.20 mile to the east. Between approximately 1940 and 1963, both properties were utilized for agricultural purposes with the western area of proposed parking overflow as orchard and the proposed fire station site as buildings likely associated with the agriculture activities.

While the overall use of the buildings and foundation elements are unknown, structures onsite were not observed in 2010 aerial imagery. It is unknown if all foundation elements were removed and should be anticipated in the subsurface during grading of the site.

2.2 Regional Geologic Conditions

The project site is located in the western part of the Tustin Plain within the Peninsular Ranges geomorphic province west of Santiago Creek drainage. The Peninsular Ranges geomorphic province extends 900 miles southward from the Los Angeles Basin to the tip of Baja California (Yerkes et al., 1965) and is

characterized by elongate northwest-trending mountain ranges separated by sediment-floored valleys. The most dominant structural features of the province are the northwest-trending fault zones, most of which die out, merge with, or are terminated by the steep reverse faults at the southern margin of the Transverse Ranges geomorphic province.

East of the site are the northwest-trending Santa Ana Mountains, a large range which has been uplifted on its eastern side along the Whittier-Elsinore Fault Zone, producing a tilted, irregular highland that slopes westward toward the sea. Sediments eroded from the Santa Ana Mountains have been transported by Santiago Creek and the lower reach of the Santa Ana River to build a large, broad alluvial fan known as the Tustin Plain. The Tustin Plain is comprised of relatively flat-lying, unconsolidated to semi-consolidated clastic sediments that are approximately 1,000 to 1,100 feet thick (Singer, 1973; Sprotte et al., 1980a and 1980b). Beneath the site, the near surface, unconsolidated, relatively fine-grained sediments are Holocene age (less than 11,000 years old) and consist of predominately youthful alluvial fan deposits (Sprotte et al., 1980a and 1980b). These sediments in turn are underlain at depth by sedimentary bedrock of Tertiary age.

The surficial geologic units mapped in the vicinity of the site are shown on Figure 3, *Regional Geology Map*.

2.3 Subsurface Soil Conditions

Based upon our review of pertinent geotechnical literature and our subsurface exploration, the site is underlain by undocumented fill (Map Symbol: Afu) in the upper five to seven feet, localized deeper fill to seven feet below grade was interpreted in boring LB-5 due to the presence of fresh, mechanically fractured black slaty gravels and cobble size rock fragments. Review of historic aerial imagery indicates former structures were onsite until circa 2010. Foundation elements should be anticipated in the subsurface during grading of the site. Refusal at shallow depth in boring LB-2 was encountered which is within the footprint of a historical structure formerly located onsite (NETR, 2019). The artificial fill is underlain by Quaternary-age old alluvial fan deposits (Map Symbol: Qof) extending to the maximum exploration depth of 51 feet bgs. The overlying undocumented fill (Afu) encountered within our excavations generally consisted of a loose to dense silty sand and sand with gravel and small mechanically fractured cobbles. The native soils (Qof) were generally composed of slightly

moist to moist, dense to very dense, well-graded gravel with sand and silt, sand with gravel, and silty sand with small weathered cobbles derived from the sedimentary formations in the Santa Ana Mountains. The in-situ moisture content within the upper approximately 15 feet generally ranged from 2 to 7 percent. More detailed descriptions of the subsurface soil are presented on the boring logs in Appendix B.

2.3.1 Compressible and Collapsible Soil

Soil compressibility refers to a soil's potential for settlement when subjected to increased loads as from a fill surcharge or a new structure. Based on our observations and the laboratory test results, the native soil encountered is generally considered slightly compressible. Removal and recompaction of this material under shallow foundations is recommended to reduce the potential for adverse total and differential settlement of the proposed improvements.

Collapse potential (moisture sensitivity, sometimes referred to as 'hydrocollapse') refers to the potential settlement of a soil under existing stresses upon being wetted. Based upon the dense nature of encountered sands and gravel, the hydrocollapse potential of the onsite soil is expected to be very low.

2.3.2 Expansive Soils

Expansive soils contain significant amounts of clay particles that swell considerably when wetted and shrink when dried. Foundations constructed on these soils are subjected to large uplifting forces caused by the swelling. Without proper measures taken, heaving and cracking of building foundations and slabs-on-grade could result.

A near-surface soil sample from the proposed fire station building area was tested for expansion index. The results of the tests indicated soil with very low expansion potential. Based on these test results, the near surface soil is expected to have a very low expansion potential. The results of the expansion testing are included in Appendix C of this report

2.3.3 Sulfate Content

Water-soluble sulfates in soil can react adversely with concrete. However, concrete in contact with soil containing sulfate concentrations of less than 0.1 percent by weight is considered to have negligible sulfate exposure based on the American Concrete Institute (ACI) provisions, adopted by the 2016 CBC (CBC, 2016, Chapter 19; and ACI, 2008).

A near-surface soil sample was tested for soluble sulfate content. The result of this test indicated a sulfate content of less than 0.02 percent by weight, indicating negligible sulfate exposure. As such, the soils exposed at pad grade are not expected to pose a significant potential for sulfate reaction with concrete. The results of the chemical analyses are included in Appendix C of this report

2.3.4 Resistivity, Chloride and pH

Soil corrosivity to ferrous metals can be estimated by the soil's electrical resistivity, chloride content and pH. In general, soil having a minimum resistivity between 1,000 and 2,000 ohm-cm is considered corrosive, and soil having a minimum resistivity less than 1,000 ohm-cm is considered severely corrosive. Soil with a chloride content of 500 parts-per-million (ppm) or more is considered corrosive to ferrous metals.

As a screening for potentially corrosive soil, a soil sample was tested during this investigation to determine its minimum resistivity, chloride content, and pH. These tests indicated a minimum resistivity of 1,570 ohm-cm, chloride content of 187 ppm, and pH of 7.1. Based on these results, the onsite soil is considered corrosive to ferrous metals. The results of the chemical analyses are included in Appendix C of this report.

2.4 Groundwater

Groundwater was not encountered in our borings excavated to a maximum depth of 51 feet below the existing ground surface (bgs). The historical high groundwater level in the area was estimated to have been on the order of 172 feet bgs in State Well 04S09W33M001S, located 0.6 miles southeast of the site (CDWR, 2019). The California Geological Survey (1997) Seismic Hazard Zone Report for this region shows the site area as not having historically shallow

groundwater levels (greater than 40 feet bgs). Based on this, groundwater has historically been deep, and shallow groundwater is not expected at the site.

Fluctuations of the groundwater level and localized zones of perched water should be anticipated below grade during and following the rainy season. Irrigation of landscaped areas and infiltration of groundwater can also cause a fluctuation of local groundwater levels and may create temporary zones of perched water.

2.5 Faulting and Seismicity

In general, the primary seismic hazards for sites in the region include surface rupture along active faults and strong ground shaking. The potential for fault rupture and seismic shaking are discussed below.

2.5.1 Surface Faulting

One of the primary seismic hazards for this region is surface fault rupture. Our assessment of the possible presence of active faulting through the proposed improvement project site included a review of available literature, maps, and aerial photographs.

Our review of available in-house literature indicates that there are no known active faults traversing the site and the site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone. Therefore, the potential risk for surface fault rupture through the site is considered low.

The closest known active or potentially active faults are the Elysian Park Blind Thrust and the Puente Hills Blind Thrust fault systems located approximately 9 miles northwest of the project site. The known regional active and potentially active faults that could produce the most significant ground shaking at the site include the Whittier-Elsinore, San Andreas, Sierra Madre, San Jacinto, Newport-Inglewood, Raymond, Puente Hills, Verdugo-Eagle Rock, Elysian Park and Norwalk faults. Active faults within a 60-mile radius from the site are listed in Appendix D.

2.5.2 Seismic Design Parameters

The principal seismic hazard to the site is ground shaking resulting from an earthquake occurring along any of several major active and potentially active faults in southern California, see Figure 4, *Regional Fault and Historical Seismicity Map*. The intensity of ground shaking at a given location depends primarily upon the earthquake magnitude, the distance from the source, and the site response characteristics. Accordingly, design of the project should be performed in accordance with all applicable current codes and standards utilizing the appropriate seismic design parameters to reduce seismic risk as defined by California Geological Survey (CGS) Chapter 2 of Special Publication 117A (CGS, 2008). The 2016 edition of the California Building Code (CBC) is the current edition of the code. Through compliance with these regulatory requirements and the utilization of appropriate seismic design parameters selected by the design professionals, potential effects relating to seismic shaking can be reduced. A summary of the analysis is provided in Appendix D, *Seismic Analysis*.

The following code-based seismic parameters should be considered for design under the 2016 CBC:

Table 1 - 2016 CBC Seismic Design Parameters

Description (2016 CBC reference)	Parameter	Design Value
Site Latitude, degrees		33.7873
Site Longitude, degrees		-117.8411
Site Class Definition (1613A.3.2)		D
Mapped MCE Spect Resp Accel at 0.2s for (Fig 1613.3.1(1)), using USGS	S_s	1.5
Mapped MCE Spect Resp Accel at 1.0s for (Fig 1613.3.1(2)) using USGS	S_1	0.549
Short Period Site Coefficient (Table 1613A.3.3(1))	F_a	1.0
Long Period Site Coefficient (Table 1613A.3.3(2))	F_v	1.5
Adjusted MCE Spectral Response Acceleration at 0.2s Period [$=F_a S_s$] (Eq. 16-37)	S_{MS}	1.5
Adjusted MCE Spectral Response Acceleration at 1s Period [$=F_v S_1$] (Eq. 16-38)	S_{M1}	0.823
Design Spectral Response Acceleration at 0.2s Period, 5% damped [$=2/3 S_{MS}$] (Eq. 16-39)	S_{DS}	1.0
Design Spectral Response Acceleration at 1s Period, 5% damped [$=2/3 S_{M1}$] (Eq 16-40)	S_{D1}	0.549
Is S_1 greater than or equal to 0.75?		No
Seismic Design Category [$=$ "D" if $S_1 < 0.75$] (1613A.2.5)		D



2.5.3 Seismic Parameters for Geotechnical Evaluation

Based on ASCE 7-10 Equation 11.8-1, the F_{PGA} is 1.0, the PGA is 0.515g, and the PGA_M is 0.51g. This is the value used for seismic analysis of the onsite soils. As an added check, PGA and hazard deaggregation were also estimated using the United States Geological Survey's (USGS) 2008 Interactive Deaggregations utility. The results of this analysis indicate that the predominant modal earthquake has a PGA of 0.58g with magnitude of approximately 6.9 (M_W) at a distance on the order of 12.8 kilometers for the Maximum Considered Earthquake (2% probability of exceedance in 50 years); 2/3 of this value is 0.39g. Results are included in Appendix D. This is not an exhaustive site-specific analysis, yet is useful in evaluating the general seismic potential at the site as an added check.

2.5.4 Historical Seismicity

Figure 4, *Regional Fault and Historical Seismicity Map* shows recorded historical regional seismic events (those that have been recorded since the mid 1700s) with respect to the site. Based on this map, it appears that the site has been exposed to relatively significant seismic events; however, this site does not appear to have experienced more severe seismicity than compared to much of southern California in general. We are unaware of documentation indicating that past earthquake damage in the site vicinity has been significantly worse than for the majority of southern California. In addition, we are unaware of damage in the site vicinity as the result of liquefaction, lateral spreading, or other related phenomenon.

We also performed an evaluation of site historical seismicity with respect to significant past earthquakes (those recorded from the 1800s with magnitudes 5 or greater) using the EQSEARCH computer program (Blake, 2011; see Appendix D). This is a relatively simple analysis, based on epicenters, and does not include more complex characteristics of earthquakes, such as rupture length and direction; however, it gives an idea of past seismicity at the site. This analysis suggests that the largest ground acceleration at the site generated from the magnitude 6.3Mw 1933 Long Beach Earthquake along the Newport Inglewood Fault is estimated to have been roughly 0.16g.

2.6 Secondary Seismic Hazards

In general, secondary seismic hazards for sites in the region could include soil liquefaction, earthquake-induced settlement, lateral displacement, landsliding, and earthquake-induced flooding. The potential for secondary seismic hazards at the site is discussed below.

2.6.1 Liquefaction Potential

Liquefaction is the loss of soil shear strength due to a buildup of pore-water pressure during severe and sustained ground shaking. Liquefaction is associated primarily with loose (low density), saturated, fine-to-medium grained, cohesionless soils. As the shaking action of an earthquake progresses, the soil grains are rearranged and the soil densifies within a short period of time. Rapid densification of the soil results in a buildup of pore-water pressure. When the pore-water pressure approaches the total overburden pressure, the soil shear strength reduces greatly and this soil temporarily behaves similarly to a fluid. Effects of liquefaction can include sand boils, settlement, and bearing capacity failures below structural foundations.

As shown on the Seismic Hazard Zones map for the Orange Quadrangle (CGS, 1998), the project site is **not** located within an area that has been identified by the State of California as being potentially susceptible to liquefaction (Figure 5, *Seismic Hazard Map*).

We have evaluated liquefaction potential of the soil encountered in our borings assuming a historic high groundwater depth deeper than 50 feet. Our analysis was based on the modified Seed Simplified Procedure as detailed by Youd et al. (2001) and Martin and Lew (1999), which compares the seismic demand on a soil layer (Cyclic Stress Ratio, or CSR) to the capacity of the soil to resist liquefaction (Cyclic Resistance Ratio, or CRR), (Youd et al, 2001). A minimum required factor of safety of 1.3 was used in our analysis, with factor of safety defined as CRR/CSR. As required, our analysis assumes that the design earthquake would occur while the groundwater is at its estimated historically highest level. In the SPT method, soil resistance to liquefaction is estimated based on several factors, including SPT sampling blow counts normalized and corrected for several factors including fines content, and overburden

pressure. Soil plasticity and moisture content are also considered in an evaluation of liquefaction. Parameters utilized in our analysis include Standard Penetration Test (SPT) results from the borings, visual descriptions of soil samples retrieved, and geotechnical laboratory test results.

Based on our analysis, the nature of the onsite soils, and the historically deep groundwater level, the potential for liquefaction at the site is considered very low.

2.6.2 Seismically Induced Settlement

During a strong seismic event, seismically induced settlement can occur within loose to moderately dense, dry or saturated granular soil. Settlement caused by ground shaking is often nonuniformly distributed, which can result in differential settlement.

We have performed analyses to estimate the potential for seismically induced settlement using the method of Tokimatsu and Seed (1987), and based on Martin and Lew (1999), considering the maximum considered earthquake (MCE) peak ground acceleration (PGA_M). The results of our analyses suggest that the onsite soils are susceptible to less than an 1-inch of seismic settlement based on the MCE. Differential settlement due to seismic loading is assumed to be less than $\frac{1}{2}$ inch over a horizontal distance of 40 feet based on the MCE. A summary of seismic settlement analysis is included in Appendix D.

2.6.3 Seiches and Tsunamis

Seiches are large waves generated in enclosed bodies of water in response to ground shaking. Tsunamis are waves generated in large bodies of water by fault displacement or major ground movement. Based on the location of the site and distance from contained water facilities, seiches and tsunamis are not a hazard to the site.

2.7 Slope Stability and Landslides

The potential for seismically induced landsliding to occur at the site is considered low due to the absence of slopes at the site. In addition, based on review of the

Seismic Hazard Zones Map for the Orange Quadrangle (CGS, 1998), the site is **not** located within an area that has been identified by the State of California as being potentially susceptible to seismically induced landslides (Figure 5, *Seismic Hazard Map*). Proposed slopes, while not anticipated, should be engineered and constructed at a gradient of 2:1 (horizontal:vertical) or flatter.

2.8 Flooding and Dam Inundation Potential

The site is not located within the 100-year or 500-year flood plain based on the Federal Emergency Management Agency (FEMA) flood maps (see Figure 7, *Flood Hazard Zone Map*).

Flooding can also result from the failure of dams. Based on our review of dam inundation data by the California Office of Emergency Services (OES), the site is not located near dams or in an area shown as susceptible to dam inundation, see Figure 6, *Dam Inundation Map*.

2.9 Infiltration Testing

Infiltration tests was conducted in two of the excavated borings (LB-4 and LB-5) to estimate the infiltration rate of the onsite soils at the depths tested. The infiltration test was conducted at bottom depths of approximately 14 and 20.5 feet below the existing ground surface.

Well permeameter tests are useful for field measurements of soil infiltration rates, and are suited for testing when the design depth of the basin or chamber is deeper than current existing grades. It should be noted that this is a clean-water, small-scale test, and that correction factors need to be applied. The test consists of excavating a boring to the depth of the test (or deeper if it is partially backfilled with soil and a bentonite plug with a thin soil covering is placed just below the design test elevation). A layer of clean sand or gravel is placed in the boring bottom to support temporary perforated well casing pipe and a float valve. In addition, coarse sand is poured around the outside of the well casing within the test zone to prevent the boring from caving/collapsing or eroding when water is added. The float valve, lowered into the boring inside the casing, adds water stored in barrels at the top of the hole to the boring as water infiltrates into the soil, while maintaining a relatively constant water head in the boring. The incremental infiltration rate as measured during intervals of the test is defined as the incremental flow rate of water infiltrated, divided by the surface area of the

infiltration interface. The test was conducted based on the USBR 7300-89 test method.

Raw infiltration rates for the well permeameter tests may be assumed to be about 4.5 in/hour within the gravel layer generally encountered at a depth of 15 to 20 feet bgs, but should be considered negligible in the clayey sand layer at a depth of approximately 10 feet in boring LB-4. These are raw values and do not include a factor of safety or correction. Results of infiltration testing are provided in Appendix B. Further discussion on infiltration testing and recommendations are included in Section 3.9.

2.10 Other Potential Hazards Listed on CGS Note 48

The following naturally occurring hazards are not believed to exist at the site nor in the region: methane gas, hydrogen-sulfide gas, tar seeps, volcanic eruption, radon-22 gas, and naturally occurring asbestos in geologic formations associated with serpentine.

We are unaware of significant subsidence or damage from subsidence near the site due to groundwater withdrawal.

3.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of this study, the proposed fire station is feasible from a geotechnical standpoint. No severe geologic or soils related issues were identified that would preclude development of the site for the proposed improvements. The most significant geotechnical issues at the site are those related to the potential for strong seismic shaking, undocumented fill soils and potentially compressible soils. Good planning and design of the project can limit the impact of these constraints. Remedial recommendations for these and other geotechnical issues are provided in the following sections.

3.1 General Earthwork and Grading

All grading should be performed in accordance with the General Earthwork and Grading Specifications presented in Appendix E, General Earthwork Recommendations, unless specifically revised or amended below or by future recommendations based on final development plans.

3.1.1 Site Preparation

Prior to construction, the site should be cleared of vegetation, trash and debris, which should be disposed of offsite. Any underground obstructions should be removed, as should trees and their root systems. Resulting cavities should be properly backfilled and compacted. Efforts should be made to locate existing utility lines. Those lines should be removed or rerouted if they interfere with the proposed construction, and the resulting cavities should be properly backfilled and compacted.

Although not encountered during this investigation, abandoned septic tanks, seepage pits, or other buried structures, or items related to past site uses may be present. If such items are encountered during grading, they will require further evaluation and special consideration.

3.1.2 Overexcavation and Recompanction

To reduce the potential for adverse differential settlement of the proposed improvements, the underlying subgrade soil should be prepared in such a manner that a uniform response to the applied loads is achieved. For the proposed fire station building and apparatus building constructed with

shallow foundations, we recommend that onsite soils be overexcavated and recompacted to a minimum depth of 2 feet below the bottom of the proposed footings or 5 feet below existing grade, whichever is deeper. In addition, existing undocumented artificial fill in structural areas should be removed to undisturbed native alluvial soil. Where feasible, overexcavation and recompaction should extend a minimum horizontal distance of 5 feet from perimeter edges of the proposed footings, or a distance equal to the depth of overexcavation, whichever is greater.

Local conditions, such as those interpreted in boring LB-5 may require that deeper overexcavation be performed; such areas should be evaluated by Leighton during grading.

Areas outside these overexcavation limits planned for asphalt or concrete pavement, flatwork, and areas to receive fill should be overexcavated to a minimum depth of 18 inches below the existing ground surface or 12 inches below the proposed subgrade, whichever is deeper. Overexcavation for site walls should extend a minimum 2 feet below the bottom of the wall footings.

All excavation or removal bottoms should be observed by a representative of the geotechnical engineer prior to placement of fill or other improvements to determine that geotechnically suitable soil is exposed. The overexcavation in the building area may also require observation by the City Grading Inspector prior to fill placement. Excavation bottoms observed to be suitable for fill placement or other improvements should be scarified to a depth of at least 8 inches, moisture-conditioned as necessary to achieve a moisture content approximately 2 to 3 percentage points above the optimum moisture content, and then compacted to a minimum of 90 percent of the laboratory derived maximum density as determined by ASTM Test Method D 1557 (Modified Proctor).

Once final development plans are completed and building loads have been calculated this information should be provided to Leighton for geotechnical review to ensure our recommendations have been properly interpreted and remain appropriate for the project as currently proposed.

3.1.3 Fill Placement and Compaction

The onsite soil is geotechnically suitable for use as compacted structural fill, provided it is free of debris and oversized material (cobbles) (greater than 6 inches in largest dimension). Any soil to be placed as fill, whether onsite or imported material, should be reviewed and possibly tested by Leighton.

Based upon the anticipated conceptual plan, site grading is not expected to require significant cut or fill; however, excavations as deep as 5 to 6 feet with localized deeper excavation should be expected for the removal and reworking of all undocumented fill and overexcavation of building foundations. All fill soil should be placed in thin, loose lifts, moisture-conditioned as necessary to achieve a moisture content approximately 2 to 3 percentage points above the optimum moisture content, and then compacted to a minimum of 90 percent of the laboratory derived maximum density as determined by ASTM Test Method D 1557 (Modified Proctor). Aggregate base for pavement should be compacted to a minimum of 95 percent relative compaction.

3.1.4 Import Fill Soil

If import soil is to be placed as fill, it should be geotechnically accepted by Leighton. Preferably at least 3 working days prior to proposed import to the site, the contractor should provide Leighton pertinent information of the proposed import soil, such as location of the soil, whether stockpiled or native in place, and pertinent geotechnical reports if available. We recommend that a Leighton representative visit the proposed import site to observe the soil conditions and obtain representative soil samples. Potential issues may include soil that is more expansive than onsite soil, soil that is too wet, soil that is too rocky or too dissimilar to onsite soils, oversize material, organics, debris, environmental unsuitability etc.

3.1.5 Shrinkage and Subsidence

The change in volume of excavated and recompacted soil varies according to soil type and location. This volume change is represented as a percentage increase (bulking) or decrease (shrinkage) in volume of fill after removal and recompaction. Subsidence occurs as in-place soil (e.g., natural ground) is moisture-conditioned and densified to receive fill, such

as in processing an overexcavation bottom. Subsidence is in addition to shrinkage due to recompaction of fill soil. Field and laboratory data used in our calculations included laboratory-measured maximum dry densities for soil types encountered at the subject site, the measured in-place densities of soils encountered, sampling blow counts, and our experience. We preliminarily estimate the following earth volume changes will occur during grading:

Shrinkage and Subsidence	
Shrinkage	Approximately 10 +/- 3 percent
Subsidence (overexcavation bottom processing)	Approximately 0.1 foot

The level of fill compaction, variations in the dry density of the existing soils and other factors influence the amount of volume change. Some adjustments to earthwork volume should be anticipated during grading of the site.

3.2 Foundation Recommendations

The following recommendations are based on soils with a very low expansion potential. The structural engineer should design the footing reinforcement in accordance with current California Building Code (CBC) requirements. Local agencies, the structural engineer or the CBC may have requirements that are more stringent.

Overexcavation and recompaction of the footing subgrade soil should be performed as detailed in Section 3.1.2.

3.2.1 Minimum Embedment and Width

Based on our preliminary investigation, footings should have a minimum embedment depth and width per the 2016 CBC. These minimums include a depth and width of 12 inches.

3.2.2 Allowable Bearing

An allowable bearing pressure of 2,000 pounds-per-square-foot (psf) may be used, based on the minimum embedment depth and width above. This allowable bearing value may be increased by 200 psf per foot increase in depth or width to a maximum allowable bearing pressure of 4,000 psf. These allowable bearing pressures are for total dead load and sustained live loads. Footing reinforcement should be designed by the structural engineer.

3.2.3 Lateral Load Resistance

Soil resistance available to withstand lateral loads on a shallow foundation is a function of the frictional resistance along the base of the footing and the passive resistance that may develop as the face of the structure tends to move into the soil. The frictional resistance between the base of the foundation and the subgrade soil may be computed using a coefficient of friction of 0.40. The passive resistance may be computed using an allowable equivalent fluid pressure of 240 pounds per cubic foot (pcf), assuming there is constant contact between the footing and undisturbed soil. The maximum passive resistance should not exceed 3,500 psf. The coefficient of friction and passive resistance may be combined without further reduction.

3.2.4 Increase in Bearing and Friction - Short Duration Loads

The allowable bearing pressure and coefficient of friction values may be increased by one-third when considering loads of short duration, such as those imposed by wind and seismic forces.

3.2.5 Settlement Estimates

The recommended allowable bearing capacity is generally based on a total allowable, post construction settlement of 1 inch. Differential settlement due to static loading is estimated at ½ inch over a horizontal distance of 30 feet. Since settlement is a function of footing sustained load, size and contact bearing pressure, differential settlement can be expected between adjacent columns or walls where a large differential loading condition exists.

3.3 Recommendations for Slabs-On-Grade

Concrete slabs-on-grade should be designed by the structural engineer in accordance with the current CBC for a soil with a very low expansion potential. Laboratory testing should be conducted at finish grade to evaluate the Expansion Index (EI) of near-surface subgrade soils. Where conventional light floor loading conditions exist, the following minimum recommendations should be used. More stringent requirements may be required by local agencies, the structural engineer, the architect, or the CBC. Slabs-on-grade should have the following minimum recommended components:

- Subgrade Moisture Conditioning: The subgrade soil should be moisture conditioned to at least 3 percentage points above optimum moisture content to a minimum depth of 18 inches prior to placing steel or concrete.
- Concrete Thickness: Thickness of slabs-on-grade should be designed by the structural engineer, but should be at least 4 inches thick (this is referring to the actual minimum thickness, not the nominal thickness). Reinforcing steel should be designed by the structural engineer, but as a minimum (for conventionally reinforced slabs) should be No. 4 rebar placed at 18 inches on center, each direction, mid-depth in the slab. Crack control joints should be placed at 13 feet on center or less, forming approximately square panels.

For the apparatus bay, the slab should be a minimum of 8 inches thick and underlain by 6 inches of aggregate base. Reinforcing steel should be designed by the structural engineer, but as a minimum should be No. 4 rebar placed at 18 inches on center, each direction, mid-depth in the slab. Construction joints should be designed by the structural engineer, but should be spaced no more than 13 feet on center, forming square sections.

- Moisture Vapor Retarder: We recommend a minimum of a 15-mil vapor retarder should be placed below slabs where moisture-sensitive floor coverings or equipment is planned. Since moisture will otherwise be transmitted up from the soil through the concrete, it is important that an intact vapor retarder be installed. We recommend that the vapor retarder intended for the specific conditions present be used and meet the requirements of ASTM E1745 and installed per ASTM E1643. The structural engineer should specify pertinent concrete design parameters and moisture migration prevention measures, such as whether or not a sand blotter layer should be

placed over the vapor retarder. If sand is placed on top of the vapor retarder, the contractor should not allow the sand to become wet prior to concrete placement (e.g., sand should not be placed if rain is expected). Sharp objects, such as gravel or other protruding objects that could puncture the moisture retarder should be removed from the subgrade prior to placing the vapor retarder, or a stronger vapor retarder intended for the specific conditions present can be used. *Mechanically fractured gravel and small cobbles observed during drilling and sampling resulted in angular sharp fragments that could puncture the barrier.*

Minor cracking of the concrete as it cures, due to drying and shrinkage is normal and should be expected. However, cracking is often aggravated by a high water/cement ratio, high concrete temperature at the time of placement, small nominal aggregate size, aggregate that is not sufficiently clean, and rapid moisture loss due to hot, dry, and/or windy weather conditions during placement and curing. Cracking due to temperature and moisture fluctuations can also be expected. Low slump concrete can reduce the potential for shrinkage cracking. Additionally, our experience indicates that reinforcement in slabs and foundations can generally reduce the potential for concrete cracking. The structural engineer should consider these components in slab design and specifications.

Moisture retarders can reduce, but not eliminate moisture vapor rise from the underlying soils up through the slab. Moisture retarders should be designed and constructed in accordance with the applicable American Concrete Institute, Portland Cement Association, Post-Tensioning Institute, ASTM International, and California Building Code requirements and guidelines.

Leighton does not practice in the field of moisture vapor transmission recommend that a qualified person, such as the flooring subcontractor and/or structural engineer, be consulted with to evaluate the general and specific moisture vapor transmission paths and any impact on the proposed construction. That person (or persons) should provide recommendations for mitigation of potential adverse impact of moisture vapor transmission on various components of the structures as deemed appropriate. In addition, the recommendations in this report and our services in general are not intended to address mold prevention, since we, along with geotechnical consultants in general, do not practice in the area of mold prevention. If specific

recommendations are desired, a professional mold prevention consultant should be contacted.

3.4 Seismic Design Parameters

Seismic parameters presented in this report should be considered during project design. In order to reduce the effects of ground shaking produced by regional seismic events, seismic design should be performed in accordance with the most recent edition of the California Building Code (CBC). The seismic design parameters listed in Table 1 of Section 0 of this report should be considered for the seismic analysis of the subject site.

3.5 Lateral Earth Pressures

The following retaining wall recommendations are included for design consideration of walls with a height less than 6 feet. We recommend that retaining walls be backfilled with very low expansive soil and constructed with a backdrain in accordance with the recommendations provided on Figure 8, *Retaining Wall Backfill and Subdrain Detail*. Using expansive soil as retaining wall backfill will result in higher lateral earth pressures exerted on the wall and are, therefore, not recommended. Retaining wall locations and configurations are unknown at the time of this report.

Table 2 - Retaining Wall Design Parameters

Static Equivalent Fluid Pressure (pcf)	
Condition	Level Backfill
Active	40
At-Rest (drained, compacted-fill backfill)	60
Passive (ultimate)	360 (Max. 5,000 psf)

The above values do not contain an appreciable factor of safety, so the structural engineer should apply the applicable factors of safety and/or load factors during design.

Cantilever walls that are designed to yield at least $0.001H$, where H is equal to the wall height, may be designed using the active condition. Rigid walls and walls braced at the top should be designed using the at-rest condition.

Passive pressure is used to compute soil resistance to lateral structural movement. In addition, for sliding resistance, a frictional resistance coefficient of 0.40 may be used at the concrete and soil interface. The lateral passive resistance should be taken into account only if it is ensured that the soil providing passive resistance, embedded against the foundation elements, will remain intact with time. A soil unit weight of 120 pcf may be assumed for calculating the actual weight of the soil over the wall footing.

In addition to the above lateral forces due to retained earth, surcharge due to improvements, such as an adjacent structure or traffic loading, should be considered in the design of the retaining wall. Loads applied within a 1:1 projection from the surcharging structure on the stem of the wall should be considered in the design. A third of uniform vertical surcharge-loads should be applied at the surface as a horizontal pressure on cantilever (active) retaining walls, while half of uniform vertical surcharge-loads should be applied as a horizontal pressure on braced (at-rest) retaining walls. To account for automobile parking surcharge, we suggest that a uniform horizontal pressure of 100 psf (for restrained walls) or 70 psf (for cantilever walls) be added for design, where autos are parked within a horizontal distance behind the retaining wall less than the height of the retaining wall stem.

We recommend that the wall designs for walls 6 feet tall or taller be checked seismically using an *additive seismic* Equivalent Fluid Pressure (EFP) of 28 pcf, which is added to the EFP. The *additive seismic* EFP should be applied at the retained midpoint.

Conventional retaining wall footings should have a minimum width of 24 inches and a minimum embedment of 12 inches below the lowest adjacent grade. An allowable bearing pressure of 2,000 psf may be used for retaining wall footing design, based on the minimum footing width and depth. This bearing value may be increased by 200 psf per foot increase in width or depth to a maximum allowable bearing pressure of 4,000 psf.

3.6 Cement Type and Corrosion Protection

Based on the results of laboratory testing (Appendix C), concrete structures in contact with the onsite soil will have negligible exposure to water-soluble sulfates in the soil. Therefore, common Type II cement may be used for concrete

construction. Concrete should be designed in accordance with ACI 318-14, Section 4.2 (ACI, 2014), adopted by the 2016 CBC (Section 1904A.2).

Based on our laboratory testing, the onsite soil is considered corrosive to ferrous metals. Metallic utilities should be avoided, or typical corrosion protection of underground metallic utilities should be considered. Corrosion information presented in this report should be provided to your underground utility contractors.

3.7 Pavement Design

Based on the design procedures outlined in the current Caltrans Highway Design Manual, and using an assumed design R-value of 40 for compacted silty sand subgrade soils, preliminary flexible pavement sections may consist of the following for the Traffic Indices (TI) indicated.

Table 3 – Hot Mix Asphalt (HMA) Pavement Sections

Traffic Index	Asphaltic Concrete (AC) Thickness (inches)	Class 2 Aggregate Base (AB) Thickness (inches)
5 or less (auto access)	3.0	4.0
7 (truck access)	4.0	4.0

For fire truck (60,000-pound “apparatus”) lanes, asphalt pavements designed for a TI=7 are recommended. However, note that undisturbed apparatus outrigger loads could cause local asphalt pavement punching damage. When possible, outrigger loads should be distributed over asphalt pavements with planks and plywood. Otherwise, areas where outrigger loads are anticipated could be paved with 8-inch-thick concrete as described below.

Portland cement concrete pavement sections were calculated in accordance with procedures developed by the Portland Cement Association. Concrete paving sections for three Traffic Indices (TIs) are presented below.

Table 4 – Portland Cement Concrete Pavement Sections

Traffic Index	Asphaltic Concrete (AC) Thickness (inches)	Class 2 Aggregate Base (AB) Thickness (inches)
5 or less (auto access)	6.0	4.0
7 (truck access)	8.0	6.0

We have assumed that this Portland cement concrete will have a compressive strength of at least 4,000 psi. Reinforcement should be specified by the structural engineer, but should be a minimum of #3 rebar at 18 inches on center each way. The PCC pavement sections should be provided with crack-control joints spaced no more than 13 feet on center each way. If sawcuts are used, they should have a minimum depth of $\frac{1}{4}$ of the slab thickness and made within 24 hours of concrete placement. We recommend that sections be as nearly square as possible.

PCC sidewalks should be at least 4 inches thick over prepared subgrade soil, with construction joints no more than 8 feet on center each way, with sections as nearly square as possible. Use of reinforcing will help reduce severity of cracking.

All pavement construction should be performed in accordance with the Standard Specifications for Public Works Construction. Field observations and periodic testing, as needed during placement of the base course materials, should be undertaken to ensure that the requirements of the standard specifications are fulfilled. Prior to placement of aggregate base, the subgrade soil should be processed to a minimum depth of 8 inches, moisture-conditioned, as necessary, and recompact to a minimum of 90 percent relative compaction. Aggregate base should be moisture conditioned, as necessary, and compacted to a minimum of 95 percent relative compaction.

3.8 Infiltration Recommendations

Infiltration Rate: We recommend an unfactored (small-scale) infiltration rate of 4.5 inches per hour be used for preliminary design for an infiltration system designed at a depth of 15 to 20 feet below the existing grade within the natural gravel layer. The infiltration chamber may be deepened by excavating trenches in the bottom of the infiltration chamber excavation for the length of the excavation, and backfilling

these trenches with ASTM C33 Fine Aggregate (washed concrete sand). Leighton should observe the soil in the excavation to confirm these recommendations.

We recommend that a correction factor/safety factor be applied to the infiltration rate in conformance with the Orange County guidelines, since monitoring of actual facility performance has shown that actual infiltration rates are lower than for small-scale tests. The small-scale infiltration rate should be divided by a correction factor of at least 2 for buried chambers, and at least 3 for open basins or for conditions where retained water will be exposed to the open atmosphere, but the correction/safety factor may be higher based on project-specific aspects.

The infiltration rates described herein are for a clean, unsilted infiltration surface in native, sandy alluvial soil. These values may be reduced over time as silting of the infiltration facility occurs. Furthermore, if the basin or chamber bottom is allowed to be compacted by heavy equipment, this value is expected to be significantly reduced. Infiltration of water through soil is highly dependent on such factors as grain size distribution of the soil particles, particle shape, fines content, clay content, and density. Small changes in soil conditions, including density, can cause large differences in observed infiltration rates. Infiltration is not suitable in compacted fill.

It should be noted that during periods of prolonged precipitation, the underlying soils tend to become saturated to greater and greater depths/extents. Therefore, infiltration rates tend to decrease with prolonged rainfall. It is difficult to extrapolate longer-term, full-scale infiltration rates from small-scale tests, and as such, this is a significant source of uncertainty in infiltration rates.

Additional Review and Evaluation: Infiltration rates are anticipated to vary significantly based on the location and depth. Infiltration concepts should be discussed with Leighton as infiltration plans are being developed. Leighton should review all infiltration plans, including specific locations and invert depths of proposed facilities. Further testing may be needed based on the design of infiltration facilities, particularly considering their type, depth and location.

General Design Considerations: The periodic flow of water carrying sediments into the infiltration facility, plus the introduction of wind-blown sediments and sediments from erosion of basin side walls, can eventually cause the bottom of the facility to accumulate a layer of silt, which has the potential of significantly reducing the overall infiltration rate. Therefore, we recommend that significant

amounts of silt/sediment not be allowed to flow into the facility within stormwater, especially during construction of the project and prior to achieving mature landscape on site. We recommend that an easily maintained, robust silt/sediment removal system be installed to pretreat storm water before it enters the infiltration facility.

As infiltrating water can seep within the soil strata nearly horizontally for long distances, it is important to consider the impact that infiltration facilities can have on nearby subterranean structures, such as basement walls or open excavations, whether onsite or offsite, and whether existing or planned. Any such nearby features should be identified and evaluated as to whether infiltrating water can impact these. Such features should be brought to Leighton's attention as they are identified.

Infiltration facilities should not be constructed adjacent to or under buildings. Setbacks should be discussed with Leighton during the planning process.

Infiltration facilities should be constructed with spillways or other appropriate means that would cause overflowing to not be a concern to the facility or nearby improvements.

For buried chambers, control/access manhole covers should not contain holes or should be screened to prevent mosquitos from entering the chambers.

Construction Considerations: We recommend that Leighton evaluate the infiltration facility excavations, to confirm that granular, undisturbed alluvium is exposed in the bottoms and sides. Additional excavation or evaluation may be required if silty or clayey soils are exposed.

It is critical to infiltration that the basin or chamber bottom not be allowed to be compacted during construction or maintenance; rubber-tired equipment and vehicles should not be allowed to operate on the bottom. We recommend that at least the bottom 3 feet of the basins or chambers be excavated with an excavator or similar.

If fill material is needed to be placed in the basin, such as due to removal of uncontrolled artificial fill, the fill material should be select and free-draining sand, and should be observed and evaluated by Leighton.

Maintenance Considerations: The infiltration facilities should be routinely monitored, especially before and during the rainy season, and corrective measures should be implemented as/when needed. Things to check for include proper upkeep, proper infiltration, absence of accumulated silt, and that de-silting filters/features are clean and functioning. Pretreatment desilting features should be cleaned and maintained per manufacturers' recommendations. Even with measures to prevent silt from flowing into the infiltration facility, accumulated silt may need to be removed occasionally as part of maintenance.

3.9 Temporary Excavations

All temporary excavations, including utility trenches, retaining wall excavations and other excavations should be performed in accordance with project plans, specifications and all OSHA requirements. Contractors should be advised that sand and gravelly fill soils should be considered Type C soils as defined in the California Construction Safety Orders.

No surcharge loads should be permitted within a horizontal distance equal to the height of cut or 5 feet, whichever is greater from the top of the slope, unless the cut is shored appropriately. Excavations that extend below an imaginary plane inclined at 45 degrees below the edge of any adjacent existing site foundation should be properly shored to maintain support of the adjacent structures.

Cantilever shoring should be designed based on an active equivalent fluid pressure of 35 pcf. If excavations are braced at the top and at specific design intervals, the active pressure may then be approximated by a rectangular soil pressure distribution with the pressure per foot of width equal to $25H$, where H is equal to the depth of the excavation being shored.

During construction, the soil conditions should be regularly evaluated to verify that conditions are as anticipated. The contractor should be responsible for providing the "competent person" required by OSHA, standards to evaluate soil conditions. Close coordination between the competent person and the geotechnical engineer should be maintained to facilitate construction while providing safe excavations.

3.10 Trench Backfill

Utility trenches should be backfilled with compacted fill in accordance with Sections 306-1.2 and 306-1.3 of the *Standard Specifications for Public Works Construction*, (SSPWC, “Greenbook”), 2018 Edition. Utility trenches may be backfilled with onsite material free of rubble, debris, organic and oversized material up to 3 inches in largest dimension. Prior to backfilling trenches, pipes should be bedded in and covered with either:

- (1) **Granular Bedding:** a uniform sand material with a Sand Equivalent (SE) greater-than-or-equal-to (\geq) 30, passing the No. 4 U.S. Standard Sieve (or as specified by the pipe manufacturer).
- (2) **CLSM:** Controlled Low Strength Material (CLSM) conforming to Section 201-6 of the SPWC. CLSM bedding should be placed to 6-inch (0.3 m) over the top of the conduit, and vibrated.

Pipe bedding should extend at least 4 inches below the pipeline invert and at least 12 inches over the top of the pipeline. The bedding and shading sand is recommended to be densified in place by vibratory, lightweight compaction equipment.

Trench backfill over the pipe bedding zone may consist of native and clean fill soils. All backfill should be placed in thin lifts (appropriate for the type of compaction equipment), moisture conditioned to slightly above optimum, and mechanically compacted to at least 90 percent of the laboratory derived maximum density as determined by ASTM Test Method D 1557.

3.11 Surface Drainage

Inadequate control of runoff water and/or poorly controlled irrigation can cause the onsite soils to expand and/or shrink, producing heaving and/or settlement of foundations, flatwork, walls, and other improvements. Maintaining adequate surface drainage, proper disposal of runoff water, and control of irrigation should help reduce the potential for future soil moisture problems. Positive surface drainage should be designed to be directed away from foundations and toward approved drainage devices, such as gutters, paved drainage swales, or watertight area drains and collector pipes.

Surface drainage should be provided to prevent ponding of water adjacent to the structures. In general, the area around the buildings should slope away from the building. We recommend that unpaved landscaped areas adjacent to the buildings be avoided. Roof runoff should be carried to suitable drainage outlets by watertight drain pipes or over paved areas.

3.12 Additional Geotechnical Services

The geotechnical recommendations presented in this report are based on subsurface conditions as interpreted from limited subsurface explorations and limited laboratory testing. Geotechnical recommendations provided in this report are based on information available at the time the report was prepared and may change as plans are developed. Additional geotechnical investigation and analysis may be required based on final improvement plans. Leighton should review the site and grading plans when available and comment further on the geotechnical aspects of the project. Geotechnical observation and testing should be conducted during excavation and all phases of grading operations. Our conclusions and preliminary recommendations should be reviewed and verified by Leighton during construction and revised accordingly if geotechnical conditions encountered vary from our preliminary findings and interpretations.

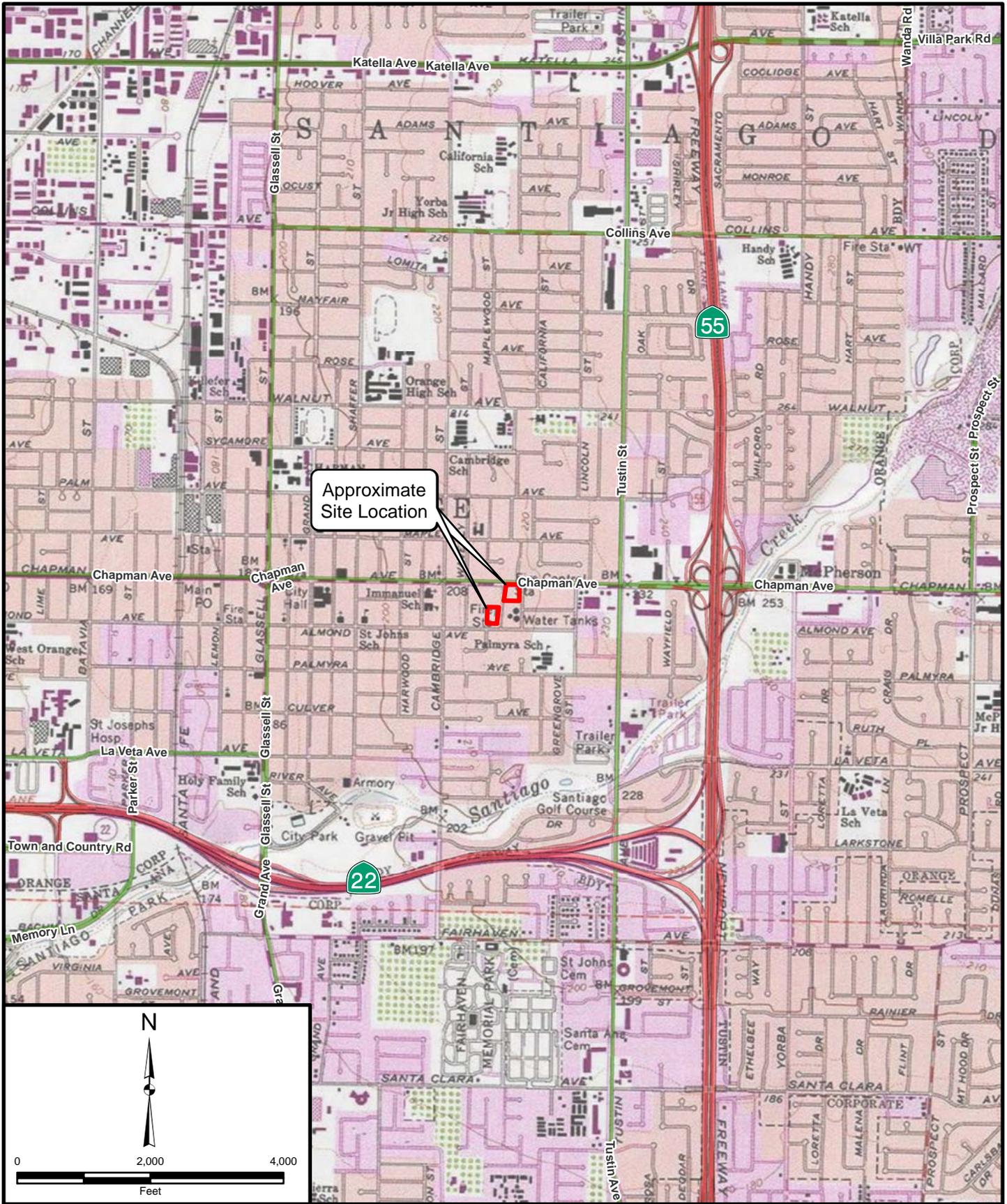
Geotechnical observation and testing should be provided:

- After completion of site clearing.
- During overexcavation of compressible soil.
- During compaction of all fill materials.
- After excavation of all footings and prior to placement of concrete.
- During utility trench backfilling and compaction.
- During pavement subgrade and base preparation.
- When any unusual conditions are encountered.

4.0 LIMITATIONS

This report was based in part on data obtained from a limited number of observations, site visits, soil excavations, samples, and tests. Such information is, by necessity, incomplete. The nature of many sites is such that differing soil or geologic conditions can be present within small distances and under varying climatic conditions. Changes in subsurface conditions can and do occur over time. Therefore, our findings, conclusions, and recommendations presented in this report are based on the assumption that Leighton Consulting, Inc. will provide geotechnical observation and testing during construction. Please refer to the GBA "Important Information about This Geotechnical Engineering Report" presented on at the end of this report.

This report was prepared for the sole use of WLC Architects, Inc. for application to the design of the proposed City of Orange Fire Station 1 in accordance with generally accepted geotechnical engineering practices at this time in California.



Project: 12482.001	Eng/Geol: JDH/PB
Scale: 1" = 2,000'	Date: September 2019
Base Map: ESRI ArcGIS Online 2019	
Thematic Information: Leighton	
Author: (kmanchikanti)	

SITE LOCATION MAP

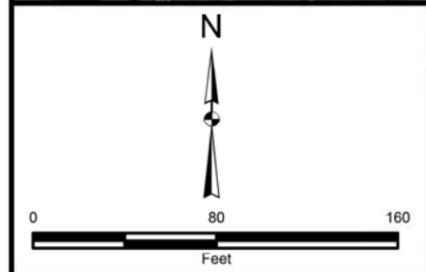
Proposed Fire Station 1

105 South Water Street

City of Orange, California

Figure 1

Leighton



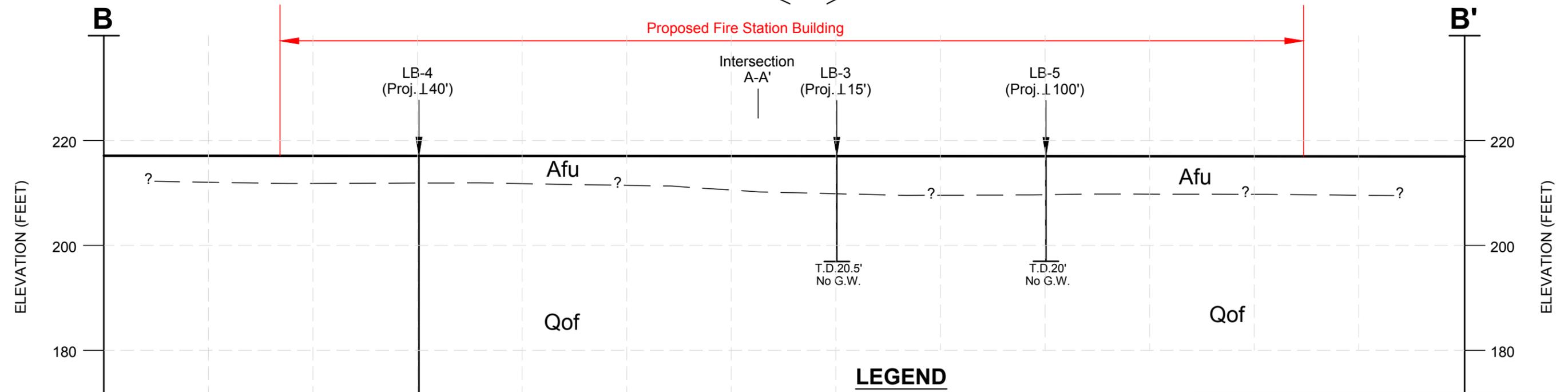
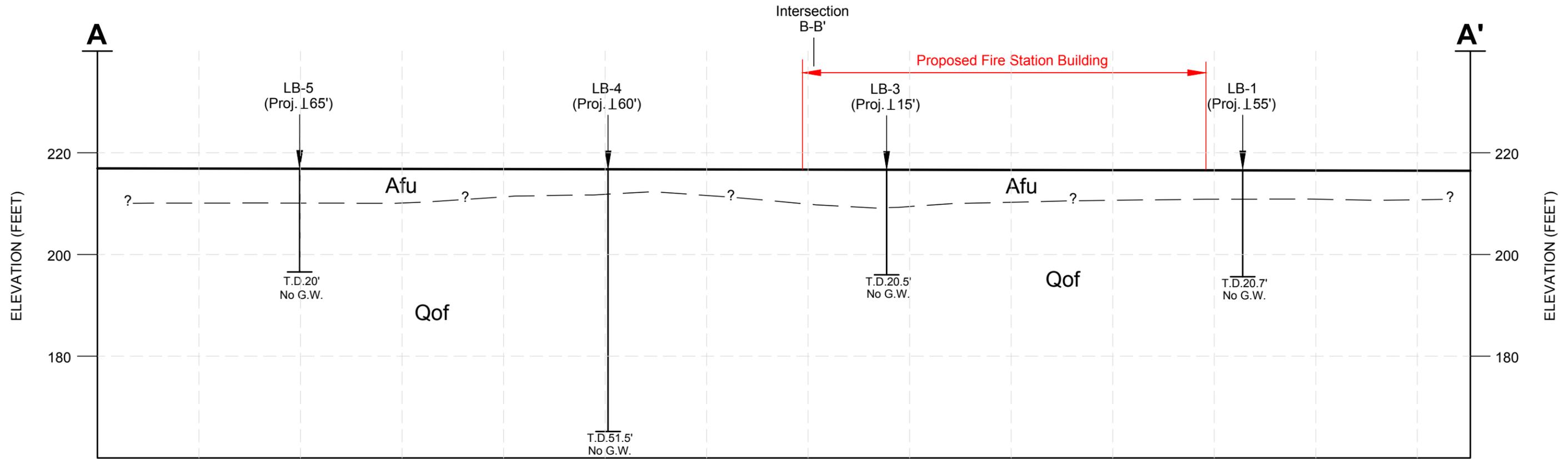
Project: 12482.001 Eng/Geol: JDH/PB
 Scale: 1" = 80' Date: September 2019
 Base Map: ESRI ArcGIS Online 2019
 Thematic Information: Leighton
 Author: (kmanc)

EXPLORATION LOCATION MAP

Proposed Fire Station 1
 105 South Water Street
 City of Orange, California

Figure 2





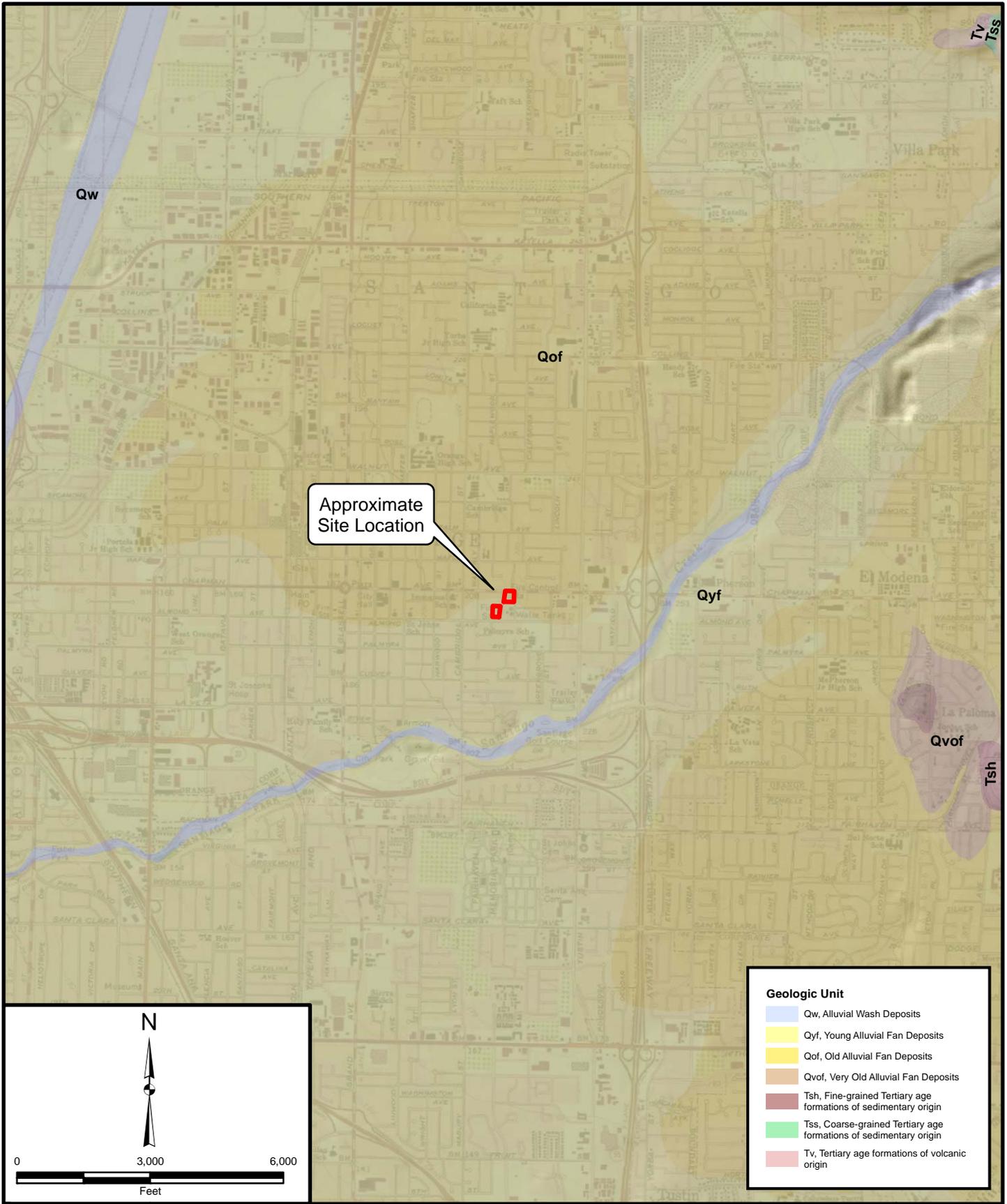
LEGEND

- Afu ARTIFICIAL FILL UNDOCUMENTED
- Qof QUATERNARY-AGE OLD ALLUVIAL FAN DEPOSITS

GEOTECHNICAL CROSS SECTIONS	
A-A' AND B-B'	
Proposed Fire Station 1 105 South Water Street, City of Orange, California	
Proj: 12482.001	Eng/Geol: JEH/PB
Scale: 1"=20'	Date: September 2019
Drafted By: BOT Checked By: BOT V:\DRAFTING\12482001\CAD\2019-09-25\12482-001_FJA_CS_2019-09-25.DWG (09-25-19 11:50:54AM) Plotted by: sbran	

Figure 2A





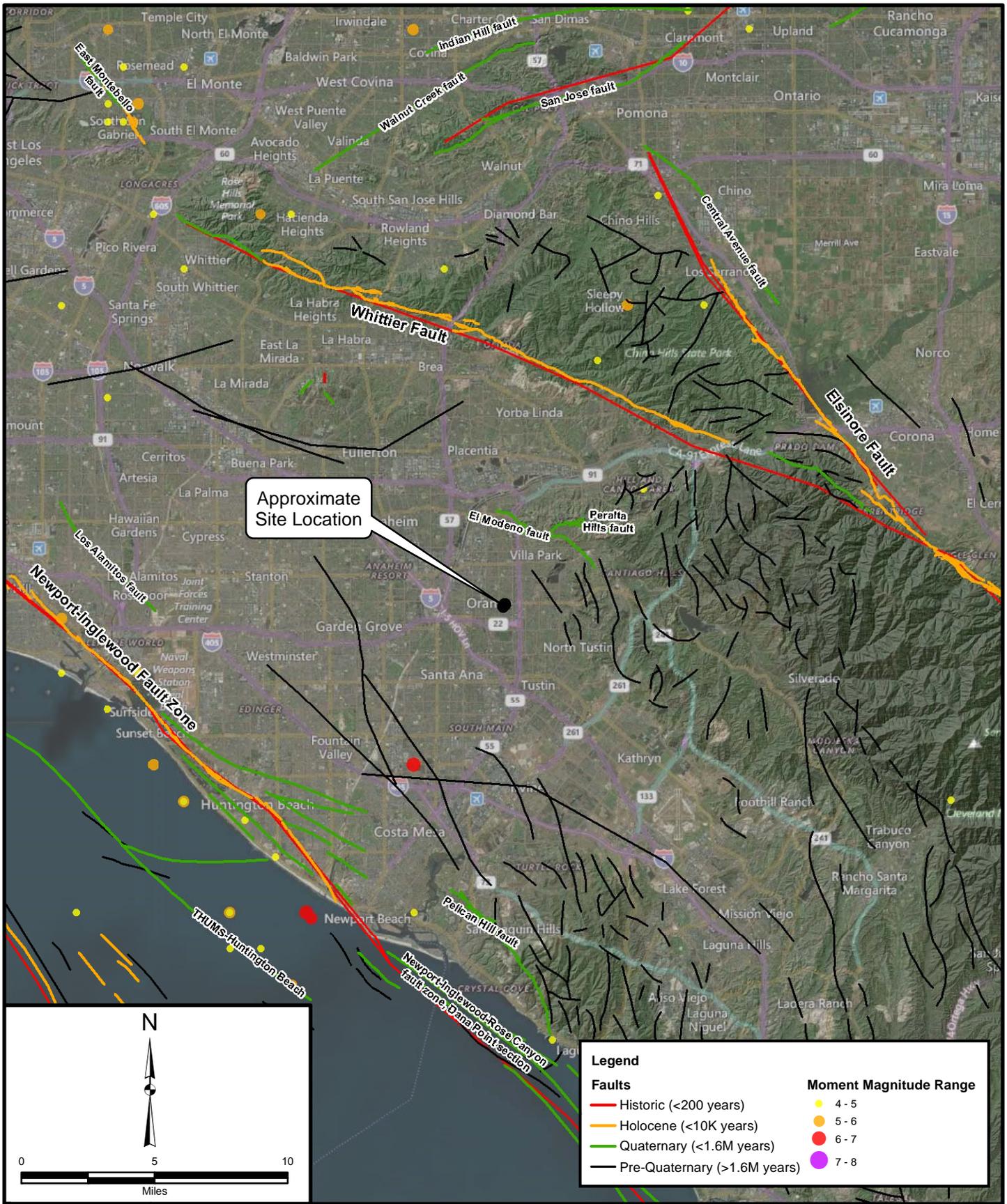
Project: 12482.001	Eng/Geol: JDH/PB
Scale: 1" = 3,000'	Date: September 2019
Base Map: ESRI ArcGIS Online 2019 Thematic Information: Leighton, USGS Author: (kmanchikanti)	

REGIONAL GEOLOGY MAP

Proposed Fire Station 1 105 South Water Street City of Orange, California

Figure 3

Leighton

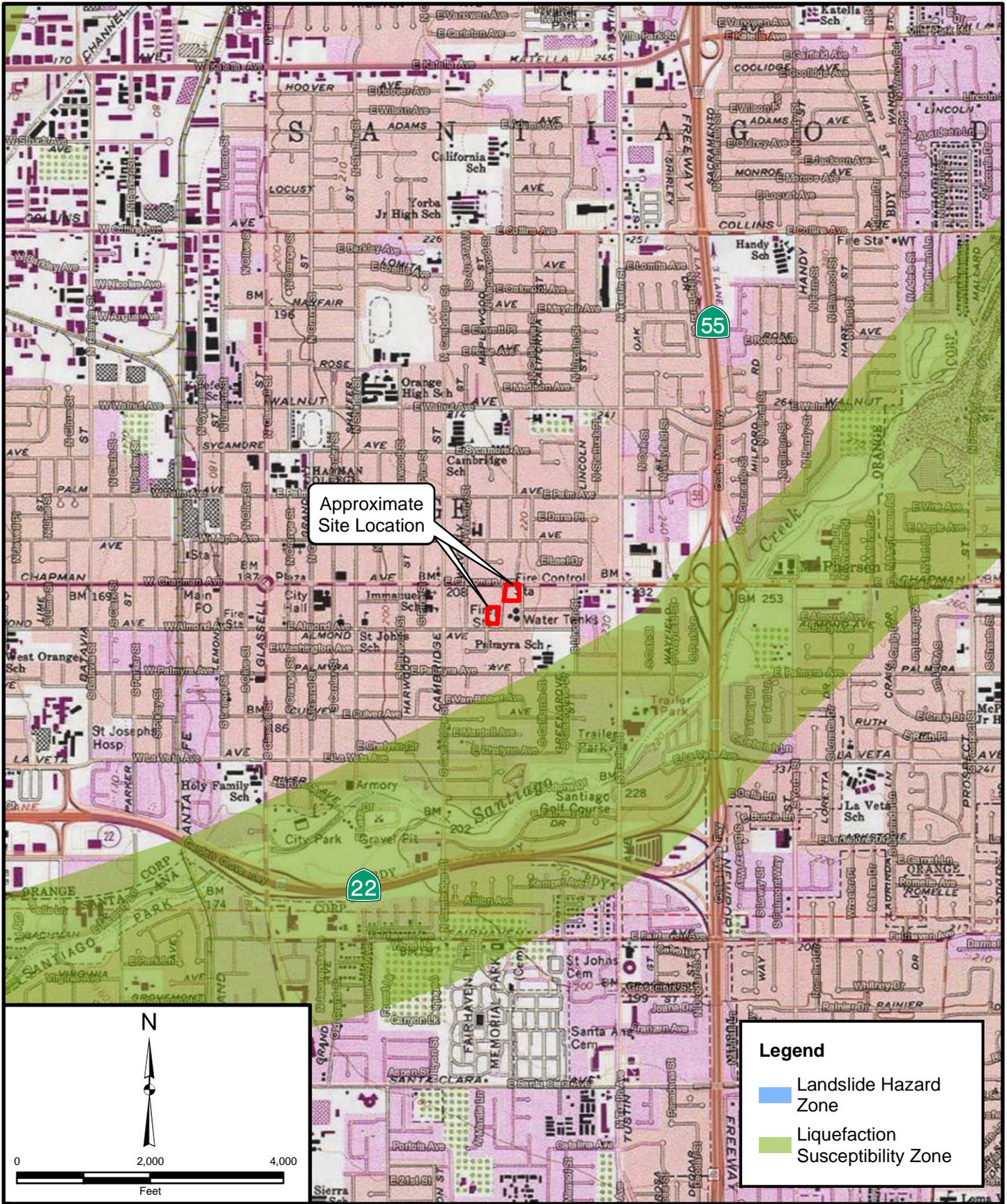


Project: 12375.001 Eng/Geol: JDH/PB
 Scale: 1" = 5 miles Date: September 2019
 Base Map: ESRI ArcGIS Online 2019
 Thematic Information: Leighton
 Author: Leighton Geomatics (kmanchikanti)

REGIONAL FAULT AND HISTORIC SEISMICITY MAP Proposed Fire Station 1 105 South Water Street, City of Orange, California

Figure 4

 Leighton



Approximate Site Location

Legend

- Landslide Hazard Zone
- Liquefaction Susceptibility Zone

N

0 2,000 4,000

Feet

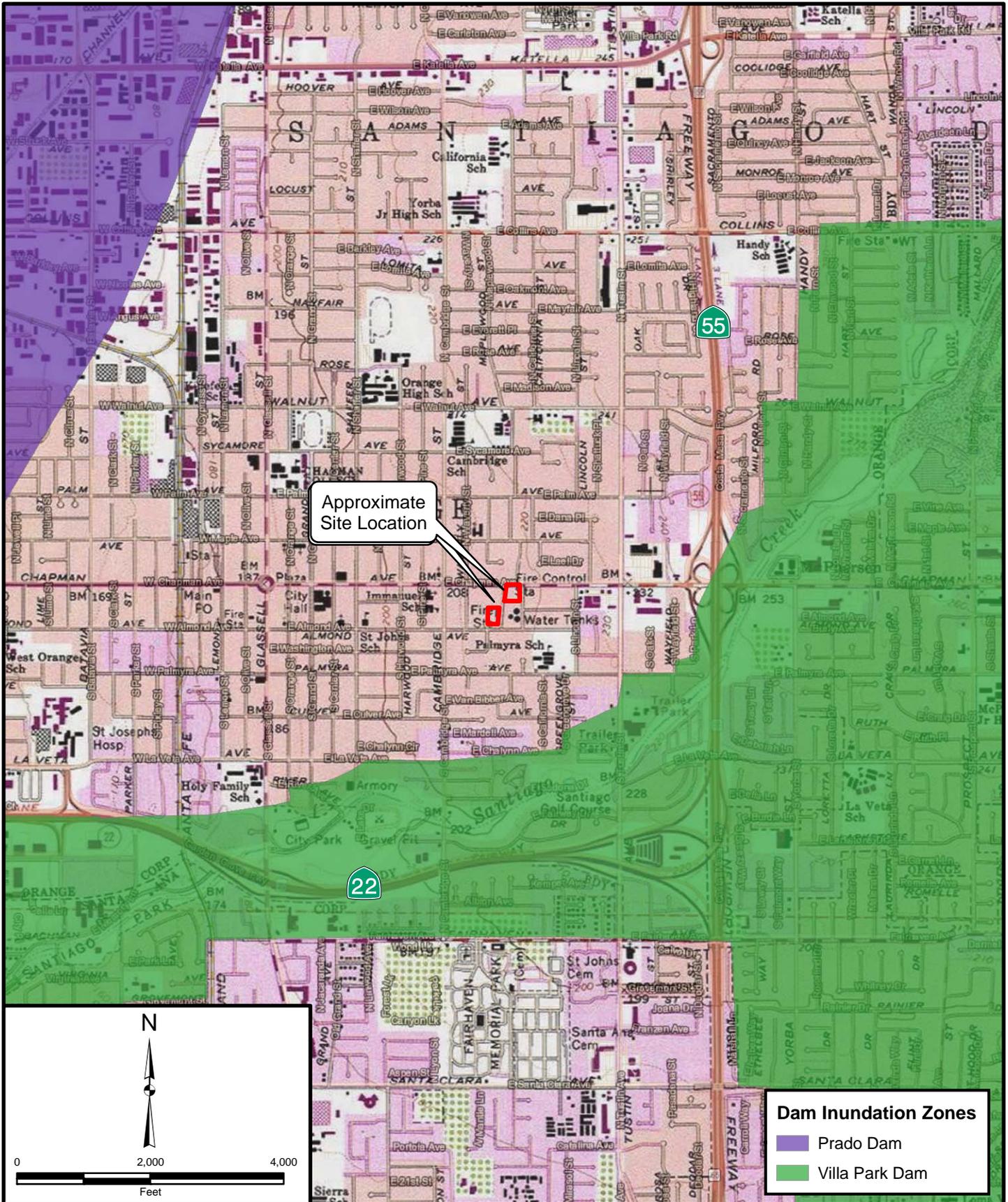
Project: 12482.001	Eng/Geol: JDH/PB
Scale: 1" = 2,000'	Date: September 2019
Base Map: ESRI ArcGIS Online 2019	
Thematic Information: Leighton	
Author: Leighton Geomatics (kmanchikanti)	

SEISMIC HAZARD MAP

Proposed Fire Station 1 105 South Water Street City of Orange, California

Figure 5

Leighton



Approximate Site Location

Dam Inundation Zones

- Prado Dam
- Villa Park Dam

Project: 12482.001	Eng/Geol: JDH/PB
Scale: 1" = 2,000'	Date: September 2019
Base Map: ESRI ArcGIS Online 2019 Thematic Information: Leighton, CA DWR, FEMA Author: Leighton Geomatics (kmanchikanti)	

DAM INUNDATION MAP

Proposed Fire Station 1 105 South Water Street City of Orange, California

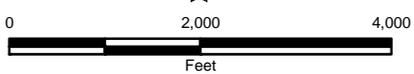
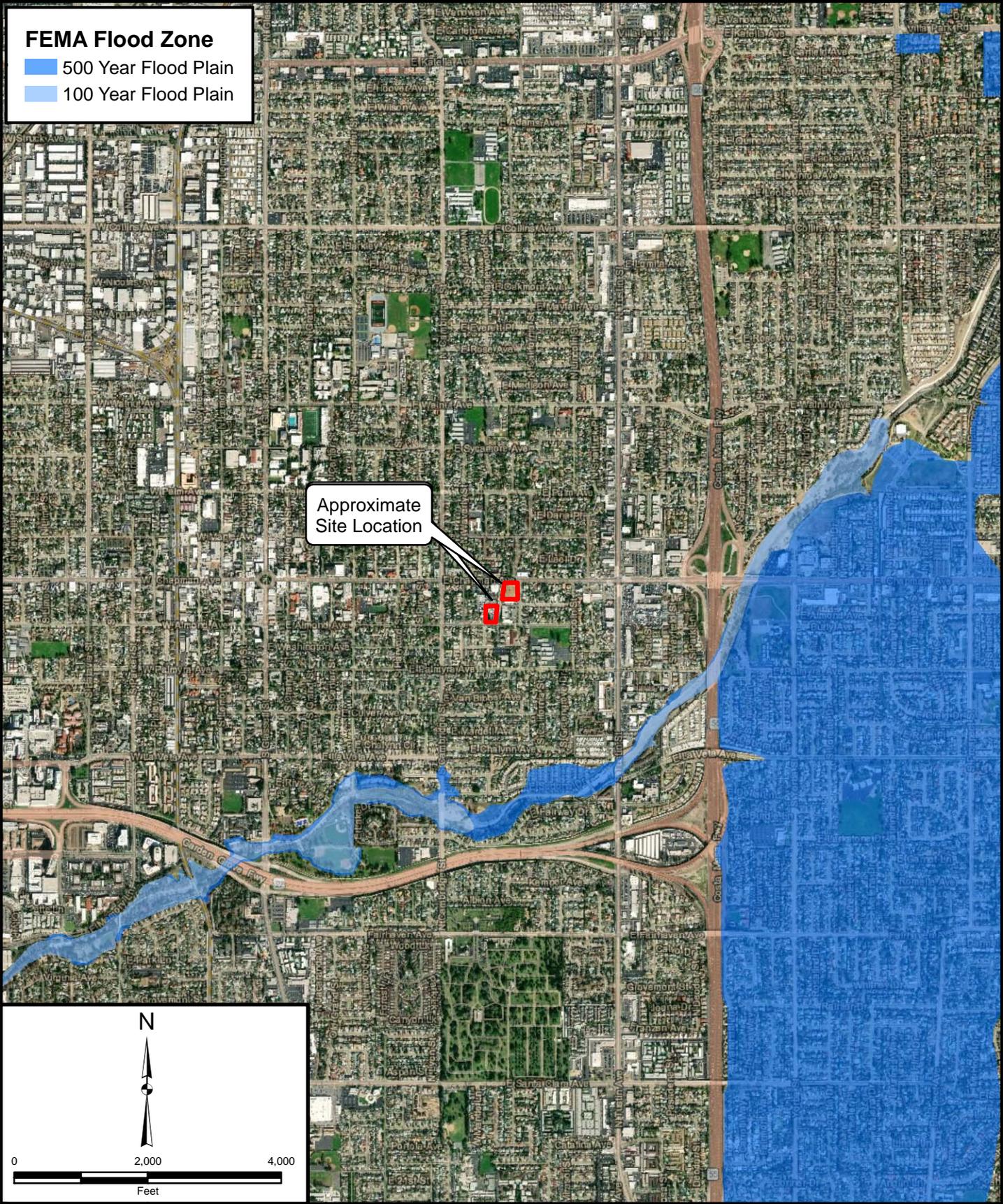
Figure 6

Leighton

FEMA Flood Zone

- 500 Year Flood Plain
- 100 Year Flood Plain

Approximate Site Location



Project: 12482.001	Eng/Geol: JDH/PB
Scale: 1" = 2,000'	Date: September 2019
Base Map: ESRI ArcGIS Online 2019 Thematic Information: Leighton; FEMA Author: Leighton Geomatics (kmanchikanti)	

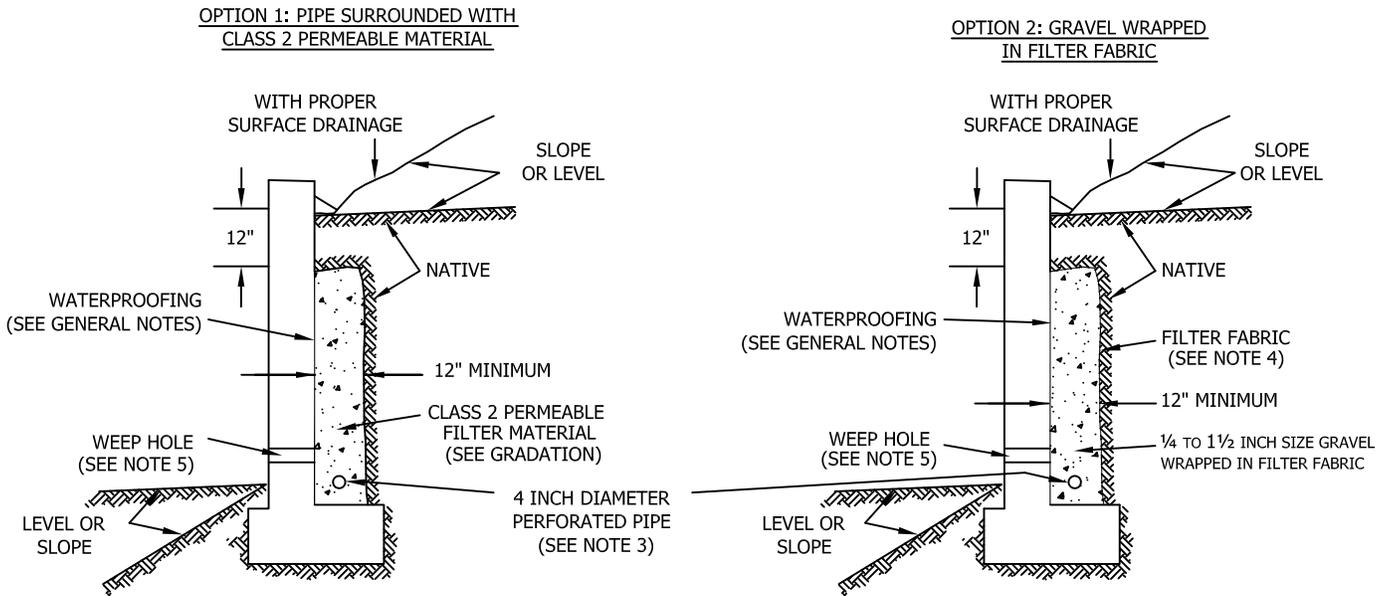
FLOOD HAZARD ZONE MAP

Proposed Fire Station 1 105 South Water Street City of Orange, California

Figure 7

Leighton

SUBDRAIN OPTIONS AND BACKFILL WHEN NATIVE MATERIAL HAS EXPANSION INDEX OF ≤ 50



Class 2 Filter Permeable Material Gradation
Per Caltrans Specifications

Sieve Size	Percent Passing
1"	100
3/4"	90-100
3/8"	40-100
No. 4	25-40
No. 8	18-33
No. 30	5-15
No. 50	0-7
No. 200	0-3

GENERAL NOTES:

- * Waterproofing should be provided where moisture nuisance problem through the wall is undesirable.
- * Water proofing of the walls is not under purview of the geotechnical engineer
- * All drains should have a gradient of 1 percent minimum
- * Outlet portion of the subdrain should have a 4-inch diameter solid pipe discharged into a suitable disposal area designed by the project engineer. The subdrain pipe should be accessible for maintenance (rodding)
- * Other subdrain backfill options are subject to the review by the geotechnical engineer and modification of design parameters.

Notes:

- 1) Sand should have a sand equivalent of 30 or greater and may be densified by water jetting.
- 2) 1 Cu. ft. per ft. of 1/4- to 1 1/2-inch size gravel wrapped in filter fabric
- 3) Pipe type should be ASTM D1527 Acrylonitrile Butadiene Styrene (ABS) SDR35 or ASTM D1785 Polyvinyl Chloride plastic (PVC), Schedule 40, Armco A2000 PVC, or approved equivalent. Pipe should be installed with perforations down. Perforations should be 3/8 inch in diameter placed at the ends of a 120-degree arc in two rows at 3-inch on center (staggered)
- 4) Filter fabric should be Mirafi 140NC or approved equivalent.
- 5) Weepholes should be 3-inch minimum diameter and provided at 10-foot maximum intervals. If exposure is permitted, weepholes should be located 12 inches above finished grade. If exposure is not permitted such as for a wall adjacent to a sidewalk/curb, a pipe under the sidewalk to be discharged through the curb face or equivalent should be provided. For a basement-type wall, a proper subdrain outlet system should be provided.
- 6) Retaining wall plans should be reviewed and approved by the geotechnical engineer.
- 7) Walls over six feet in height are subject to a special review by the geotechnical engineer and modifications to the above requirements.

RETAINING WALL BACKFILL AND SUBDRAIN DETAIL FOR WALLS 6 FEET OR LESS IN HEIGHT

WHEN NATIVE MATERIAL HAS EXPANSION INDEX OF ≤ 50



Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, clients can benefit from a lowered exposure to the subsurface problems that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed below, contact your GBA-member geotechnical engineer. Active involvement in the Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.

Geotechnical-Engineering Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical-engineering study conducted for a given civil engineer will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client. *Those who rely on a geotechnical-engineering report prepared for a different client can be seriously misled.* No one except authorized client representatives should rely on this geotechnical-engineering report without first conferring with the geotechnical engineer who prepared it. *And no one – not even you – should apply this report for any purpose or project except the one originally contemplated.*

Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read it *in its entirety*. Do not rely on an executive summary. Do not read selected elements only. *Read this report in full.*

You Need to Inform Your Geotechnical Engineer about Change

Your geotechnical engineer considered unique, project-specific factors when designing the study behind this report and developing the confirmation-dependent recommendations the report conveys. A few typical factors include:

- the client's goals, objectives, budget, schedule, and risk-management preferences;
- the general nature of the structure involved, its size, configuration, and performance criteria;
- the structure's location and orientation on the site; and
- other planned or existing site improvements, such as retaining walls, access roads, parking lots, and underground utilities.

Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light-industrial plant to a refrigerated warehouse;
- the elevation, configuration, location, orientation, or weight of the proposed structure;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.*

This Report May Not Be Reliable

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, that it could be unwise to rely on a geotechnical-engineering report whose reliability may have been affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If your geotechnical engineer has not indicated an "apply-by" date on the report, ask what it should be, and, in general, if you are the least bit uncertain about the continued reliability of this report, contact your geotechnical engineer before applying it.* A minor amount of additional testing or analysis – if any is required at all – could prevent major problems.

Most of the "Findings" Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site's subsurface through various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing were performed.* The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgment to form opinions about subsurface conditions throughout the site. Actual sitewide-subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team from project start to project finish, so the individual can provide informed guidance quickly, whenever needed.

This Report's Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, *they are not final*, because the geotechnical engineer who developed them relied heavily on judgment and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* revealed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

This Report Could Be Misinterpreted

Other design professionals' misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a full-time member of the design team, to:

- confer with other design-team members,
- help develop specifications,
- review pertinent elements of other design professionals' plans and specifications, and
- be on hand quickly whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction observation.

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note conspicuously that you've included the material for informational purposes only*. To avoid misunderstanding, you may also want to note that "informational purposes" means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report, but they may rely on the factual data relative to the specific times, locations, and depths/elevations referenced. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may

perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely*. Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a "phase-one" or "phase-two" environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures*. If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk-management guidance. As a general rule, *do not rely on an environmental report prepared for a different client, site, or project, or that is more than six months old*.

Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, none of the engineer's services were designed, conducted, or intended to prevent uncontrolled migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, *proper implementation of the geotechnical engineer's recommendations will not of itself be sufficient to prevent moisture infiltration*. Confront the risk of moisture infiltration by including building-envelope or mold specialists on the design team. *Geotechnical engineers are not building-envelope or mold specialists*.



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APPENDIX A
REFERENCES



APPENDIX A

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APPENDIX B
GEOTECHNICAL BORING AND INFILTRATION LOGS



GEOTECHNICAL BORING LOG LB-1

Project No. 12482.001
Project Proposed Fire Station 1
Drilling Co. 2R Drilling, Inc.
Drilling Method Hollow Stem Auger - 140lb - Autohammer - 30" Drop
Location See Figure 2 Exploration Location Map

Date Drilled 8-8-19
Logged By MM
Hole Diameter 8"
Ground Elevation 217'
Sampled By MM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.										
0	0	N S		B-1					@Surface: gravel, sand Artificial Fill, undocumented (Afu)	EI
215				R-1	8 14 17	111	3	SM	@2.5' SILTY SAND (SM), medium dense, orange brown, moist, fine sand, 30% fines (field estimate), 10% gravel (field estimate) subround, subangular, fine gravel, mechanically fractured	
5				R-2	11 23 20			SM	Quaternary Old Alluvial Fan (Qof) @5' SILTY SAND with gravel (SM), medium dense, orange brown, moist, fine sand, fine to medium gravel, angular due to mechanical fracturing (soil cuttings)	
210				R-3	50/5"	122	1	GW-GM	@10' GRAVEL with silt and sand (GW-GM), dense, orange brown, moist, fine sand, fine to coarse gravel and cobbles, no recovery	
205				R-4	41 50/5"	121	7	SP-SM	@15' SAND with silt to silty sand with gravel (SP-SM), dense, orange brown, moist, fine to medium sand, oxidized throughout, fine angular gravel, due to mechanical fracturing	
200				S-1	18 50/2.5"			SP-SM	@20' SAND with silt to silty sand with gravel (SP-SM), very dense, orange brown, moist, fine to medium sand, oxidized throughout, fine angular gravel, angular due to mechanical fracturing, low recovery	
195									Total Depth: 21 feet No groundwater encountered Backfilled with soil cuttings and tamped upon completion of drilling	
25										
190										
30										

SAMPLE TYPES:

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

TYPE OF TESTS:

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



GEOTECHNICAL BORING LOG LB-2

Project No. 12482.001
Project Proposed Fire Station 1
Drilling Co. 2R Drilling, Inc.
Drilling Method Hollow Stem Auger - 140lb - Autohammer - 30" Drop
Location See Figure 2 Exploration Location Map

Date Drilled 8-8-19
Logged By MM
Hole Diameter 8"
Ground Elevation 217'
Sampled By MM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
		N S							This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
215	0			B-1					@Surface: 2 inches Asphalt Concrete Artificial Fill, undocumented (Afu)	
	2.5			R-1	23 23 25	97	3	SM	@2.5' SILTY SAND with gravel (SM), medium dense, orange brown, moist, fine sand, fine to medium gravel, subangular to subround, majority of gravel in cuttings, no recovery	
	5			R-2	25 50/3"			GP	Quaternary Old Alluvial Fan (Qof) @5' GRAVEL with sand (GP), dense, grayish brown, slightly moist, fine sand, fine to medium gravel, subangular to subround, mechanically fractured gravel, low recovery	
210	6								Drilling refusal at 6 feet No groundwater encountered Backfilled with soil cuttings and tamped upon completion of drilling	
205	10									
200	15									
195	20									
190	25									
30	30									

SAMPLE TYPES:

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

TYPE OF TESTS:

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



GEOTECHNICAL BORING LOG LB-3

Project No. 12482.001
Project Proposed Fire Station 1
Drilling Co. 2R Drilling, Inc.
Drilling Method Hollow Stem Auger - 140lb - Autohammer - 30" Drop
Location See Figure 2 Exploration Location Map

Date Drilled 8-8-19
Logged By MM
Hole Diameter 8"
Ground Elevation 217'
Sampled By MM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION		Type of Tests
									<i>This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.</i>		
0		N S		B-1					@Surface: Gravel and sand Artificial Fill, undocumented (Afu)	MD, CR	
215				R-1	8 6 6	112	7	SM	@2.5' SILTY SAND (SM), loose, brown, moist, fine sand, gravel, fine gravel, angular to subangular gravel, 28% fines	-200	
5				R-2	7 11 15	124	2	SM	@5' SILTY SAND (SM), medium dense, brown, moist, fine sand, no recovery, cuttings same as @2.5'		
210									Quaternary Old Alluvial Fan (Qof)		
				R-3	10 15 18			SP	@8' SAND with gravel (SP), medium dense, light brown to grayish brown, slightly moist, fine sand, angular to subangular fine gravel		
10				R-4	10 18 32			SP	@10' SAND with gravel (SP), dense, light brown to grayish brown, slightly moist, fine to medium sand, fine to medium subangular gravel due to mechanical fracturing, clay with gravel in shoe		
205											
15				R-5	50/3"			GW-GM	@15' GRAVEL with silt and sand (GW-GM), very dense, no recovery, sand with gravel in cuttings		
200											
20				S-1	50/5"			GW-GM	@20' GRAVEL with silt and sand (GW-GM), very dense, no recovery, sand with gravel in cuttings		
195									Total Depth: 20.5 feet No groundwater encountered Backfilled with soil cuttings and tamped upon completion of drilling		
25											
190											
30											

SAMPLE TYPES:

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

TYPE OF TESTS:

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



GEOTECHNICAL BORING LOG LB-4

Project No. 12482.001
Project Proposed Fire Station 1
Drilling Co. 2R Drilling, Inc.
Drilling Method Hollow Stem Auger - 140lb - Autohammer - 30" Drop
Location See Figure 2 Exploration Location Map

Date Drilled 8-8-19
Logged By MM
Hole Diameter 8"
Ground Elevation 217'
Sampled By MM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION		Type of Tests
									<i>This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.</i>		
0		N S		B-1					@Surface: sand, gravel Artificial Fill, undocumented (Afu)		
215				R-1	19 12 9			SM	@2.5' SILTY SAND with gravel (SM), medium dense, brown		
5				R-2	13 20 27	136	3	GP	Quaternary Old Alluvial Fan (Qof) @5' SANDY GRAVEL (GP), medium dense, grayish brown, slightly moist, fine sand, rounded gravels, with few mechanically fractured during sampling, cobble-sized slaty bedrock fragments @8' gravel, hard drilling		
210				R-3	32 32 18	122	7	SC	CLAYEY SAND with gravel (SC), medium dense, reddish brown, moist, low to medium plasticity, 31% fines	-200	
205				R-4	30 47 50/5"	108	4	GW-GM	@15' GRAVEL with silt and sand (GW-GM), very dense, reddish brown, moist, fine, subangular, well graded	SA	
200				R-5	50/5"	115	4	GW-GM	@20' GRAVEL with silt and sand (GW-GM), very dense, reddish brown, moist, fine, subangular, well graded		
195				S-1	32 49 50/4"			SP	@25' SAND (SP), very dense, reddish brown, moist, fine to medium, subangular, trace silt		
190											
30											

SAMPLE TYPES:

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

TYPE OF TESTS:

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



GEOTECHNICAL BORING LOG LB-4

Project No. 12482.001
Project Proposed Fire Station 1
Drilling Co. 2R Drilling, Inc.
Drilling Method Hollow Stem Auger - 140lb - Autohammer - 30" Drop
Location See Figure 2 Exploration Location Map

Date Drilled 8-8-19
Logged By MM
Hole Diameter 8"
Ground Elevation 217'
Sampled By MM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests				
This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.														
30		N S		R-6	50/2"			GW-GM	@30' GRAVEL with silt and sand (GW-GM), very dense, brown, no recovery					
185														
35				S-2	11 18 10			CL	@35' CLAY (CL), very stiff, orange brown, moist, low to medium plasticity					
180														
40				R-7	5 10 14	105	21	CL	@40' CLAY (CL), stiff, orange brown, moist, low to medium plasticity, with some gravel, 81% fines	-200, AL				
175														
45				S-3	11 14 50/5"			SP	@45' SAND (SP), very dense, light brown, moist, fine grained					
170														
50				R-8	20 24 23	119	11	CL	@50' CLAY (CL), very stiff, orange brown, moist, low plasticity					
165									Total Depth: 51.5 feet No groundwater encountered Caved at 30' Backfilled with soil cuttings and tamped upon completion of drilling					
55														
160														
60														
<table style="width: 100%; font-size: x-small;"> <tr> <td style="width: 33%;"> SAMPLE TYPES: B BULK SAMPLE C CORE SAMPLE G GRAB SAMPLE R RING SAMPLE S SPLIT SPOON SAMPLE T TUBE SAMPLE </td> <td style="width: 33%;"> TYPE OF TESTS: -200 % FINES PASSING AL ATTERBERG LIMITS CN CONSOLIDATION CO COLLAPSE CR CORROSION CU UNDRAINED TRIAXIAL </td> <td style="width: 33%;"> DS DIRECT SHEAR EI EXPANSION INDEX H HYDROMETER MD MAXIMUM DENSITY PP POCKET PENETROMETER RV R VALUE </td> <td style="width: 33%;"> SA SIEVE ANALYSIS SE SAND EQUIVALENT SG SPECIFIC GRAVITY UC UNCONFINED COMPRESSIVE STRENGTH </td> </tr> </table>											SAMPLE TYPES: B BULK SAMPLE C CORE SAMPLE G GRAB SAMPLE R RING SAMPLE S SPLIT SPOON SAMPLE T TUBE SAMPLE	TYPE OF TESTS: -200 % FINES PASSING AL ATTERBERG LIMITS CN CONSOLIDATION CO COLLAPSE CR CORROSION CU UNDRAINED TRIAXIAL	DS DIRECT SHEAR EI EXPANSION INDEX H HYDROMETER MD MAXIMUM DENSITY PP POCKET PENETROMETER RV R VALUE	SA SIEVE ANALYSIS SE SAND EQUIVALENT SG SPECIFIC GRAVITY UC UNCONFINED COMPRESSIVE STRENGTH
SAMPLE TYPES: B BULK SAMPLE C CORE SAMPLE G GRAB SAMPLE R RING SAMPLE S SPLIT SPOON SAMPLE T TUBE SAMPLE	TYPE OF TESTS: -200 % FINES PASSING AL ATTERBERG LIMITS CN CONSOLIDATION CO COLLAPSE CR CORROSION CU UNDRAINED TRIAXIAL	DS DIRECT SHEAR EI EXPANSION INDEX H HYDROMETER MD MAXIMUM DENSITY PP POCKET PENETROMETER RV R VALUE	SA SIEVE ANALYSIS SE SAND EQUIVALENT SG SPECIFIC GRAVITY UC UNCONFINED COMPRESSIVE STRENGTH											



GEOTECHNICAL BORING LOG LB-5

Project No. 12482.001
Project Proposed Fire Station 1
Drilling Co. 2R Drilling, Inc.
Drilling Method Hollow Stem Auger - 140lb - Autohammer - 30" Drop
Location See Figure 2 Exploration Location Map

Date Drilled 8-8-19
Logged By MM
Hole Diameter 8"
Ground Elevation 217'
Sampled By MM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
		N S			Bulk Driven				This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
215	0	█		B-1					@Surface: 3.5 inches Asphalt Concrete Artificial Fill, undocumented (Afu)	
	2.5	●		R-1	11 29 30	127	3	SP	@2.5' SAND with gravel (SP), dense, light orange brown, moist, fine to medium, subangular, 4% fines	-200
	5	○		R-2	26 36 44	119	1	GP	@5' SANDY GRAVEL (GP), dense, grayish orange brown, moist, fine to medium, subangular slaty rock fragments @6' gravel, hard drilling, abundant mechanically fractured gravel, small cobble-sized slaty rock fragments	
210		○							Quaternary Old Alluvial Fan (Qof)	
	10	○		R-3	21 50/4"	121	3	GP	@10' SANDY GRAVEL with cobbles (GP), dense, orange brown, moist, abundant mechanically fractured rock fragments	
205		○		R-4	50/3"			GW-GM	@15' GRAVEL with silt and sand (GW-GM), very dense, reddish brown, moist, fine to medium, subangular, no recovery	
200		○		S-1	50/1"			GW-GM	@20' GRAVEL with silt and sand (GW-GM), very dense, reddish brown, moist, fine to medium, subangular, no recovery	
195		○							Total Depth: 20 feet No groundwater encountered Backfilled with soil cuttings and tamped upon completion of drilling	
	25	○								
190		○								
	30	○								

SAMPLE TYPES:

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

TYPE OF TESTS:

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



GEOTECHNICAL BORING LOG LB-6

Project No. 12482.001
Project Proposed Fire Station 1
Drilling Co. 2R Drilling, Inc.
Drilling Method Hollow Stem Auger - 140lb - Autohammer - 30" Drop
Location See Figure 2 Exploration Location Map

Date Drilled 8-8-19
Logged By MM
Hole Diameter 8"
Ground Elevation 216'
Sampled By MM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
									<i>This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.</i>	
215	0	N S		B-1				SC	@Surface: 6 inches Asphalt Concrete Artificial Fill, undocumented (Afu)	
		N S		R-1	3 4 11	117	12	SC	@2.5 CLAYEY SAND (SC), stiff, brown, moist, fine, low plasticity, 43% fines	-200, AL
210	5	N S		R-2	50/5"			SP	Quaternary Old Alluvial Fan (Qof) @ 5' No Recovery	
		N S		R-3	17 24 29			SP	@ 6.5' SAND with gravel (SP), dense, light brown, slightly moist, fine, subangular	
205	10								Total Depth: 8' No groundwater encountered Backfilled with soil cuttings and tamped upon completion of drilling	
200	15									
195	20									
190	25									
	30									

SAMPLE TYPES:

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

TYPE OF TESTS:

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



GEOTECHNICAL BORING LOG LB-7

Project No. 12482.001
Project Proposed Fire Station 1
Drilling Co. 2R Drilling, Inc.
Drilling Method Hollow Stem Auger - 140lb - Autohammer - 30" Drop
Location See Figure 2 Exploration Location Map

Date Drilled 8-8-19
Logged By MM
Hole Diameter 8"
Ground Elevation 216'
Sampled By MM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
	0	N S							<i>This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.</i>	
215				B-1					@Surface: 3 inches Asphalt Concrete Artificial Fill, undocumented (Afu)	
				R-1				SM	@2.5' SILTY SAND with gravel (SM), light brown, moist, fine, subangular	
210	5			R-2	27 35 42	100	10	SM	Quaternary Old Alluvial Fan (Qof) @6' SAND with gravel (SP), dense, light brown, fine, subangular	
				R-3	18 24 38			SP	@7.5' SAND with gravel (SP), dense, light brown, fine to medium, subangular	
205	10								Total Depth: 9' No groundwater encountered Backfilled with soil cuttings and tamped upon completion of drilling	
200	15									
195	20									
190	25									
30										

SAMPLE TYPES:

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

TYPE OF TESTS:

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



Results of Well Permeameter, from USBR 7300-89 Method.



Leighton

Project:

12482
LB-4
50
JK
Cloudy
H2O
9
60

Initial estimated Depth to Water Surface (in.): 127
 Average depth of water in well, "h" (in.): 41
 approx. h/r: 9.1
 Tu (Fig. 8) (ft): 49.4
 Tu>3h?: yes, OK

Measured boring diameter: 9 in. 4.5 in. Well Radius Cross-sectional area for vol calcs (in.^2): 63.6
 Approx Depth to GW below GS: 60 ft
 Well Prep: Caved to 30', Backfilled to 15', Added Bentonite, Gravel to 14'

	ft	in.	Total (in.)
Depth to Bot of well (or top of soil over Bentonite)	14. ft	0. in.	168
Pilot Tube stickup (+ is above ground)	0. ft	10. in.	10
Depth to top of sand outside of casing from top of pilot tube			
Depth to top of float assembly from top of pilot tube	9. ft	4. in.	112
Float Assembly ID		DHVA	
Float assembly Extension length (in.)		34	

Flow Meter:

Meter ID: SN18003236
 Meter Color: Black
 Meter Unit: Gallons
 DL ID: 1
 0.05 gallons/pulse

Field Data

Calculations

Date	Time	Data from Flow Meter		Depth to WL in Boring (measured from top of pilot tube)		Water Temp (deg F)	Comments	Δt (min)	Total Elapsed Time (min.)	Depth to WL in well (in.)	h, Height of Water in Well (in.)	Δh (in.)	Avg. h	Vol Change (in.^3)			Flow (in.^3/ min)	q, Flow (in.^3/ hr)	V (Fig 9)	K20, Coef. Of Permeability at 20 deg C (in./hr)	Infiltration Rate [flow/surf area] (in./hr) (FS=1)		
		Reading (cu-ft or gal)	Interval Pulse Count	ft	in.									from supply	from Δh	Total							
8/8/19	10:30	593.5		10	8.5				6.3E+07	118.5	49.5												
8/8/19	10:55	595.2		10	7.4			25	6.3E+07	117.4	50.6	1.1	50	393	-70	323	13	775	0.9	0.10	0.48		
8/8/19	11:26	595.4		10	9.9			31	6.3E+07	119.9	48.1	-2.5	49	46	159	205	7	397	0.9	0.05	0.25		
8/8/19	11:53	595.4		10	11.8			27	6.3E+07	121.8	46.2	-1.9	47	0	121	121	4	268	0.921	0.04	0.18		
8/8/19	12:24	595.4		11	2.1			31	6.3E+07	124.1	43.9	-2.3	45	0	146	146	5	283	0.9	0.05	0.20		
8/8/19	12:50	595.45		11	3.2			26	6.3E+07	125.2	42.8	-1.1	43	12	70	81	3	188	0.9	0.03	0.13		
8/8/19	13:15	595.45		11	4.3			25	6.3E+07	126.3	41.7	-1.1	42	0	70	70	3	168	0.9	0.03	0.12		
8/8/19	13:45	595.45		11	5.9			30	6.3E+07	127.9	40.1	-1.6	41	0	102	102	3	203	0.9	0.04	0.15		
8/8/19	14:15	595.54		11	6.2			30	6.3E+07	128.2	39.8	-0.3	40	21	19	40	1	80	0.9	0.01	0.06		
8/8/19	14:30	595.7		11	6.1			15	6.3E+07	128.1	39.9	0.1	40	37	-6	31	2	122	0.9	0.02	0.09		

template updated: 8/14/19

Results of Well Permeameter, from USBR 7300-89 Method.



Project:

Exploration #/Location:	12482
Depth Boring drilled to (ft):	LB-5
Tested by:	JK
USCS Soil Type in test zone:	
Weather (start to finish):	Sunny
Liquid Used/pH:	
Measured boring diameter:	10 in.
Approx Depth to GW below GS:	60 ft
Well Prep:	Drilled to 30', Caved to 25', Backfilled to 21', Added Bentonite, Gravel to 20.5'

Initial estimated Depth to Water Surface (in.): 212
 Average depth of water in well, "h" (in.): 34
 approx. h/r: 6.9
 Tu (Fig. 8) (ft): 42.4
 Tu>3h?: yes, OK

5 in. Well Radius

Cross-sectional area for vol calcs (in.^2): 78.5

Depth to Bot of well (or top of soil over Bentonite)

Pilot Tube stickup (+ is above ground)

Depth to top of sand outside of casing from top of pilot tube

Depth to top of float assembly from top of pilot tube

Float Assembly ID

Float assembly Extension length (in.)

ft	in.	Total (in.)
20. ft	6. in.	246
0. ft	4. in.	4
15. ft	8. in.	188
	E	
	34	

184 Depth below GS (in.)

Flow Meter:

Meter ID: SN18003242
 Meter Color: Black
 Meter Unit: Gallons
 DL ID: 2
 0.05 gallons/pulse

Field Data

Calculations

Date	Time	Data from Flow Meter		Depth to WL in Boring (measured from top of pilot tube)		Water Temp (deg F)	Comments	Δt (min)	Total Elapsed Time (min.)	Depth to WL in well (in.)	h. Height of Water in Well (in.)	Δh (in.)	Avg. h	Vol Change (in.^3)			Flow (in^3/ min)	q. Flow (in^3/ hr)	V (Fig 9)	K20, Coef. Of Permeability at 20 deg C (in./hr)	Infiltration Rate [flow/surf area] (in./hr) (FS=1)		
		Reading (cu-ft or gal)	Interval Pulse Count	ft	in.									from supply	from Δh	Total							
8/8/19	12:03	350.4		18	0.6				6.3E+07	212.6	33.4												
8/8/19	12:26	364.2		17	11.2			23	6.3E+07	211.2	34.8	1.4	34	3188	-110	3078	134	8029	0.9	1.71	6.44		
8/8/19	12:51	375.8		17	11.6			25	6.3E+07	211.6	34.4	-0.4	35	2680	31	2711	108	6506	0.9	1.43	5.15		
8/8/19	13:16	385.4		18	1.3			25	6.3E+07	213.3	32.7	-1.7	34	2218	133	2351	94	5643	0.921	1.35	4.59		
8/8/19	13:46	398.5		18	1.4			30	6.3E+07	213.4	32.6	-0.1	33	3026	8	3034	101	6068	0.9	1.44	5.07		
8/8/19	14:16	416.8		18	1.2			30	6.3E+07	213.2	32.8	0.2	33	4227	-16	4212	140	8423	0.9	1.97	7.02		
8/8/19	14:45	437.2		17	11.5			29	6.3E+07	211.5	34.5	1.7	34	4712	-133	4579	158	9474	0.9	2.04	7.69		
8/8/19	15:00	448.6		17	10.8			15	6.3E+07	210.8	35.2	0.7	35	2633	-55	2578	172	10314	0.9	2.17	8.10		
8/8/19	15:15	459.3		17	10.7			15	6.3E+07	210.7	35.3	0.1	35	2472	-8	2464	164	9855	0.9	2.07	7.66		
8/8/19	15:30	468.9		17	11.4			15	6.3E+07	211.4	34.6	-0.7	35	2218	55	2273	152	9090	0.9	1.98	7.12		

template updated: 8/14/19

APPENDIX C
LABORATORY TEST RESULTS



Borehole	Depth	Liquid Limit	Plastic Limit	Plasticity Index	Maximum Size (mm)	%<#200 Sieve	Classification	Water Content (%)	Dry Density (pcf)	Saturation (%)	Void Ratio
LB-1	2.5							3.2	110.5		
LB-1	10.0							0.6	121.7		
LB-1	15.0							6.5	120.8		
LB-2	2.5							3.0	96.9		
LB-3	2.5							7.0	112.4		
LB-3	5.0							1.8	123.5		
LB-4	5.0							2.6	136.5		
LB-4	10.0							7.4	121.6		
LB-4	15.0							3.5	107.9		
LB-4	20.0							3.5	114.9		
LB-4	40.0							21.1	105.4		
LB-4	50.0							11.5	118.7		
LB-5	2.5							3.0	126.6		
LB-5	5.0							0.9	118.5		
LB-5	10.0							3.3	120.5		
LB-6	2.5							11.7	116.9		
LB-7	6.0							10.5	99.7		

US LAB SUMMARY 12482.01 BORING LOGS DRAFT.GPJ ROCKLOG2012.GDT 9/6/19



Summary of Laboratory Results

Project Name: WLC Orange FS1

Project Number: 12482.001

Date: 9/6/2019 2:38:21 PM

Figure No. 1



MODIFIED PROCTOR COMPACTION TEST

ASTM D 1557

Project Name: WLC/Orange FS 1 Tested By: O. Figueroa Date: 09/05/19
 Project No.: 12482.001 Input By: G. Bathala Date: 09/06/19
 Boring No.: LB-3 Depth (ft.): 0-5
 Sample No.: B-1
 Soil Identification: Olive brown silty, clayey sand with gravel (SC-SM)g

Note: Corrected dry density calculation assumes specific gravity of 2.70 and moisture content of 1.0% for oversize particles

Preparation Method:	<input checked="" type="checkbox"/>	Moist	Scalp Fraction (%)			
		Dry				
Compaction Method:	<input checked="" type="checkbox"/>	Mechanical Ram	#3/4		Rammer Weight (lb.) =	10.0
		Manual Ram	#3/8	16.5	Height of Drop (in.) =	18.0
			#4		Mold Volume (ft ³)	0.03320

TEST NO.	1	2	3	4	5	6
Wt. Compacted Soil + Mold (g)	3852	3945	3995	3901		
Weight of Mold (g)	1817	1817	1817	1817		
Net Weight of Soil (g)	2035	2128	2178	2084		
Wet Weight of Soil + Cont. (g)	395.3	442.6	435.5	459.9		
Dry Weight of Soil + Cont. (g)	385.1	420.8	405.4	419.4		
Weight of Container (g)	62.3	39.2	39.4	39.8		
Moisture Content (%)	3.16	5.71	8.22	10.67		
Wet Density (pcf)	135.1	141.3	144.6	138.4		
Dry Density (pcf)	131.0	133.7	133.6	125.0		

Maximum Dry Density (pcf) 134.4
Corrected Dry Density (pcf) 139.0

Optimum Moisture Content (%) 7.1
Corrected Moisture Content (%) 6.1

Procedure A
 Soil Passing No. 4 (4.75 mm) Sieve
 Mold : 4 in. (101.6 mm) diameter
 Layers : 5 (Five)
 Blows per layer : 25 (twenty-five)
 May be used if + #4 is 20% or less

Procedure B
 Soil Passing 3/8 in. (9.5 mm) Sieve
 Mold : 4 in. (101.6 mm) diameter
 Layers : 5 (Five)
 Blows per layer : 25 (twenty-five)
 Use if + #4 is >20% and +3/8 in. is 20% or less

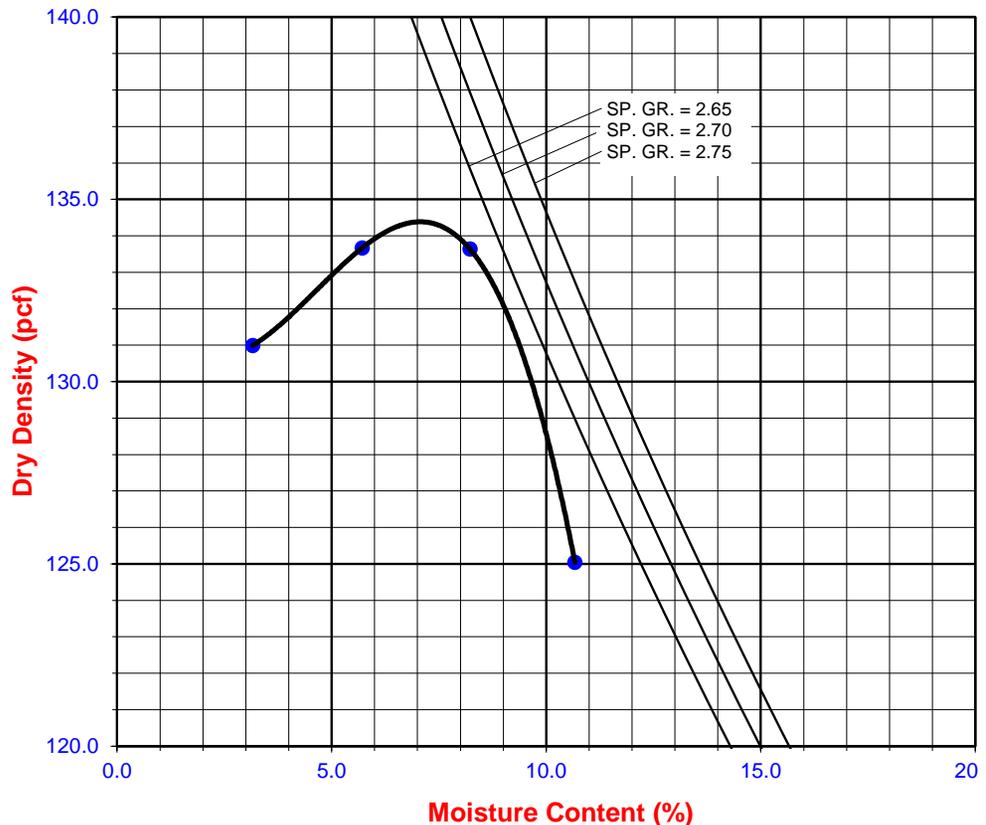
Procedure C
 Soil Passing 3/4 in. (19.0 mm) Sieve
 Mold : 6 in. (152.4 mm) diameter
 Layers : 5 (Five)
 Blows per layer : 56 (fifty-six)
 Use if +3/8 in. is >20% and +3/4 in. is <30%

Particle-Size Distribution:

GR:SA:FI

Atterberg Limits:

LL,PL,PI



Boring No.	LB-3	LB-4	LB-4	LB-5	LB-6			
Sample No.	R-1	R-3	R-7	R-1	R-1			
Depth (ft.)	2.5	10.0	40.0	2.5	2.5			
Sample Type	Ring	Ring	Ring	Ring	Ring			
Soil Identification	Brown silty sand with gravel (SM)g	Brown clayey sand with gravel (SC)g	Brown lean clay with sand (CL)s	Brown poorly-graded sand with gravel (SP)g	Brown clayey sand (SC)			
Moisture Correction								
Wet Weight of Soil + Container (g)	0.00	0.00	0.00	0.00	0.00			
Dry Weight of Soil + Container (g)	0.00	0.00	0.00	0.00	0.00			
Weight of Container (g)	1.00	1.00	1.00	1.00	1.00			
Moisture Content (%)	0.00	0.00	0.00	0.00	0.00			
Sample Dry Weight Determination								
Weight of Sample + Container (g)	769.70	1024.80	627.10	867.90	699.50			
Weight of Container (g)	108.70	99.80	108.40	107.80	108.80			
Weight of Dry Sample (g)	661.00	925.00	518.70	760.10	590.70			
Container No.:								
After Wash								
Method (A or B)	A	A	A	A	A			
Dry Weight of Sample + Cont. (g)	584.00	740.30	205.10	834.20	442.40			
Weight of Container (g)	108.70	99.80	108.40	107.80	108.80			
Dry Weight of Sample (g)	475.30	640.50	96.70	726.40	333.60			
% Passing No. 200 Sieve	28.1	30.8	81.4	4.4	43.5			
% Retained No. 200 Sieve	71.9	69.2	18.6	95.6	56.5			
 Leighton	PERCENT PASSING No. 200 SIEVE ASTM D 1140				Project Name: <u>WLC/Orange FS 1</u>			
					Project No.: <u>12482.001</u>			
					Client Name: _____			
					Tested By: <u>S. Felter</u>		Date: <u>08/19/19</u>	



**PARTICLE-SIZE DISTRIBUTION (GRADATION)
of SOILS USING SIEVE ANALYSIS
ASTM D 6913**

Project Name: WLC/Orange FS 1

Tested By: S. Felter Date: 08/19/19

Project No.: 12482.001

Checked By: G. Bathala Date: 09/06/19

Boring No.: LB-4

Depth (feet): 15.0

Sample No.: R-4

Soil Identification: Brown well-graded gravel with silt and sand (GW-GM)s

		Moisture Content of Total Air - Dry Soil	
Container No.:	A-15	Wt. of Air-Dry Soil + Cont. (g)	0.0
Wt. of Air-Dried Soil + Cont.(g)	893.6	Wt. of Dry Soil + Cont. (g)	0.0
Wt. of Container (g)	107.2	Wt. of Container No._____ (g)	1.0
Dry Wt. of Soil (g)	786.4	Moisture Content (%)	0.0

After Wet Sieve	Container No.	A-15
	Wt. of Dry Soil + Container (g)	842.9
	Wt. of Container (g)	107.2
	Dry Wt. of Soil Retained on # 200 Sieve (g)	735.7

U. S. Sieve Size		Cumulative Weight Dry Soil Retained (g)	Percent Passing (%)
(in.)	(mm.)		
1 1/2"	37.5	0.0	100.0
1"	25.0	59.8	92.4
3/4"	19.0	112.3	85.7
1/2"	12.5	250.7	68.1
3/8"	9.5	324.1	58.8
#4	4.75	453.6	42.3
#8	2.36	548.3	30.3
#16	1.18	612.3	22.1
#30	0.600	665.1	15.4
#50	0.300	704.4	10.4
#100	0.150	723.1	8.0
#200	0.075	735.1	6.5
PAN			

GRAVEL: **58 %**

SAND: **35 %**

FINES: **7 %**

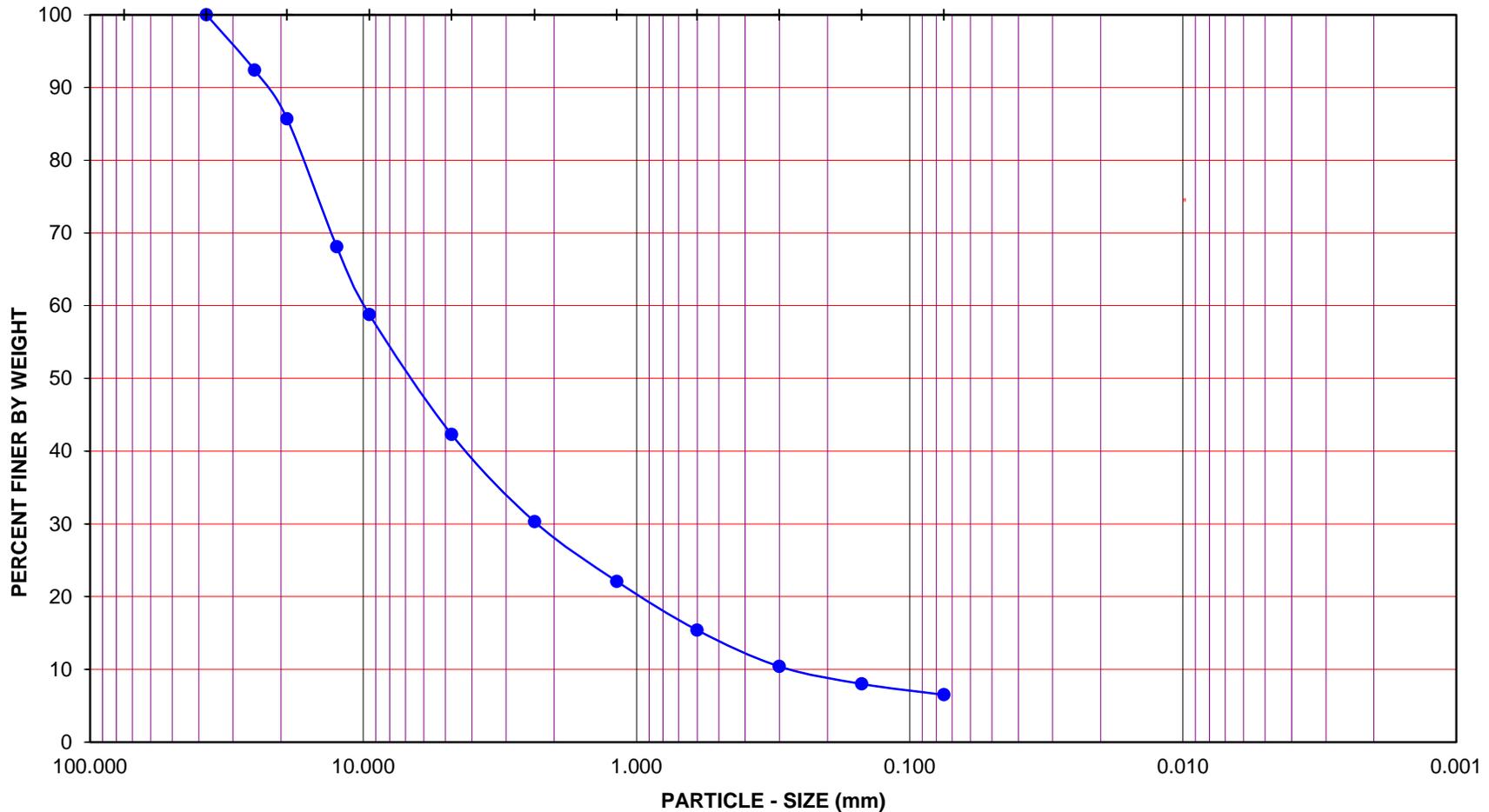
GROUP SYMBOL: **(GW-GM)s**

Cu = D60/D10 = 35.71

Cc = (D30)²/(D60*D10) = 2.06

Remarks: _____

GRAVEL				SAND						FINES		
COARSE		FINE		COARSE	MEDIUM	FINE		SILT		CLAY		
U.S. STANDARD SIEVE OPENING				U.S. STANDARD SIEVE NUMBER						HYDROMETER		
3.0"	1 1/2"	3/4"	3/8"	#4	#8	#16	#30	#50	#100	#200		



Project Name: WLC/Orange FS 1
Project No.: 12482.001

Boring No.: LB-4 Sample No.: R-4
Depth (feet): 15.0 Soil Type : (GW-GM)s
Soil Identification: Brown well-graded gravel with silt and sand (GW-GM)s

GR:SA:FI : (%) **58 : 35 : 7**

sep-19



**PARTICLE - SIZE
DISTRIBUTION
ASTM D 6913**



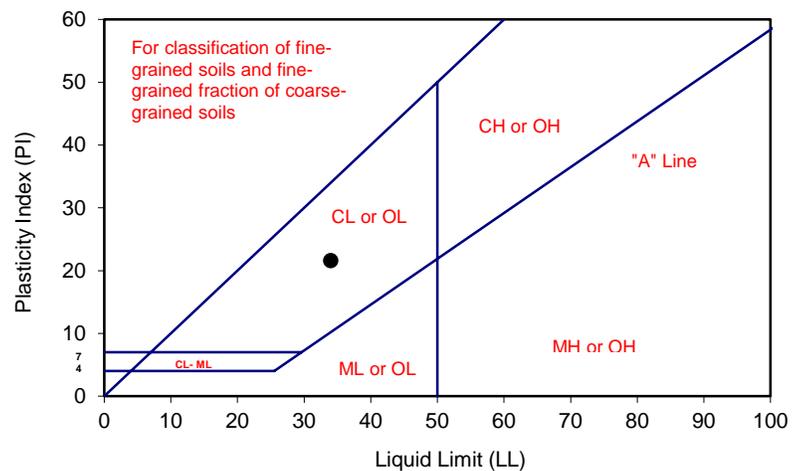
ATTERBERG LIMITS

ASTM D 4318

Project Name: WLC/Orange FS 1 Tested By: S. Felter Date: 08/20/19
 Project No.: 12482.001 Input By: G. Bathala Date: 09/06/19
 Boring No.: LB-4 Checked By: G. Bathala
 Sample No.: R-7 Depth (ft.) 40.0
 Soil Identification: Brown lean clay with sand (CL)s

TEST NO.	PLASTIC LIMIT		LIQUID LIMIT			
	1	2	1	2	3	4
Number of Blows [N]			34	27	18	
Wet Wt. of Soil + Cont. (g)	10.19	10.14	20.91	20.14	21.78	
Dry Wt. of Soil + Cont. (g)	9.17	9.16	16.08	15.40	16.37	
Wt. of Container (g)	1.09	1.10	1.03	1.10	1.12	
Moisture Content (%) [Wn]	12.62	12.16	32.09	33.15	35.48	

Liquid Limit	34
Plastic Limit	12
Plasticity Index	22
Classification	CL



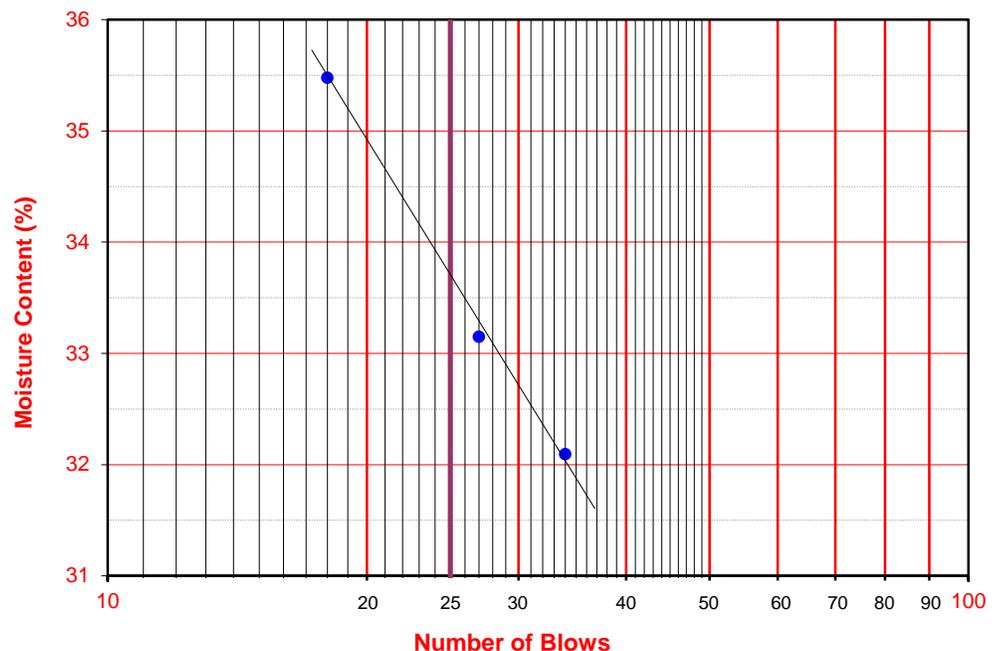
PI at "A" - Line = $0.73(LL-20)$ = 10.22

One - Point Liquid Limit Calculation

$$LL = Wn(N/25)^{0.12}$$

PROCEDURES USED

- Wet Preparation Multipoint - Wet
- Dry Preparation Multipoint - Dry
- Procedure A Multipoint Test
- Procedure B One-point Test





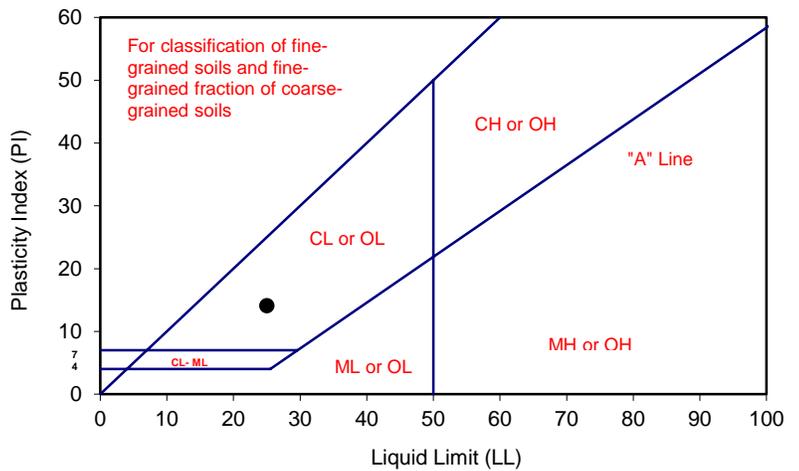
ATTERBERG LIMITS

ASTM D 4318

Project Name: WLC/Orange FS 1 Tested By: S. Felter Date: 08/20/19
 Project No. : 12482.001 Input By: G. Bathala Date: 09/06/19
 Boring No.: LB-6 Checked By: G. Bathala
 Sample No.: R-1 Depth (ft.) 2.5
 Soil Identification: Brown clayey sand (SC)

TEST NO.	PLASTIC LIMIT		LIQUID LIMIT			
	1	2	1	2	3	4
Number of Blows [N]			30	22	17	
Wet Wt. of Soil + Cont. (g)	10.14	10.15	22.28	22.14	21.95	
Dry Wt. of Soil + Cont. (g)	9.26	9.25	18.19	17.92	17.65	
Wt. of Container (g)	1.11	1.11	1.12	1.14	1.10	
Moisture Content (%) [Wn]	10.80	11.06	23.96	25.15	25.98	

Liquid Limit	25
Plastic Limit	11
Plasticity Index	14
Classification	CL



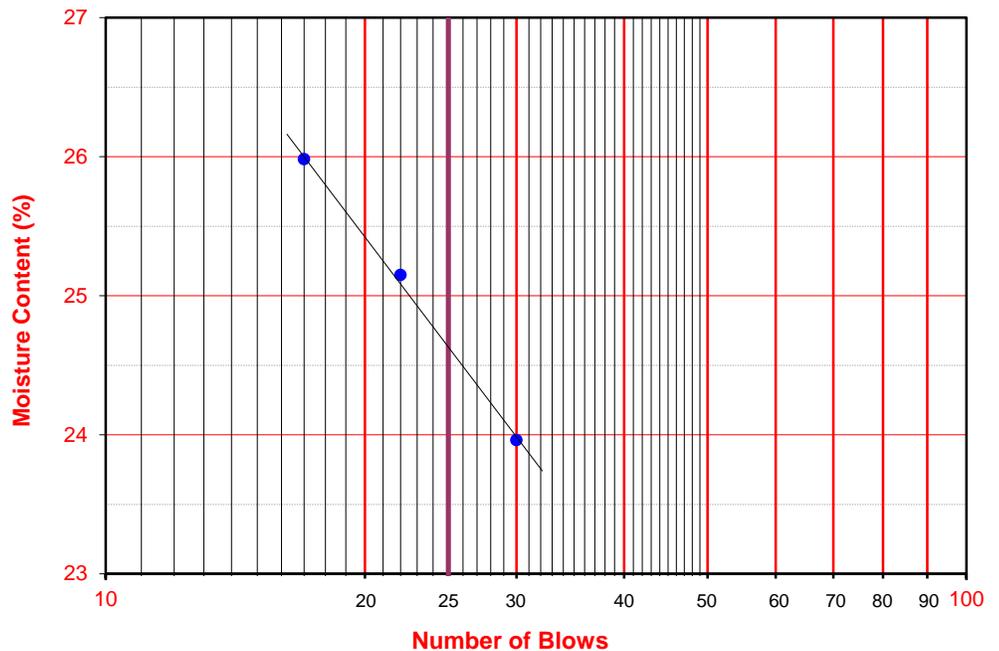
PI at "A" - Line = $0.73(LL-20)$ 3.65

One - Point Liquid Limit Calculation

$$LL = Wn(N/25)^{0.12}$$

PROCEDURES USED

- Wet Preparation Multipoint - Wet
- Dry Preparation Multipoint - Dry
- Procedure A Multipoint Test
- Procedure B One-point Test





EXPANSION INDEX of SOILS
ASTM D 4829

Project Name: WLC/Orange FS 1 Tested By: S. Felter Date: 09/05/19
 Project No.: 12482.001 Checked By: G. Bathala Date: 09/06/19
 Boring No.: LB-1 Depth (ft.): 0-5
 Sample No.: B-1
 Soil Identification: Brown poorly-graded sand with silt (SP-SM)

Dry Wt. of Soil + Cont.	(g)	1000.00
Wt. of Container No.	(g)	0.00
Dry Wt. of Soil	(g)	1000.00
Weight Soil Retained on #4 Sieve		0.00
Percent Passing # 4		100.00

MOLDED SPECIMEN	Before Test	After Test
Specimen Diameter (in.)	4.01	4.01
Specimen Height (in.)	1.0000	1.0010
Wt. Comp. Soil + Mold (g)	610.00	436.98
Wt. of Mold (g)	191.60	0.00
Specific Gravity (Assumed)	2.70	2.70
Container No.	0	0
Wet Wt. of Soil + Cont. (g)	842.70	628.58
Dry Wt. of Soil + Cont. (g)	780.30	579.04
Wt. of Container (g)	0.00	191.60
Moisture Content (%)	8.00	12.79
Wet Density (pcf)	126.2	131.7
Dry Density (pcf)	116.9	116.8
Void Ratio	0.443	0.444
Total Porosity	0.307	0.307
Pore Volume (cc)	63.5	63.7
Degree of Saturation (%) [S _{meas}]	48.8	77.8

SPECIMEN INUNDATION in distilled water for the period of 24 h or expansion rate < 0.0002 in./h

Date	Time	Pressure (psi)	Elapsed Time (min.)	Dial Readings (in.)
09/05/19	7:57	1.0	0	0.4670
09/05/19	8:07	1.0	10	0.4670
Add Distilled Water to the Specimen				
09/05/19	14:02	1.0	355	0.4680
09/06/19	6:28	1.0	1341	0.4680
09/06/19	7:44	1.0	1417	0.4680

Expansion Index (EI _{meas}) = ((Final Rdg - Initial Rdg) / Initial Thick.) x 1000	1
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**TESTS for SULFATE CONTENT
CHLORIDE CONTENT and pH of SOILS**

Project Name: WLC/Orange FS 1 Tested By : GEB/GB Date: 09/04/19
 Project No. : 12482.001 Input By: G. Bathala Date: 09/06/19

Boring No.	LB-3			
Sample No.	B-1			
Sample Depth (ft)	0-5			
Soil Identification:				
	Olive brown (SC-SM)g			
Wet Weight of Soil + Container (g)	130.22			
Dry Weight of Soil + Container (g)	126.87			
Weight of Container (g)	39.58			
Moisture Content (%)	3.84			
Weight of Soaked Soil (g)	100.10			

SULFATE CONTENT, DOT California Test 417, Part II

Beaker No.	304			
Crucible No.	12			
Furnace Temperature (°C)	860			
Time In / Time Out	10:50/11:35			
Duration of Combustion (min)	45			
Wt. of Crucible + Residue (g)	20.7428			
Wt. of Crucible (g)	20.7384			
Wt. of Residue (g) (A)	0.0044			
PPM of Sulfate (A) x 41150	181.06			
PPM of Sulfate, Dry Weight Basis	188			

CHLORIDE CONTENT, DOT California Test 422

ml of Extract For Titration (B)	30			
ml of AgNO3 Soln. Used in Titration (C)	2.0			
PPM of Chloride (C -0.2) * 100 * 30 / B	180			
PPM of Chloride, Dry Wt. Basis	187			

pH TEST, DOT California Test 643

pH Value	7.15			
Temperature °C	20.1			



SOIL RESISTIVITY TEST

DOT CA TEST 643

Project Name: WLC/Orange FS 1

Tested By : O. Figueroa Date: 09/06/19

Project No. : 12482.001

Input By: G. Bathala Date: 09/06/19

Boring No.: LB-3

Depth (ft.) : 0-5

Sample No. : B-1

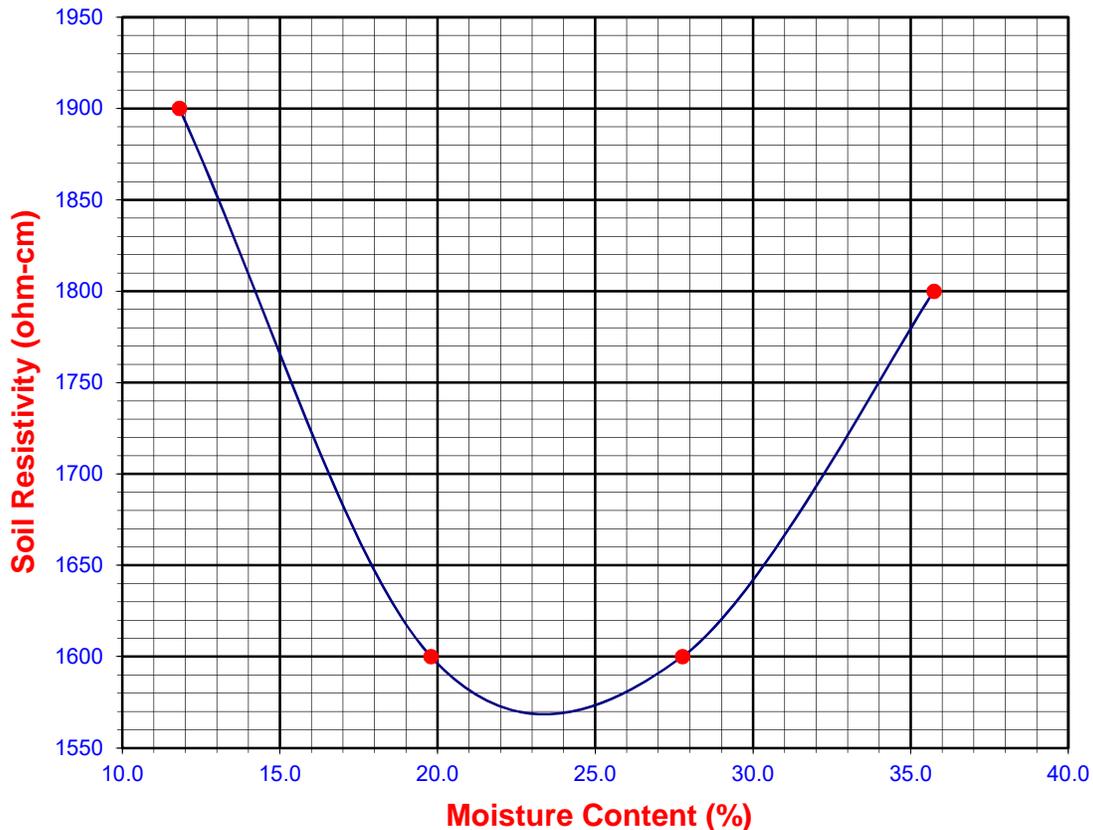
Soil Identification:* Olive brown (SC-SM)g

*California Test 643 requires soil specimens to consist only of portions of samples passing through the No. 8 US Standard Sieve before resistivity testing. Therefore, this test method may not be representative for coarser materials.

Specimen No.	Water Added (ml) (Wa)	Adjusted Moisture Content (MC)	Resistance Reading (ohm)	Soil Resistivity (ohm-cm)
1	10	11.81	1900	1900
2	20	19.79	1600	1600
3	30	27.76	1600	1600
4	40	35.74	1800	1800
5				

Moisture Content (%) (Mci)	3.84
Wet Wt. of Soil + Cont. (g)	130.22
Dry Wt. of Soil + Cont. (g)	126.87
Wt. of Container (g)	39.58
Container No.	
Initial Soil Wt. (g) (Wt)	130.20
Box Constant	1.000
$MC = (((1 + Mci/100) \times (Wa/Wt + 1)) - 1) \times 100$	

Min. Resistivity (ohm-cm)	Moisture Content (%)	Sulfate Content (ppm)	Chloride Content (ppm)	Soil pH	
				pH	Temp. (°C)
DOT CA Test 643		DOT CA Test 417 Part II		DOT CA Test 643	
1570	23.4	188	187	7.15	20.1

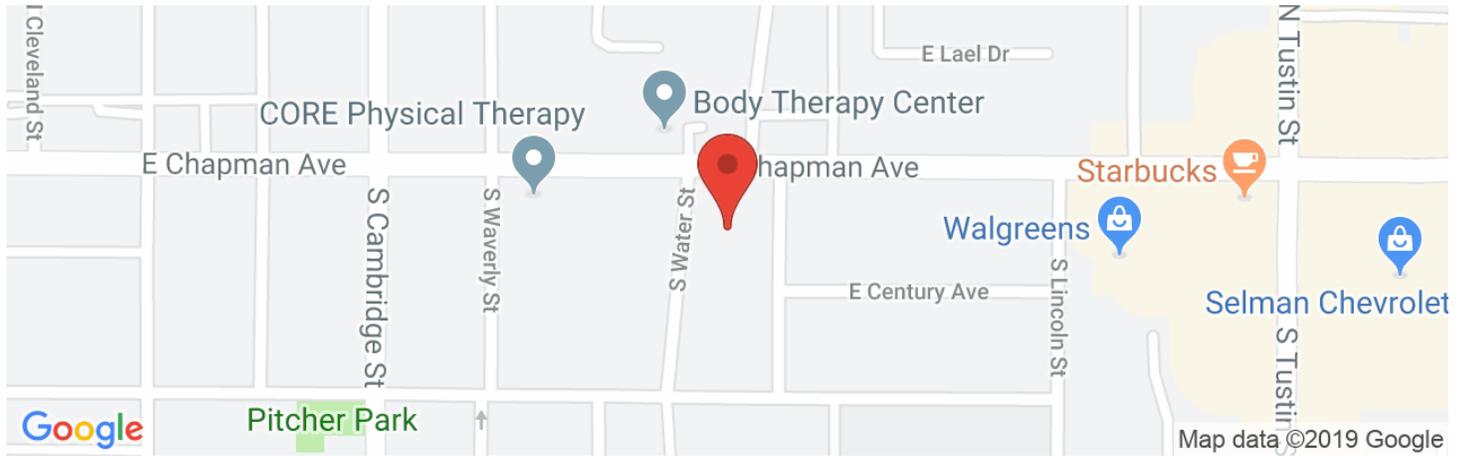


APPENDIX D
SUMMARY OF SEISMIC HAZARD ANALYSIS





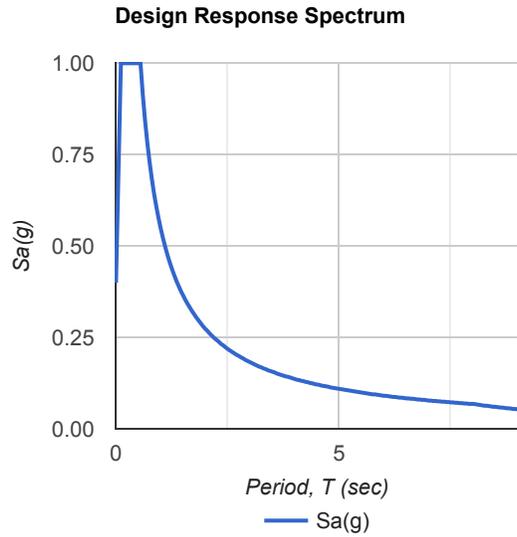
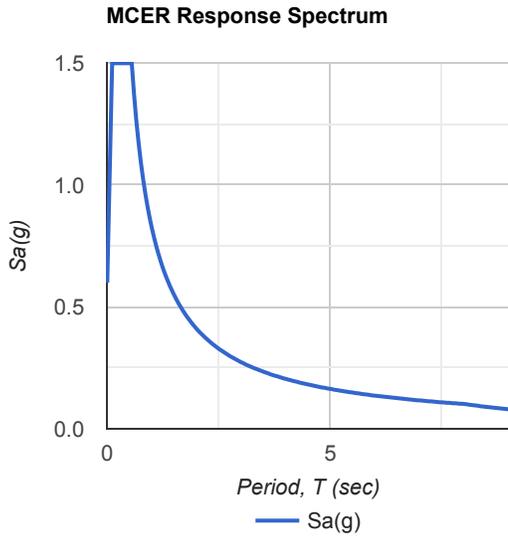
Latitude, Longitude: 33.7873345, -117.84107526



Date	8/20/2019, 11:05:16 AM
Design Code Reference Document	ASCE7-10
Risk Category	II
Site Class	D - Stiff Soil

Type	Value	Description
S_S	1.5	MCE_R ground motion. (for 0.2 second period)
S_1	0.549	MCE_R ground motion. (for 1.0s period)
S_{MS}	1.5	Site-modified spectral acceleration value
S_{M1}	0.823	Site-modified spectral acceleration value
S_{DS}	1	Numeric seismic design value at 0.2 second SA
S_{D1}	0.549	Numeric seismic design value at 1.0 second SA

Type	Value	Description
SDC	D	Seismic design category
F_a	1	Site amplification factor at 0.2 second
F_v	1.5	Site amplification factor at 1.0 second
PGA	0.515	MCE_G peak ground acceleration
F_{PGA}	1	Site amplification factor at PGA
PGA_M	0.515	Site modified peak ground acceleration
T_L	8	Long-period transition period in seconds
SsRT	1.504	Probabilistic risk-targeted ground motion. (0.2 second)
SsUH	1.443	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration
SsD	1.5	Factored deterministic acceleration value. (0.2 second)
S1RT	0.549	Probabilistic risk-targeted ground motion. (1.0 second)
S1UH	0.511	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration.
S1D	0.6	Factored deterministic acceleration value. (1.0 second)
PGAd	0.515	Factored deterministic acceleration value. (Peak Ground Acceleration)
C_{RS}	1.042	Mapped value of the risk coefficient at short periods
C_{R1}	1.073	Mapped value of the risk coefficient at a period of 1 s



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Unified Hazard Tool



Please do not use this tool to obtain ground motion parameter values for the design code reference documents covered by the [U.S. Seismic Design Maps web tools](#) (e.g., the International Building Code and the ASCE 7 or 41 Standard). The values returned by the two applications are not identical.

^ Input

Edition

Spectral Period

Latitude

Decimal degrees

Time Horizon

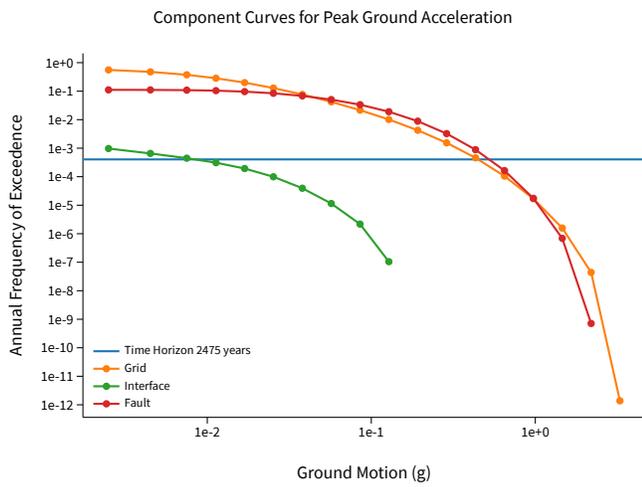
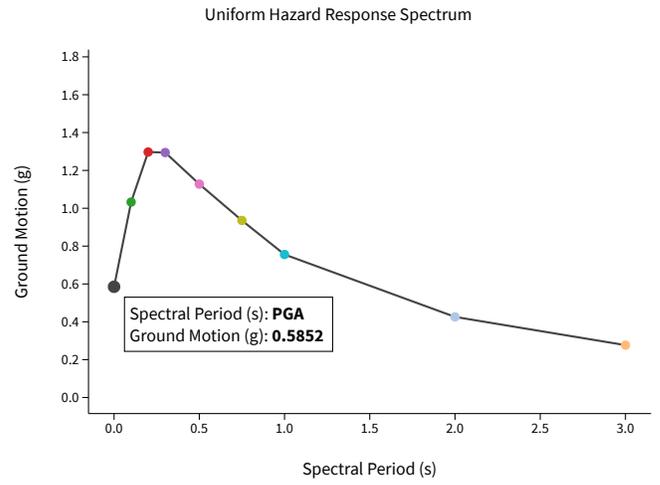
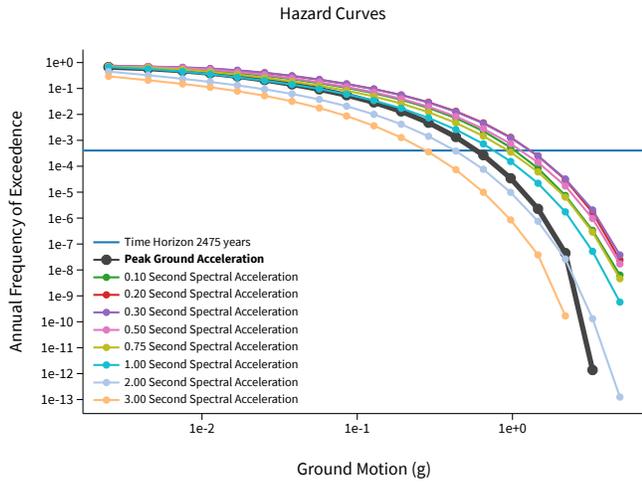
Return period in years

Longitude

Decimal degrees, negative values for western longitudes

Site Class

^ Hazard Curve

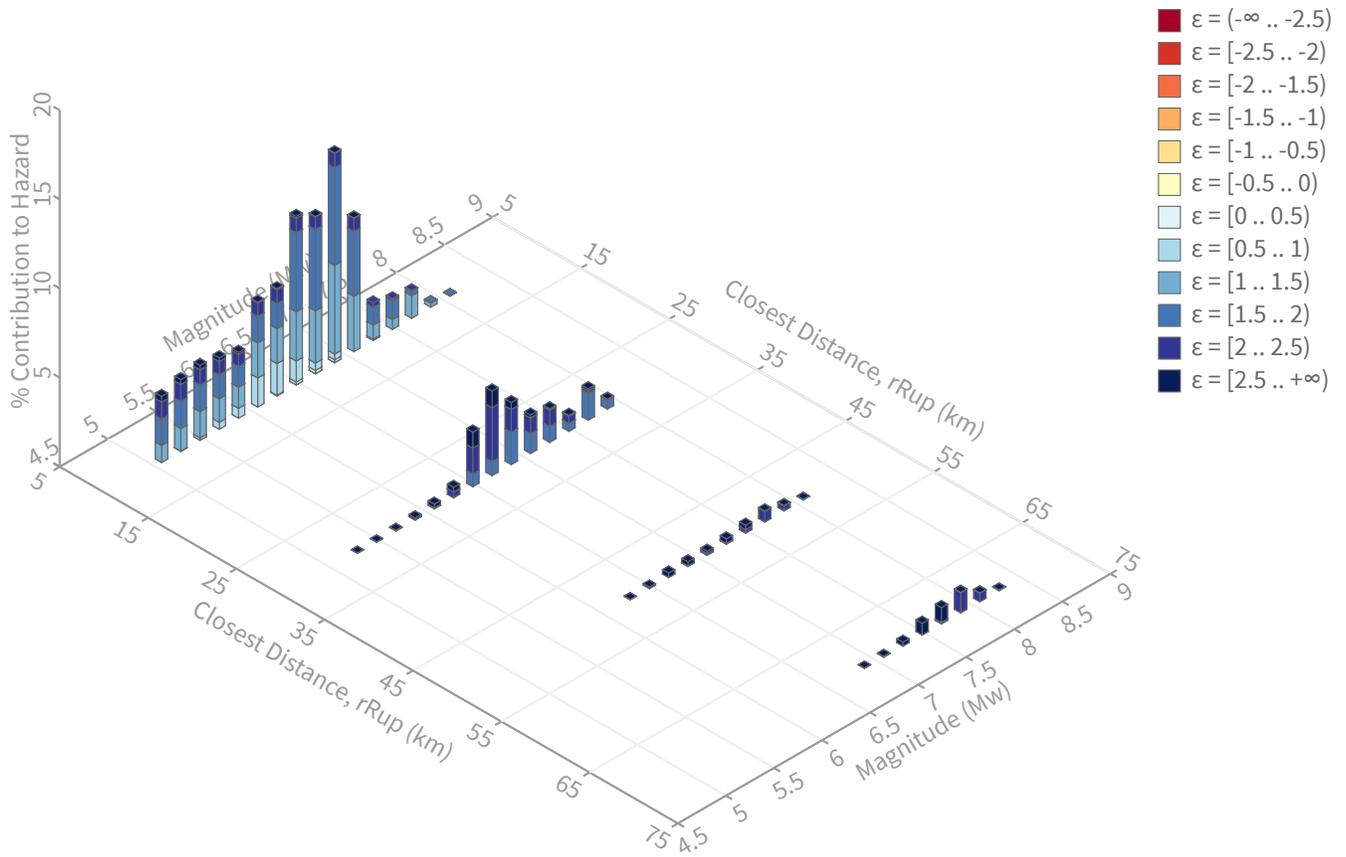


[View Raw Data](#)

^ Deaggregation

Component

Total



Summary statistics for, Deaggregation: Total

Deaggregation targets

Return period: 2475 yrs

Exceedance rate: 0.0004040404 yr⁻¹

PGA ground motion: 0.58520247 g

Recovered targets

Return period: 3014.5434 yrs

Exceedance rate: 0.0003317252 yr⁻¹

Totals

Binned: 100 %

Residual: 0 %

Trace: 0.05 %

Mean (over all sources)

m: 6.59

r: 17.19 km

ε₀: 1.72 σ

Mode (largest m-r bin)

m: 6.9

r: 12.83 km

ε₀: 1.53 σ

Contribution: 11.76 %

Mode (largest m-r-ε₀ bin)

m: 6.91

r: 14.52 km

ε₀: 1.68 σ

Contribution: 5.48 %

Discretization

r: min = 0.0, max = 1000.0, Δ = 20.0 km

m: min = 4.4, max = 9.4, Δ = 0.2

ε: min = -3.0, max = 3.0, Δ = 0.5 σ

Epsilon keys

ε₀: [-∞ .. -2.5)

ε₁: [-2.5 .. -2.0)

ε₂: [-2.0 .. -1.5)

ε₃: [-1.5 .. -1.0)

ε₄: [-1.0 .. -0.5)

ε₅: [-0.5 .. 0.0)

ε₆: [0.0 .. 0.5)

ε₇: [0.5 .. 1.0)

ε₈: [1.0 .. 1.5)

ε₉: [1.5 .. 2.0)

ε₁₀: [2.0 .. 2.5)

ε₁₁: [2.5 .. +∞]

Deaggregation Contributors

Source Set ↴ Source	Type	r	m	ϵ_0	lon	lat	az	%
bFault.ch	Fault							20.70
San Joaquin Hills		11.07	6.98	1.32	117.823°W	33.688°N	171.39	4.92
Puente Hills (Coyote Hills)		12.13	6.71	1.50	117.921°W	33.871°N	321.86	3.90
Puente Hills		16.48	7.06	1.56	117.867°W	33.927°N	351.14	1.89
Chino - alt 1		17.21	6.54	2.03	117.648°W	33.907°N	53.14	1.67
Chino - alt 2		20.12	6.70	1.97	117.629°W	33.886°N	60.81	1.43
bFault.gr	Fault							14.58
San Joaquin Hills		11.19	6.74	1.43	117.823°W	33.688°N	171.39	4.58
Puente Hills (Coyote Hills)		12.13	6.61	1.55	117.921°W	33.871°N	321.86	2.68
Puente Hills		18.62	6.81	1.84	117.867°W	33.927°N	351.14	1.11
Chino - alt 1		17.21	6.49	2.04	117.648°W	33.907°N	53.14	1.01
CAmap.21.ch.in (opt)	Grid							13.08
PointSourceFinite: -117.841, 33.828		6.75	5.76	1.28	117.841°W	33.828°N	0.00	1.08
PointSourceFinite: -117.841, 33.819		6.21	5.73	1.21	117.841°W	33.819°N	0.00	1.04
PointSourceFinite: -117.841, 33.837		7.32	5.79	1.35	117.841°W	33.837°N	0.00	1.03
CAmap.24.ch.in (opt)	Grid							13.04
PointSourceFinite: -117.841, 33.828		6.75	5.76	1.28	117.841°W	33.828°N	0.00	1.08
PointSourceFinite: -117.841, 33.819		6.21	5.73	1.21	117.841°W	33.819°N	0.00	1.04
PointSourceFinite: -117.841, 33.837		7.32	5.79	1.35	117.841°W	33.837°N	0.00	1.03
aFault_aPriori_D2.1	Fault							12.03
Elsinore : W		13.90	6.96	1.73	117.792°W	33.907°N	18.74	3.63
Elsinore : GI		23.65	6.82	2.13	117.590°W	33.829°N	78.66	2.62
Elsinore : GI+T		23.65	7.26	1.96	117.590°W	33.829°N	78.66	1.85
Elsinore : GI+T+J+CM		23.65	7.74	1.74	117.590°W	33.829°N	78.66	1.02
aFault_MoBal	Fault							11.61
Elsinore : W		13.90	6.94	1.74	117.792°W	33.907°N	18.74	5.31
Elsinore : GI		23.65	6.79	2.14	117.590°W	33.829°N	78.66	1.53
CAmap.21.gr.in (opt)	Grid							6.38
CAmap.24.gr.in (opt)	Grid							6.27
aFault_unseg	Fault							2.28
Elsinore		15.43	7.48	1.54	117.792°W	33.907°N	18.74	2.14

Determination of Site Class and Estimation of Shear Wave Velocity

Project: 12482.001

Depth (ft)	di, Layer Thick (ft)	Field Blow Counts, Ni Corrected for Cs and sampler type Blows per foot (bpf)	Average Ni (bpf)	Ni Hammer Corr:	di / Ni
		LB-4		1.3	
3	4	14	14	18	0.22
5	3.5	30	30	39	0.09
10	5	32	32	42	0.12
15	5	52	52	68	0.07
20	5	52	52	68	0.07
25	5	90	90	100	0.05
30	5	52	52	68	0.07
35	5	33	33	43	0.12
40	5	15	15	20	0.26
45	5	90	90	100	0.05
50	7.5	30	30	39	0.19
60	10	40 Assumed	40	52	0.19
70	10	40	40	52	0.19
80	15	40	40	52	0.29
100	10	40	40	52	0.19
Summation	100				2.18
Navg = Sum(di) / Sum(di / Ni) =					46

Extract of ASCE 7-10 Table 20.3-1 Site Classification (2016 CBC 1613A.3.2):

Site Class	Soil Profile Name	Avg. N upper 100'		Vs30 (ft/sec)		Vs30 (m/s)		Site Avg N	Interpolated vs30 (ft/s)
		from	to	from	to	from	to		
A	Hard Rock	-	-	5000	10000	1524	3048	46	1128
B	Rock	-	-	2500	5000	762	1524		
C	VD soil & soft rock	50.001	100	1200	2500	366	762		
D	Stiff Soil	15	50	600	1200	183	366		
E	Soft Soil	0	14.999	0	600	0	183		
F		-	-			0	0		

Site class, Table 20.3-1: **D**

Liquefaction Susceptibility Analysis: SPT Method

Based on Youd and Idriss (2001), Martin and Lew (1999).

Project: 12482
 Project No.: Proposed Fire Station 1

Leighton

General Boring Information:

Boring No.	Existing GW Depth (ft)	Design GW Depth (ft)	Design Fill Height (ft)	Ground Surface Elev (ft)
LB-1	100	100	0	211
LB-3	100	100	0	211
LB-4	100	100	0	211
LB-5	100	100	0	211
				111
				111
				111
				111
				0
				0
				0
				0
				0
				0
				0

General Parameters:	
$a_{max} = 0.51g$	MCE
$M_w = 6.9$	
MSF eq: 1	(Idriss, 2001)
MSF = 1.24	
Hammer Efficiency = 83	%
$C_E = 1.38$	
$C_B = 1$	
$C_{S(SPT)} = 1.2$	
$C_{S(ring)} = 1$	
Rod Stickup (feet) = 3	
Ring sample correction = 0.65	

Summary of Liquefaction Susceptibility Analysis: SPT Method

Liquefaction Method: Youd and Idriss (2001). Seismic Settlement Method: Tokimatsu and Seed (1987) and Martin and Lew (1999).

Project: 12482

Project No.: Proposed Fire Station 1

Leighton

Boring No.	Approx. Layer Depth (ft)	SPT Depth (ft)	Approx Layer Thickness (ft)	Plasticity ("n"=non susc. to liq.)	Estimated Fines Cont (%)	γ_t (pcf)	N_m or B (blows/ft)	Sampler Type (enter 2 if mod CA Ring)	C_s	N_m (corrected for C_s and ring->SPT) (blows/ft)	Exist σ_{vo}' (psf)	$(N_1)_{60}$	$(N_1)_{60CS}$	$CRR_{7.5}$	Design σ_{vo}' (psf)	$CSR_{7.5}$	CSR_M	Liquefaction Factor of Safety	$(N_1)_{60CS}$ (for Settlement) (blows/ft)	Dry Sand Strain (%) (Tok/ Seed 87)	Sat Sand Strain (%) (Tok/ Seed 87)	Seismic Sett. of Layer (in.)	Cummulative Seismic Settlement (in.)
LB-1	0 to 4	3	4		30	115	31	2	1	20.2	345	35.5	45.7	>Range	345	0.33	0.27	NonLiq	45.7	0.01		0.00	0.0
LB-1	4 to 8	5	4		30	125	43	2	1	28.0	585	49.3	61.6	>Range	585	0.33	0.26	NonLiq	61.6	0.01		0.00	0.0
LB-1	8 to 13	10	5		10	125	80	2	1	52.0	1210	80.3	82.9	>Range	1210	0.32	0.26	NonLiq	82.9	0.01		0.00	0.0
LB-1	13 to 18	15	5		10	125	80	2	1	52.0	1835	65.2	67.5	>Range	1835	0.32	0.26	NonLiq	67.5	0.01		0.01	0.0
LB-1	18 to 22	20	5		10	125	80	1	1.2	96.0	2460	116.2	119.6	>Range	2460	0.32	0.26	NonLiq	119.6	0.01		0.00	0.0
LB-3	0 to 4	3	4		28	115	12	2	1	7.8	345	13.8	20.2	0.218	345	0.33	0.27	NonLiq	20.2	0.05		0.02	0.1
LB-3	4 to 7	5	3		28	125	26	2	1	16.9	585	29.8	38.5	>Range	585	0.33	0.26	NonLiq	38.5	0.03		0.01	0.0
LB-3	7 to 9	8	3		5	125	33	2	1	21.5	960	35.0	35.0	>Range	960	0.33	0.26	NonLiq	35.0	0.04		0.01	0.0
LB-3	9 to 13	10	4		5	125	50	2	1	32.5	1210	50.2	50.2	>Range	1210	0.32	0.26	NonLiq	50.2	0.01		0.00	0.0
LB-3	13 to 18	15	5		10	120	80	2	1	52.0	1823	65.4	67.7	>Range	1822.5	0.32	0.26	NonLiq	67.7	0.01		0.01	0.0
LB-3	18 to 22	20	5		10	120	80	1	1.2	96.0	2423	117.1	120.5	>Range	2422.5	0.32	0.26	NonLiq	120.5	0.01		0.00	0.0
LB-4	0 to 4	3	4		30	120	21	2	1	13.7	360	24.1	32.5	>Range	360	0.33	0.27	NonLiq	32.5	0.02		0.01	0.2
LB-4	4 to 8	5	4		10	130	47	2	1	30.6	610	53.9	55.9	>Range	610	0.33	0.26	NonLiq	55.9	0.01		0.00	0.2
LB-4	8 to 13	10	5		31	125	50	2	1	32.5	1248	49.4	62.2	>Range	1247.5	0.32	0.26	NonLiq	62.2	0.01		0.01	0.2
LB-4	13 to 18	15	5		7	115	80	2	1	52.0	1848	65.0	65.7	>Range	1847.5	0.32	0.26	NonLiq	65.7	0.01		0.01	0.2
LB-4	18 to 23	20	5		7	115	80	2	1	52.0	2423	63.4	64.1	>Range	2422.5	0.32	0.26	NonLiq	64.1	0.01		0.01	0.2
LB-4	23 to 28	25	5		7	120	80	1	1.2	96.0	3010	105.1	106.1	>Range	3010	0.31	0.25	NonLiq	106.1	0.01		0.01	0.2
LB-4	28 to 33	30	5		7	120	80	2	1	52.0	3610	54.7	55.3	>Range	3610	0.31	0.25	NonLiq	55.3	0.01		0.01	0.1
LB-4	33 to 38	35	5		80	125	28	1	1.2	33.6	4223	32.7	44.2	>Range	4222.5	0.29	0.24	NonLiq	44.2	0.02		0.01	0.1
LB-4	38 to 43	40	5		80	125	24	2	1	15.6	4848	14.2	22.0	0.242	4847.5	0.28	0.23	NonLiq	22.0	0.15		0.09	0.1
LB-4	43 to 48	45	5		10	125	80	1	1.2	96.0	5473	82.0	84.7	>Range	5472.5	0.27	0.22	NonLiq	84.7	0.01		0.01	0.0
LB-4	48 to 52	50	5		80	130	47	2	1	30.6	6110	24.7	34.6	>Range	6110	0.25	0.21	NonLiq	34.6	0.06		0.03	0.0
LB-5	0 to 4	3	4		5	125	59	2	1	38.4	375	67.6	67.6	>Range	375	0.33	0.27	NonLiq	67.6	0.00		0.00	0.0
LB-5	4 to 8	5	4		5	120	80	2	1	52.0	620	91.7	91.7	>Range	620	0.33	0.26	NonLiq	91.7	0.00		0.00	0.0
LB-5	8 to 13	10	5		5	120	80	2	1	52.0	1220	80.0	80.0	>Range	1220	0.32	0.26	NonLiq	80.0	0.01		0.01	0.0
LB-5	13 to 18	15	5		8	125	80	2	1	52.0	1833	65.3	66.4	>Range	1832.5	0.32	0.26	NonLiq	66.4	0.01		0.01	0.0
LB-5	18 to 22	20	5		8	125	80	1	1.2	96.0	2458	116.3	118.1	>Range	2457.5	0.32	0.26	NonLiq	118.1	0.01		0.00	0.0

EQ Search WLC Orange FS1

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*****  
*                               *  
*   E Q S E A R C H           *  
*                               *  
*   Versi on 3.00             *  
*                               *  
*****
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ESTIMATION OF
PEAK ACCELERATION FROM
CALIFORNIA EARTHQUAKE CATALOGS

JOB NUMBER: 12482.001

DATE: 08-21-2019

JOB NAME: WLC Orange FS1

EARTHQUAKE-CATALOG-FILE NAME: ALLQUAKE.DAT

MAGNITUDE RANGE:

MINIMUM MAGNITUDE: 5.00
MAXIMUM MAGNITUDE: 9.00

SITE COORDINATES:

SITE LATITUDE: 33.7873
SITE LONGITUDE: 117.8411

SEARCH DATES:

START DATE: 1800
END DATE: 1999

SEARCH RADIUS:

60.0 mi
96.6 km

ATTENUATION RELATION: 20) Sadigh et al. (1997) Horiz. - Soil

UNCERTAINTY (M=Median, S=Sigma): M Number of Sigmas: 0.0

ASSUMED SOURCE TYPE: DS [SS=Strike-slip, DS=Reverse-slip, BT=Blind-thrust]

SCOND: 0 Depth Source: A

Basement Depth: 5.00 km Campbell SSR: Campbell SHR:

COMPUTE PEAK HORIZONTAL ACCELERATION

MINIMUM DEPTH VALUE (km): 0.0

EQ Search WLC Orange FS1

EARTHQUAKE SEARCH RESULTS

Page 1

FILE CODE	LAT. NORTH	LONG. WEST	DATE	TIME (UTC)	DEPTH (km)	QUAKE MAG.	SITE ACC. g	SITE MM INT.	APPROX. DI STANCE	
				H M Sec					mi	[km]
DMG	33. 6170	117. 9670	03/11/1933	154 7. 8	0. 0	6. 30	0. 160	V I I	13. 8	(22. 2)
MGI	33. 8000	117. 6000	04/22/1918	2115 0. 0	0. 0	5. 00	0. 057	V I	13. 9	(22. 3)
DMG	33. 6830	118. 0500	03/11/1933	658 3. 0	0. 0	5. 50	0. 084	V I I	14. 0	(22. 5)
DMG	33. 7500	118. 0830	03/11/1933	323 0. 0	0. 0	5. 00	0. 055	V I	14. 1	(22. 7)
DMG	33. 7500	118. 0830	03/11/1933	230 0. 0	0. 0	5. 10	0. 060	V I	14. 1	(22. 7)
DMG	33. 7500	118. 0830	03/11/1933	910 0. 0	0. 0	5. 10	0. 060	V I	14. 1	(22. 7)
DMG	33. 7500	118. 0830	03/13/1933	131828. 0	0. 0	5. 30	0. 071	V I	14. 1	(22. 7)
DMG	33. 7500	118. 0830	03/11/1933	2 9 0. 0	0. 0	5. 00	0. 055	V I	14. 1	(22. 7)
DMG	33. 7000	118. 0670	03/11/1933	85457. 0	0. 0	5. 10	0. 059	V I	14. 3	(23. 0)
DMG	33. 7000	118. 0670	03/11/1933	51022. 0	0. 0	5. 10	0. 059	V I	14. 3	(23. 0)
DMG	33. 6170	118. 0170	03/14/1933	19 150. 0	0. 0	5. 10	0. 054	V I	15. 5	(24. 9)
DMG	33. 7830	118. 1330	10/02/1933	91017. 6	0. 0	5. 40	0. 063	V I	16. 7	(27. 0)
DMG	33. 5750	117. 9830	03/11/1933	518 4. 0	0. 0	5. 20	0. 054	V I	16. 8	(27. 0)
MGI	34. 0000	118. 0000	12/25/1903	1745 0. 0	0. 0	5. 00	0. 044	V I	17. 3	(27. 8)
DMG	33. 6990	117. 5110	05/31/1938	83455. 4	10. 0	5. 50	0. 056	V I	19. 9	(32. 0)
PAS	34. 0610	118. 0790	10/01/1987	144220. 0	9. 5	5. 90	0. 065	V I	23. 3	(37. 5)
DMG	33. 7830	118. 2500	11/14/1941	84136. 3	0. 0	5. 40	0. 042	V I	23. 5	(37. 8)
MGI	34. 0000	117. 5000	12/16/1858	10 0 0. 0	0. 0	7. 00	0. 141	V I I I	24. 4	(39. 3)
PAS	34. 0730	118. 0980	10/04/1987	105938. 2	8. 2	5. 30	0. 036	V	24. 6	(39. 6)
DMG	33. 8500	118. 2670	03/11/1933	1425 0. 0	0. 0	5. 00	0. 027	V	24. 8	(39. 9)
GSP	34. 1400	117. 7000	02/28/1990	234336. 6	5. 0	5. 20	0. 031	V	25. 7	(41. 3)
DMG	33. 7000	117. 4000	05/13/1910	620 0. 0	0. 0	5. 00	0. 026	V	26. 0	(41. 9)
DMG	33. 7000	117. 4000	05/15/1910	1547 0. 0	0. 0	6. 00	0. 062	V I	26. 0	(41. 9)
DMG	33. 7000	117. 4000	04/11/1910	757 0. 0	0. 0	5. 00	0. 026	V	26. 0	(41. 9)
MGI	34. 1000	118. 1000	07/11/1855	415 0. 0	0. 0	6. 30	0. 079	V I I	26. 2	(42. 1)
T-A	34. 0000	118. 2500	01/10/1856	0 0 0. 0	0. 0	5. 00	0. 024	I V	27. 7	(44. 5)
T-A	34. 0000	118. 2500	03/26/1860	0 0 0. 0	0. 0	5. 00	0. 024	I V	27. 7	(44. 5)
T-A	34. 0000	118. 2500	09/23/1827	0 0 0. 0	0. 0	5. 00	0. 024	I V	27. 7	(44. 5)
DMG	34. 2000	117. 9000	08/28/1889	215 0. 0	0. 0	5. 50	0. 035	V	28. 7	(46. 2)
MGI	34. 0000	118. 3000	09/03/1905	540 0. 0	0. 0	5. 30	0. 028	V	30. 1	(48. 5)
MGI	34. 0800	118. 2600	07/16/1920	18 8 0. 0	0. 0	5. 00	0. 020	I V	31. 4	(50. 5)
GSP	34. 2620	118. 0020	06/28/1991	144354. 5	11. 0	5. 40	0. 025	V	34. 0	(54. 8)
DMG	34. 0000	117. 2500	07/23/1923	73026. 0	0. 0	6. 25	0. 049	V I	36. 9	(59. 4)
DMG	34. 2700	117. 5400	09/12/1970	143053. 0	8. 0	5. 40	0. 022	I V	37. 5	(60. 4)
DMG	33. 9000	117. 2000	12/19/1880	0 0 0. 0	0. 0	6. 00	0. 038	V	37. 6	(60. 5)
MGI	34. 1000	117. 3000	07/15/1905	2041 0. 0	0. 0	5. 30	0. 020	I V	37. 8	(60. 8)
DMG	34. 3000	117. 6000	07/30/1894	512 0. 0	0. 0	6. 00	0. 038	V	38. 0	(61. 1)
DMG	34. 2000	117. 4000	07/22/1899	046 0. 0	0. 0	5. 50	0. 024	I V	38. 1	(61. 3)
DMG	34. 3000	117. 5000	07/22/1899	2032 0. 0	0. 0	6. 50	0. 054	V I	40. 4	(65. 0)
MGI	34. 0000	118. 5000	11/19/1918	2018 0. 0	0. 0	5. 00	0. 014	I V	40. 5	(65. 2)
DMG	34. 0000	118. 5000	08/04/1927	1224 0. 0	0. 0	5. 00	0. 014	I V	40. 5	(65. 2)
DMG	34. 3700	117. 6500	12/08/1812	15 0 0. 0	0. 0	7. 00	0. 076	V I I	41. 7	(67. 1)
PAS	33. 9190	118. 6270	01/19/1989	65328. 8	11. 9	5. 00	0. 011	I I I	46. 0	(74. 0)

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EQ Search WLC Orange FS1

DMG	33. 9500	118. 6320	08/31/1930	04036. 0	0. 0	5. 20	0. 013	III	46. 7(75. 2)
GSP	34. 2310	118. 4750	03/20/1994	212012. 3	13. 0	5. 30	0. 014	IV	47. 5(76. 4)
DMG	33. 8000	117. 0000	12/25/1899	1225 0. 0	0. 0	6. 40	0. 039	V	48. 3(77. 7)
DMG	33. 7500	117. 0000	04/21/1918	223225. 0	0. 0	6. 80	0. 054	VI	48. 3(77. 8)
DMG	33. 7500	117. 0000	06/06/1918	2232 0. 0	0. 0	5. 00	0. 011	III	48. 3(77. 8)
PAS	33. 9440	118. 6810	01/01/1979	231438. 9	11. 3	5. 00	0. 010	III	49. 3(79. 4)
GSP	34. 2130	118. 5370	01/17/1994	123055. 4	18. 0	6. 70	0. 048	VI	49. 5(79. 7)
DMG	34. 3080	118. 4540	02/09/1971	144346. 7	6. 2	5. 20	0. 012	III	50. 2(80. 8)
DMG	34. 2000	117. 1000	09/20/1907	154 0. 0	0. 0	6. 00	0. 025	V	51. 1(82. 2)
DMG	33. 7100	116. 9250	09/23/1963	144152. 6	16. 5	5. 00	0. 009	III	52. 9(85. 1)

EARTHQUAKE SEARCH RESULTS

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FILE CODE	LAT. NORTH	LONG. WEST	DATE	TIME (UTC) H M Sec	DEPTH (km)	QUAKE MAG.	SITE ACC. g	SITE MM INT.	APPROX. DI STANCE mi [km]
DMG	34. 4110	118. 4010	02/09/1971	141028. 0	8. 0	5. 30	0. 012	III	53. 7(86. 3)
DMG	34. 4110	118. 4010	02/09/1971	14 244. 0	8. 0	5. 80	0. 019	IV	53. 7(86. 3)
DMG	34. 4110	118. 4010	02/09/1971	14 1 8. 0	8. 0	5. 80	0. 019	IV	53. 7(86. 3)
DMG	34. 4110	118. 4010	02/09/1971	14 041. 8	8. 4	6. 40	0. 033	V	53. 7(86. 3)
DMG	34. 5190	118. 1980	08/23/1952	10 9 7. 1	13. 1	5. 00	0. 009	III	54. 5(87. 7)
GSB	34. 3010	118. 5650	01/17/1994	204602. 4	9. 0	5. 20	0. 011	III	54. 5(87. 7)
GSP	34. 3050	118. 5790	01/29/1994	112036. 0	1. 0	5. 10	0. 010	III	55. 3(89. 0)
DMG	34. 3000	118. 6000	04/04/1893	1940 0. 0	0. 0	6. 00	0. 022	IV	56. 0(90. 1)
PAS	32. 9710	117. 8700	07/13/1986	1347 8. 2	6. 0	5. 30	0. 011	III	56. 4(90. 7)
DMG	33. 9500	116. 8500	09/28/1946	719 9. 0	0. 0	5. 00	0. 008	III	57. 9(93. 2)
DMG	34. 1800	116. 9200	01/16/1930	034 3. 6	0. 0	5. 10	0. 009	III	59. 3(95. 4)
DMG	34. 1800	116. 9200	01/16/1930	02433. 9	0. 0	5. 20	0. 009	III	59. 3(95. 4)
DMG	34. 2670	116. 9670	08/29/1943	34513. 0	0. 0	5. 50	0. 012	III	60. 0(96. 5)

-END OF SEARCH- 66 EARTHQUAKES FOUND WITHIN THE SPECIFIED SEARCH AREA.

TIME PERIOD OF SEARCH: 1800 TO 1999

LENGTH OF SEARCH TIME: 200 years

THE EARTHQUAKE CLOSEST TO THE SITE IS ABOUT 13.8 MILES (22.2 km) AWAY.

LARGEST EARTHQUAKE MAGNITUDE FOUND IN THE SEARCH RADIUS: 7.0

LARGEST EARTHQUAKE SITE ACCELERATION FROM THIS SEARCH: 0.160 g

COEFFICIENTS FOR GUTENBERG & RICHTER RECURRENCE RELATION:

a-value= 1.043
b-value= 0.349
beta-value= 0.803

TABLE OF MAGNITUDES AND EXCEEDANCES:

Earthquake Magnitude	Number of Times Exceeded	Cumulative No. / Year
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EQ Search WLC Orange FS1

4.0	66	0.33166
4.5	66	0.33166
5.0	66	0.33166
5.5	23	0.11558
6.0	15	0.07538
6.5	5	0.02513
7.0	2	0.01005

EQ Fault

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*                               *  
*   E Q F A U L T             *  
*                               *  
*   Versi on 3.00             *  
*                               *  
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DETERMINISTIC ESTIMATION OF
PEAK ACCELERATION FROM DIGITIZED FAULTS

JOB NUMBER: 12482.001

DATE: 08-20-2019

JOB NAME: WLC Orange FS1

CALCULATION NAME: Test Run Analysis

FAULT-DATA-FILE NAME: CDMGFLTE.DAT

SITE COORDINATES:

SITE LATITUDE: 33.7873
SITE LONGITUDE: 117.8411

SEARCH RADIUS: 60 mi

ATTENUATION RELATION: 20) Sadi gh et al. (1997) Horiz. - Soil
UNCERTAINTY (M=Median, S=Sigma): M Number of Sigmas: 0.0
DISTANCE MEASURE: cl odis
SCOND: 0
Basement Depth: 5.00 km Campbell SSR: Campbell SHR:
COMPUTE PEAK HORIZONTAL ACCELERATION

FAULT-DATA FILE USED: CDMGFLTE.DAT

MINIMUM DEPTH VALUE (km): 0.0

EQFAULT SUMMARY

DETERMINISTIC SITE PARAMETERS

Page 1

ABBREVIATED FAULT NAME	APPROXIMATE DISTANCE mi (km)	ESTIMATED MAX. EARTHQUAKE EVENT		
		MAXIMUM EARTHQUAKE MAG. (Mw)	PEAK SITE ACCEL. g	EST. SITE INTENSITY MOD. MERC.
ELYSIAN PARK THRUST	8.6(13.9)	6.7	0.303	IX
WHITTIER	8.8(14.1)	6.8	0.243	IX
COMPTON THRUST	9.9(15.9)	6.8	0.287	IX
NEWPORT-INGLEWOOD (L. A. Basin)	12.2(19.6)	6.9	0.199	VIII
ELSI NORE-GLEN IVY	12.6(20.3)	6.8	0.184	VIII
CHINO-CENTRAL AVE. (Elsinore)	13.0(20.9)	6.7	0.220	IX
NEWPORT-INGLEWOOD (Offshore)	14.2(22.9)	6.9	0.175	VIII
SAN JOSE	17.5(28.2)	6.5	0.147	VIII
PALOS VERDES	22.2(35.8)	7.1	0.129	VIII
SIERRA MADRE	23.9(38.4)	7.0	0.145	VIII
CUCAMONGA	24.2(39.0)	7.0	0.142	VIII
RAYMOND	27.7(44.5)	6.5	0.088	VII
CLAMSHELL-SAWPIT	28.5(45.8)	6.5	0.084	VII
VERDUGO	29.8(47.9)	6.7	0.092	VII
ELSI NORE-TEMECULA	30.0(48.3)	6.8	0.076	VII
HOLLYWOOD	32.0(51.5)	6.4	0.067	VI
SAN JACINTO-SAN BERNARDINO	35.6(57.3)	6.7	0.058	VI
CORONADO BANK	36.2(58.2)	7.4	0.093	VII
SAN JACINTO-SAN JACINTO VALLEY	38.2(61.4)	6.9	0.061	VI
SANTA MONICA	38.4(61.8)	6.6	0.062	VI
SAN ANDREAS - San Bernardino	40.1(64.5)	7.3	0.077	VII
SAN ANDREAS - Southern	40.1(64.5)	7.4	0.082	VII
SAN ANDREAS - 1857 Rupture	40.3(64.9)	7.8	0.106	VII
SAN ANDREAS - Mojave	40.3(64.9)	7.1	0.066	VI
CLEGHORN	42.2(67.9)	6.5	0.040	V
SIERRA MADRE (San Fernando)	42.8(68.8)	6.7	0.058	VI
MALIBU COAST	43.1(69.4)	6.7	0.058	VI
SAN GABRIEL	44.5(71.6)	7.0	0.054	VI
NORTH RIDGE (E. Oak Ridge)	46.2(74.4)	6.9	0.061	VI
NORTH FRONTAL FAULT ZONE (West)	48.2(77.6)	7.0	0.063	VI
ANACAPA-DUME	50.9(81.9)	7.3	0.074	VII
ROSE CANYON	51.3(82.6)	6.9	0.042	VI
SANTA SUSANA	52.8(84.9)	6.6	0.040	V
SAN JACINTO-ANZA	53.2(85.6)	7.2	0.050	VI
ELSI NORE-JULIAN	55.4(89.1)	7.1	0.044	VI
HOLSER	58.6(94.3)	6.5	0.032	V

EQ Fault

-END OF SEARCH- 36 FAULTS FOUND WITHIN THE SPECIFIED SEARCH RADIUS.

THE ELYSIAN PARK THRUST FAULT IS CLOSEST TO THE SITE.
IT IS ABOUT 8.6 MILES (13.9 km) AWAY.

LARGEST MAXIMUM-EARTHQUAKE SITE ACCELERATION: 0.3030 g

APPENDIX E
GENERAL EARTHWORK AND GRADING SPECIFICATIONS



GENERAL EARTHWORK AND GRADING SPECIFICATIONS FOR ROUGH GRADING

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1.0 General

- 1.1 Intent: These General Earthwork and Grading Specifications are for the grading and earthwork shown on the approved grading plan(s) and/or indicated in the geotechnical report(s). These Specifications are a part of the recommendations contained in the geotechnical report(s). In case of conflict, the specific recommendations in the geotechnical report shall supersede these more general Specifications. Observations of the earthwork by the project Geotechnical Consultant during the course of grading may result in new or revised recommendations that could supersede these specifications or the recommendations in the geotechnical report(s).
- 1.2 The Geotechnical Consultant of Record: Prior to commencement of work, the owner shall employ the Geotechnical Consultant of Record (Geotechnical Consultant). The Geotechnical Consultants shall be responsible for reviewing the approved geotechnical report(s) and accepting the adequacy of the preliminary geotechnical findings, conclusions, and recommendations prior to the commencement of the grading.

Prior to commencement of grading, the Geotechnical Consultant shall review the "work plan" prepared by the Earthwork Contractor (Contractor) and schedule sufficient personnel to perform the appropriate level of observation, mapping, and compaction testing.

During the grading and earthwork operations, the Geotechnical Consultant shall observe, map, and document the subsurface exposures to verify the geotechnical design assumptions. If the observed conditions are found to be significantly different than the interpreted assumptions during the design phase, the Geotechnical Consultant shall inform the owner, recommend appropriate changes in design to accommodate the observed conditions, and notify the review agency where required. Subsurface areas to be geotechnically observed, mapped, elevations recorded, and/or tested include natural ground after it has been cleared for receiving fill but before fill is placed, bottoms of all "remedial removal" areas, all key bottoms, and benches made on sloping ground to receive fill.

The Geotechnical Consultant shall observe the moisture-conditioning and processing of the subgrade and fill materials and perform relative compaction testing of fill to determine the attained level of compaction. The Geotechnical Consultant shall provide the test results to the owner and the Contractor on a routine and frequent basis.

- 1.3 The Earthwork Contractor: The Earthwork Contractor (Contractor) shall be qualified, experienced, and knowledgeable in earthwork logistics, preparation and processing of ground to receive fill, moisture-conditioning and processing of fill, and compacting fill. The Contractor shall review and accept the plans, geotechnical report(s), and these Specifications prior to commencement of grading. The

Contractor shall be solely responsible for performing the grading in accordance with the plans and specifications.

The Contractor shall prepare and submit to the owner and the Geotechnical Consultant a work plan that indicates the sequence of earthwork grading, the number of "spreads" of work and the estimated quantities of daily earthwork contemplated for the site prior to commencement of grading. The Contractor shall inform the owner and the Geotechnical Consultant of changes in work schedules and updates to the work plan at least 24 hours in advance of such changes so that appropriate observations and tests can be planned and accomplished. The Contractor shall not assume that the Geotechnical Consultant is aware of all grading operations.

The Contractor shall have the sole responsibility to provide adequate equipment and methods to accomplish the earthwork in accordance with the applicable grading codes and agency ordinances, these Specifications, and the recommendations in the approved geotechnical report(s) and grading plan(s). If, in the opinion of the Geotechnical Consultant, unsatisfactory conditions, such as unsuitable soil, improper moisture condition, inadequate compaction, insufficient buttress key size, adverse weather, etc., are resulting in a quality of work less than required in these specifications, the Geotechnical Consultant shall reject the work and may recommend to the owner that construction be stopped until the conditions are rectified.

2.0 Preparation of Areas to be Filled

- 2.1 Clearing and Grubbing: Vegetation, such as brush, grass, roots, and other deleterious material shall be sufficiently removed and properly disposed of in a method acceptable to the owner, governing agencies, and the Geotechnical Consultant.

The Geotechnical Consultant shall evaluate the extent of these removals depending on specific site conditions. Earth fill material shall not contain more than 1 percent of organic materials (by volume). No fill lift shall contain more than 5 percent of organic matter. Nesting of the organic materials shall not be allowed.

If potentially hazardous materials are encountered, the Contractor shall stop work in the affected area, and a hazardous material specialist shall be informed immediately for proper evaluation and handling of these materials prior to continuing to work in that area.

As presently defined by the State of California, most refined petroleum products (gasoline, diesel fuel, motor oil, grease, coolant, etc.) have chemical constituents that are considered to be hazardous waste. As such, the indiscriminate dumping or spillage of these fluids onto the ground may constitute a misdemeanor, punishable by fines and/or imprisonment, and shall not be allowed.

- 2.2 Processing: Existing ground that has been declared satisfactory for support of fill by the Geotechnical Consultant shall be scarified to a minimum depth of 6 inches. Existing ground that is not satisfactory shall be overexcavated as specified in the following section. Scarification shall continue until soils are broken down and free of large clay lumps or clods and the working surface is reasonably uniform, flat, and free of uneven features that would inhibit uniform compaction.
- 2.3 Overexcavation: In addition to removals and overexcavations recommended in the approved geotechnical report(s) and the grading plan, soft, loose, dry, saturated, spongy, organic-rich, highly fractured or otherwise unsuitable ground shall be overexcavated to competent ground as evaluated by the Geotechnical Consultant during grading.
- 2.4 Benching: Where fills are to be placed on ground with slopes steeper than 5:1 (horizontal to vertical units), the ground shall be stepped or benched. Please see the Standard Details for a graphic illustration. The lowest bench or key shall be a minimum of 15 feet wide and at least 2 feet deep, into competent material as evaluated by the Geotechnical Consultant. Other benches shall be excavated a minimum height of 4 feet into competent material or as otherwise recommended by the Geotechnical Consultant. Fill placed on ground sloping flatter than 5:1 shall also be benched or otherwise overexcavated to provide a flat subgrade for the fill.
- 2.5 Evaluation/Acceptance of Fill Areas: All areas to receive fill, including removal and processed areas, key bottoms, and benches, shall be observed, mapped, elevations recorded, and/or tested prior to being accepted by the Geotechnical Consultant as suitable to receive fill. The Contractor shall obtain a written acceptance from the Geotechnical Consultant prior to fill placement. A licensed surveyor shall provide the survey control for determining elevations of processed areas, keys, and benches.

3.0 Fill Material

- 3.1 General: Material to be used as fill shall be essentially free of organic matter and other deleterious substances evaluated and accepted by the Geotechnical Consultant prior to placement. Soils of poor quality, such as those with unacceptable gradation, high expansion potential, or low strength shall be placed in areas acceptable to the Geotechnical Consultant or mixed with other soils to achieve satisfactory fill material.
- 3.2 Oversize: Oversize material defined as rock, or other irreducible material with a maximum dimension greater than 8 inches, shall not be buried or placed in fill unless location, materials, and placement methods are specifically accepted by the Geotechnical Consultant. Placement operations shall be such that nesting of oversized material does not occur and such that oversize material is completely surrounded by compacted or densified fill. Oversize material shall not be placed within 10 vertical feet of finish grade or within 2 feet of future utilities or underground construction.
- 3.3 Import: If importing of fill material is required for grading, proposed import material shall meet the requirements of Section 3.1. The potential import source shall be given to the Geotechnical Consultant at least 48 hours (2 working days) before importing begins so that its suitability can be determined and appropriate tests performed.

4.0 Fill Placement and Compaction

- 4.1 Fill Layers: Approved fill material shall be placed in areas prepared to receive fill (per Section 3.0) in near-horizontal layers not exceeding 8 inches in loose thickness. The Geotechnical Consultant may accept thicker layers if testing indicates the grading procedures can adequately compact the thicker layers. Each layer shall be spread evenly and mixed thoroughly to attain relative uniformity of material and moisture throughout.
- 4.2 Fill Moisture Conditioning: Fill soils shall be watered, dried back, blended, and/or mixed, as necessary to attain a relatively uniform moisture content at or slightly over optimum. Maximum density and optimum soil moisture content tests shall be performed in accordance with the American Society of Testing and Materials (ASTM Test Method D1557-91).

- 4.3 Compaction of Fill: After each layer has been moisture-conditioned, mixed, and evenly spread, it shall be uniformly compacted to not less than 90 percent of maximum dry density (ASTM Test Method D1557-91). Compaction equipment shall be adequately sized and be either specifically designed for soil compaction or of proven reliability to efficiently achieve the specified level of compaction with uniformity.
- 4.4 Compaction of Fill Slopes: In addition to normal compaction procedures specified above, compaction of slopes shall be accomplished by backrolling of slopes with sheepsfoot rollers at increments of 3 to 4 feet in fill elevation, or by other methods producing satisfactory results acceptable to the Geotechnical Consultant. Upon completion of grading, relative compaction of the fill, out to the slope face, shall be at least 90 percent of maximum density per ASTM Test Method D1557-91.
- 4.5 Compaction Testing: Field tests for moisture content and relative compaction of the fill soils shall be performed by the Geotechnical Consultant. Location and frequency of tests shall be at the Consultant's discretion based on field conditions encountered. Compaction test locations will not necessarily be selected on a random basis. Test locations shall be selected to verify adequacy of compaction levels in areas that are judged to be prone to inadequate compaction (such as close to slope faces and at the fill/bedrock benches).
- 4.6 Frequency of Compaction Testing: Tests shall be taken at intervals not exceeding 2 feet in vertical rise and/or 1,000 cubic yards of compacted fill soils embankment. In addition, as a guideline, at least one test shall be taken on slope faces for each 5,000 square feet of slope face and/or each 10 feet of vertical height of slope. The Contractor shall assure that fill construction is such that the testing schedule can be accomplished by the Geotechnical Consultant. The Contractor shall stop or slow down the earthwork construction if these minimum standards are not met.
- 4.7 Compaction Test Locations: The Geotechnical Consultant shall document the approximate elevation and horizontal coordinates of each test location. The Contractor shall coordinate with the project surveyor to assure that sufficient grade stakes are established so that the Geotechnical Consultant can determine the test locations with sufficient accuracy. At a minimum, two grade stakes within a horizontal distance of 100 feet and vertically less than 5 feet apart from potential test locations shall be provided.

5.0 Subdrain Installation

Subdrain systems shall be installed in accordance with the approved geotechnical report(s), the grading plan, and the Standard Details. The Geotechnical Consultant may recommend additional subdrains and/or changes in subdrain extent, location, grade, or material depending on conditions encountered during grading. All subdrains shall be surveyed by a land surveyor/civil engineer for line and grade after installation and prior to burial. Sufficient time should be allowed by the Contractor for these surveys.

6.0 Excavation

Excavations, as well as over-excavation for remedial purposes, shall be evaluated by the Geotechnical Consultant during grading. Remedial removal depths shown on geotechnical plans are estimates only. The actual extent of removal shall be determined by the Geotechnical Consultant based on the field evaluation of exposed conditions during grading. Where fill-over-cut slopes are to be graded, the cut portion of the slope shall be made, evaluated, and accepted by the Geotechnical Consultant prior to placement of materials for construction of the fill portion of the slope, unless otherwise recommended by the Geotechnical Consultant.

7.0 Trench Backfills

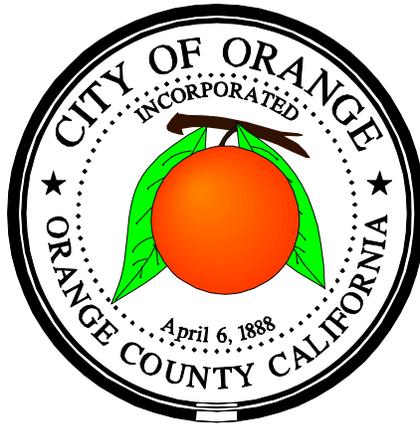
7.1 Safety: The Contractor shall follow all OSHA and Cal/OSHA requirements for safety of trench excavations.

7.2 Bedding and Backfill: All bedding and backfill of utility trenches shall be done in accordance with the applicable provisions of Standard Specifications of Public Works Construction. Bedding material shall have a Sand Equivalent greater than 30 (SE>30). The bedding shall be placed to 1 foot over the top of the conduit and densified by jetting. Backfill shall be placed and densified to a minimum of 90 percent of maximum from 1 foot above the top of the conduit to the surface.

The Geotechnical Consultant shall test the trench backfill for relative compaction. At least one test should be made for every 300 feet of trench and 2 feet of fill.

7.3 Lift Thickness: Lift thickness of trench backfill shall not exceed those allowed in the Standard Specifications of Public Works Construction unless the Contractor can demonstrate to the Geotechnical Consultant that the fill lift can be compacted to the minimum relative compaction by his alternative equipment and method.

7.4 Observation and Testing: The jetting of the bedding around the conduits shall be observed by the Geotechnical Consultant.



**PRELIMINARY
PRIORITY PUBLIC PROJECT
WATER QUALITY MANAGEMENT PLAN
(WQMP)**

PROJECT: Orange Fire Station No. 1 - Headquarters

WQMP No.: 2020- _____

Prepared by:

**MSL Engineering, Inc.
Aaron D. Pellow, R.C.E. 77913
301 North San Dimas Avenue
San Dimas, CA 91773
909-305-2395**

06-22-2020

Date

Reviewed by: _____

Date

Recommended for Approval:

City Engineer

Date

Approved by:

Public Works Director

Date

OWNER'S CERTIFICATION
WATER QUALITY MANAGEMENT PLAN
FOR
Orange Fire Station No. 1 - Headquarters

This Water Quality Management Plan (WQMP) for the City of Orange Fire Station No. 1 – Headquarters at 180 South Jameson Street Project has been prepared for The City of Orange Public Works Department. This WQMP is intended to comply with the requirements of the City of Orange's and the countywide Model Water Quality Management Plan.

The undersigned, while it owns the subject property, is responsible for the implementation of the provisions of this plan and will ensure that this plan is amended as appropriate to reflect up-to-date conditions on the site consistent with the current City of Orange Local Implementation Plan (LIP), and the intent of NPDES Permit and Waste Discharge Requirements for the City of Orange, County of Orange, Orange County Flood Control District and the incorporated Cities of Orange County within the Santa Ana Region.

Signature: _____ Date: _____

Name: _____

Title: Fire Chief - City of Orange

Address: _____, Orange, CA

Telephone Number: (714)_____

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I. Discretionary Permit Number(s), Water Quality Condition Number(s) and Conditions of Approval

Tract No. Jameson Tract M.R. L.A. CO 13-44, Block B Lot No. 1-8 per RD-094-022

GPS Coordinates: 33.78748, -117.84100

Water Quality Conditions (WQMP conditions listed below)

A complete copy of the signed Conditions of Approval, will be included in the Final WQMP and included as Appendix A

Conditions of Approval:

Projects that exceed 5,000 square feet of paved surface are considered Priority projects subject to the preparation of a Water Quality Management Plan (WQMP) and BMP design in compliance with the Orange County Technical Guidance Document.

Prior to the issuance of any grading permits the applicant shall submit a Project WQMP for review and approval to the Public Works Department that:

- Prioritizes the use of Low Impact Development principles as follows: preserves natural features; minimizes runoff and reduces impervious surfaces; and utilizes infiltration of runoff as the method of pollutant treatment. Infiltration BMPs to be considered include the use of permeable materials such as concrete and concrete pavers, infiltration trenches, infiltration planters, and other infiltration BMPs as applicable.
- Incorporates the applicable Routine Source and Structural Control BMPs as defined in the Drainage Area Management Plan (DAMP)
- Maintains the hydrologic characteristics of the site by matching time of concentration, runoff, velocity, volume and hydrograph for a 2-year storm event.
- Minimizes the potential increase in downstream erosion and avoids downstream impacts to physical structures, aquatic and riparian habitat.
- Generally describes the long-term operation and maintenance requirements for structural and Treatment Control BMPs
- Identifies the entity or employees that will be responsible for long-term operation, maintenance, repair and or replacement of the structural and Treatment Control BMPs and the training that qualifies them to operate and maintain the BMPs
- Describes the mechanism for funding the long-term operation and maintenance of all structural and Treatment Control BMPs.

- A copy of the forms to be used in conducting maintenance and inspection activities
- Recordkeeping requirements (forms to be kept for 5 years)
- A copy of the form to be submitted annually by the project owner to the Public Works Department that certifies that the project's structural and treatment BMPs are being inspected and maintained in accordance with the project's WQMP.

Prior to the issuance of certificates for use of occupancy, the applicant shall demonstrate the following to the Public Works Department:

- That all structural and treatment control best management practices (BMPs) described in the Project WQMP have been constructed and installed in conformance with the approved plans and specifications,
- That applicant is prepared to implement all non-structural BMPs described in the Project WQMP,
- That an adequate number of copies of the project's approved final Project WQMP are available for the future occupiers.

Prior to the issuance of certificates for use of occupancy or final signoff by the Public Works Department, the applicant shall demonstrate to the satisfaction of Public Works, that the preparer of the WQMP has reviewed the BMP maintenance requirements in Section V of the WQMP with the responsible person and that a copy of the WQMP has been provided to that person. A certification letter from the WQMP preparer may be used to satisfy this condition.

The project applicant shall maintain all structural, treatment and low impact development BMPs at the frequency specified in the approved water quality management plan (WQMP). Upon transfer of ownership or management responsibilities for the project site, the applicant shall notify the City of Orange Public Works Department of the new person(s) or entity responsible for maintenance of the BMPs.

II. Project Description

Planning Area (Location): Office Professional/Residential. To be re-zoned by City.

Project Site Area (ac): 2.00

Project Disturbed Area (ac): 2.00

Percent Change in Impermeable Surfaces: Reduction of 9,927 s.f.

SIC Code: 9224, Fire Protection

Project Description

The existing site was previously developed, but structures have since been demolished. The southwest parcel is currently used for City parking, while the southeast parcel remains vacant and not utilized. The previous existing condition impervious area is estimated as 95% of the site, based on historic aerial photographs.

The City of Orange will be responsible for demolishing and removing the remaining site improvements within the development area. The City is proposing to develop a new Fire Station No. 1 and Headquarters Administration building on the northeast parcel located on Chapman Avenue, and staff parking lot on the southwest parcel located on Water Street. The total proposed impervious surface area of the project including the building, asphalt and concrete paved parking, driving aisles, sidewalks, and flatwork is approximately 74,021 square feet, the proposed landscaping is approximately 13,144 square feet.

Onsite stormwater treatment was designed in accordance with the MWQMP and TGD, to the maximum extent practicable. Infiltration BMPs were used to retain 100% of the LID DCV calculated below.

Total Impervious Surface Areas Impacted

Pre-project impervious area: 1.90 acres

Post-project impervious area: 1.70 acres

Project Purpose and Activities

The purpose of the project is to create a new fire station and headquarters facility. In order to create this use, all existing site features must be demolished and removed for the construction of the new site.

Potential Storm Water Pollutants

The project uses of commercial development and parking lot, will result with the following expected pollutants: Suspended-Solid/ Sediments, Nutrients, Heavy Metals, Pathogens (Bacteria/Virus), Pesticides, Oil and Grease, Toxic Organic Compounds, and Trash and Debris.

Hydrologic Conditions of Concern

Per TGD Susceptibility Analysis Map for Santa Ana River, included in Section VI, the site location is located within an area of potential areas of erosion, habitat, & physical structure susceptibility, therefore Hydromodification controls will be required for this project. Per Section 2.2.3 of Technical Guidance Document, Post Development conditions must meet pre-development conditions, including time of concentration, volume, velocity and matching 2-year hydrographs. Due to the reduction in impervious surface area and implementation on onsite infiltration BMPs at the site, the project will meet these conditions.

Post Development Drainage Characteristics

The site topography slopes from northeast to southwest towards Almond Avenue. The precise grading and drainage for the project is still in the preliminary stage, but all runoff from the site will be collected onsite and conveyed through a new underground storm drain system to the new stormwater treatment system. The fire station and administration building site will be collected and treated separately from the parking lot site on the west side of Water Street. As described further within the site descriptions section below, the site impervious surface area will be reduced from 82,806 in the existing condition to 74,021 in the proposed condition. With the other drainage characteristics remaining relatively consistent in the proposed condition when compared with the existing condition, this will lead to a reduction in peak flowrates from the site in the proposed condition. This reduction in peak runoff will be quantified in the Final Drainage Study submitted with the project construction documents.

Commercial Projects

The fire station site will include a trash enclosure for site refuse, an emergency generator, and a fuel tank used for re-fueling of fire apparatus. Vehicles will be parked onsite on the both sites.

Site Ownership and any Easements

The property owner of the site is the City of Orange. The City will be responsible for on-going operation and maintenance of all proposed Best Management Practices.

III. Site Description

Reference Location Map: XXXX

Site Address: 180 S. Jameson Street, Orange, CA

Zoning: Office Professional/Residential

Predominant Soil type: Well-graded gravel with sand and silt, sand with gravel, and silty sand.

Pre-project percent pervious: 5% (4,359 S.F.)

Post-project percent pervious: 15.1% (13,144 S.F.)

Pre-project percent impervious: 95% (82,806 S.F.)

Post-project percent impervious: 84.9% (74,021 S.F.)

Watershed: Santa Ana River

Downstream Receiving Waters: Santiago Creek E08, Santa Ana River E01.

Water Quality Impairments (if applicable): None (2016 CA 303d list)

Identify Hydromodification susceptibility: The site is located within an area of potential areas of erosion, habitat, & physical structure susceptibility.

Site Characteristics

The existing site was previously developed, but is currently vacant. The project total area of onsite development is 87,165 square feet, or 2.00 acres. Per the project Geotechnical Investigation, the underlying soil conditions are a thin layer of artificial fill. The artificial fill is underlain by Quaternary-age old alluvial fan deposits extending to the maximum exploration depth of 51 feet bgs. The overlying undocumented fill (Afu) encountered within our excavations generally consisted of a loose to dense silty sand and sand with gravel and small mechanically fractured cobbles. The native soils (Qof) were generally composed of slightly moist to moist, dense to very dense, well-graded gravel with sand and silt, sand with gravel, and silty sand with small weathered cobbles derived from the sedimentary formations in the Santa Ana Mountains. The in-situ moisture content within the upper approximately 15 feet generally ranged from 2 to 7 percent. Groundwater was not encountered in our borings excavated to a maximum depth of 51 feet below the existing ground surface (bgs). The historical high groundwater level in the area was estimated to have been on the order of 172 feet bgs. Raw infiltration rates for the well permeameter tests may be assumed to be about 4.5 in/hour within the gravel layer generally encountered at a depth of 15 to 20 feet bgs, but should be considered negligible in the clayey sand layer at a depth of approximately 10 feet in boring LB-4.

Hydrologic Characteristics

All project runoff from the fire station site and the parking lot site, are ultimately tributary to the same point. The entire project area has a Soil Type A (according to the USDA's Web Soil Survey). Within the limits of the fire station site, existing and proposed runoff flows towards the southwest to curb and gutter flow on Water Street that flows to the south. Site runoff if eventually collected within an existing catch basin on Almond Avenue near the intersection with Water Street. For the parking lot site, existing and proposed runoff flows to the southwest towards and existing concrete drainage flume that drains to curb and gutter flow on Almond Avenue. Site runoff if eventually collected within an existing catch basin on Almond Avenue near the intersection with Cambridge Street. Collected runoff is conveyed via a County RCB storm drain south on Cambridge Street and discharges into Santiago Creek before discharging into the Santa Ana River and ultimately the Pacific Ocean

IV. Best Management Practices

The BMPs chosen for this project are designed to reduce and/or eliminate the wide range of pollutants that are common to commercial developments such as this project. Pollutants such as trash & debris, sediment, oil & grease, and many other pollutant types, commonly attached to sediment, will be removed through a combination of Best Management Practices including Site Design, Source Control, and LID BMPs. With consistent stormwater awareness training for all City staff that will be responsible for ongoing maintenance, the City will be able to appropriately address any potential water quality problem that may arise in the project area. Due to the educational efforts within the City and the resulting heightened awareness of residents, the potential to have possible water quality impacts from illegal activities is minimized.

The treatment BMP selected for this project is two separate underground storm water infiltration systems, one for the fire station and administration building site and one for the parking lot site. For the fire station site the system will be placed near the southwest corner of the site, approximately 250 feet south of Chapman Avenue. For the parking lot site the system will be placed near the south limits of the parking lot, approximately 475 feet south of Chapman Avenue. The units will treat runoff from the 24 Hour, 85th Percentile Rainfall depth, determined to be 0.80 inches for the site location. Infiltration systems have been found to provide a high removal efficiency for Total Suspended Solids, total Phosphorus, total Nitrogen, oil & grease, and metals, since they completely retain and infiltrate the design storm event.

As identified on the Preliminary WQMP Site Plan Sheet C20, there are three onsite drainage Areas. The two main areas of development which are treated via infiltration as described above are designated as Drainage Areas A1 and A2. The third smaller drainage area is designated as Drainage Area B, and represents approximately 10% of the total site area that is primarily perimeter landscape planter areas, which drain directly offsite to the public right of way, and due to the project grading are not feasible to capture onsite.

IV.1 Site Design and Drainage Characteristics

Table 1
Site Design BMPs

Technique	Included?		If no, state justification.
	Yes	No	
Minimize Directly Connected Impervious Areas (DCIAs) (C-Factor Reduction)	X		
Create Reduced or "Zero Discharge" Areas (Runoff Volume Reduction) ¹		X	Not feasible due to the ponding depth that would be required within the landscaped areas.
Minimize Impervious Area/Maximize Permeability (C-Factor Reduction) ²	X		
Conserve Natural Areas (C-Factor Reduction)		X	There are no existing natural areas to conserve.

- 1 Detention and retention areas incorporated into landscape design provide areas for retaining and detaining stormwater flows, resulting in lower runoff rates and reductions in volume due to limited infiltration and evaporation. Such Site Design BMPs may reduce the size of Treatment Control BMPs.
- 2 The "C Factor" is a representation of the ability of a surface to produce runoff. Surfaces that produce higher volumes of runoff are represented by higher C Factors. By incorporating more pervious, lower C Factor surfaces into a development, lower volumes of runoff will be produced. Lower volumes and rates of runoff translate directly to lowering treatment requirements.

Minimize Directly Connected Impervious Areas (DCIAs)

The directly connected impervious areas (DCIAs) were eliminated in the design by connecting all impervious areas to the proposed infiltration system.

Minimize Impervious Area/Maximize Permeability

Driving aisles were reduced to the minimum width allowable for truck turning radii, and sidewalk paths were minimized to the minimum width necessary for ADA access. Minimizing the impervious cover reduces the runoff from the site by reducing the project C-Factor.

IV.2 Source Control BMPs

IV.2.1 Routine Non-Structural BMPs

Table 2

Routine Non-Structural BMPs

BMP No.	Name	Check One		If not applicable, state brief reason.
		Included	Not Applicable	
N1	Education for Property Owners, Tenants and Occupants	X		
N2	Activity Restriction	X		
N3	Common Area Landscape Management	X		
N4	BMP Maintenance	X		
N5	Title 22 CCR Compliance		X	No hazardous wastes anticipated.
N6	Local Water Quality Permit Compliance		X	This BMP is not applicable. The City of Orange does not issue water quality permits.
N7	Spill Contingency Plan	X		
N8	Underground Storage Tank Compliance		X	No underground storage tank.
N9	Hazardous Materials Disclosure Compliance	X		
N10	Uniform Fire Code Implementation	X		
N11	Common Area Litter Control	X		
N12	Employee Training	X		
N13	Housekeeping of Loading Docks		X	No loading docks onsite.
N14	Common Area Catch Basin Inspection	X		
N15	Street Sweeping Private Streets and Parking Lots	X		

N1. Education for Property Owners, Tenants and Occupants: Section VII of this document contains BMP fact sheets and education material relevant to the Fire Station project, for use by City employees. The list of the materials provided is shown in the Table of Contents. The City will be responsible for all BMPs for the project. Through BMP implementation and maintenance, pollutants generated by the project will be reduced and/or eliminated. Maintenance will be performed prior to the rainy season, October 1 - April 30, and all BMPs will be inspected prior to and during the rainy season as needed. See Section VII for the education materials included.

N2. Activity Restriction: The City will be required to maintain a list of restricted activities, regarding stormwater and urban runoff. In addition to the requirements provided here, it is required that The City review and add additional requirements as necessary. The following requirements shall be enforced at all times at the site:

- Dumpster lids must always remain closed and trash shall not be placed next to the dumpster at any time.
- Discharges of fertilizer or pesticides to the stormwater drainage system, are prohibited.
- Landscaping maintenance waste must be disposed of properly and no waste shall enter the stormwater drainage system.

N3. Common Area Landscape Management (SC-41): The City will be required to properly maintain the landscaping at the facility. The sprinkler system for the site is a drip irrigation system, which will prevent the chance of overspray or non-stormwater discharge from the site. All federal, state and local laws and regulations will be followed governing the use, storage, and disposal of fertilizers and pesticides. Irrigation schedules shall be offset from pesticide application to prevent non-stormwater discharge.

N4. BMP Maintenance: BMP maintenance, implementation schedules, and responsible parties are included with each specific BMP narrative.

N7. Spill Contingency Plan (SC-11): In the event of a spill, the initial response will be provided by the City's 24-hour emergency response personnel. If the spill is determined to be chemical or otherwise hazardous, the Orange Fire Department will take over response and clean-up of any hazardous materials. Spills will be contained and cleaned up in accordance with those procedures. In addition, the public has been and will continue to be made aware of the phone numbers, (714) 538-1961 or 911, for reporting any condition of concern to the city of Orange.

N9. Hazardous Materials Disclosure Compliance: The City will be required to prepare all disclosure materials required by the Fire Department regarding the storage of diesel fuel on the site, including the "Chemical Inventory and Business Emergency Plan".

N10. Uniform Fire Code Implementation: The City is responsible for maintaining compliance with Article 80 of the Uniform Fire Code, in order to address the proper management and handling of hazardous materials at the fire station (Diesel Fuel).

N11. Common Area Litter Control (SC-34): The City is required to maintain a litter-free common area and is required to provide a sufficient number of litter receptacles for the facility. The City will implement a schedule for the proper removal of the litter receptacles for the purposes of keeping the site free of loose litter or overfilled receptacles.

N12. Employee Training: The City will be required to develop employee-training procedures that correspond to the Best Management Practices provided in this report. Training should focus on the project-specific concepts related to the prevention of stormwater pollution at the site. Any employee that will be working at the site shall perform new-hire training, as well as annual refresher training.

See Section VII for the education materials included to be used for training.

N14. Common Area Catch Basin Inspection: All catch basins will be inspected on an annual basis prior to October 1st and will be cleaned when necessary. This will reduce the potential for sediment, trash & debris, and other pollutants to accumulate within the storm drain system. All Catch Basins will be inspected to determine the legibility of the “No Dumping- Drains to Ocean” stencil, annually.

N15. Street Sweeping Private Streets and Parking Lots: The City shall provide sweeping and cleaning for its parking areas frequently, as needed to prevent accumulated sediment and debris. Hosing down the parking lot and patios is prohibited. No runoff is allowed to drain into the drain box inlets. Use proper procedure with pollution prevention measures to avoid discharges of was water and other materials into the storm drain system.

IV.2.2 Municipal Activities Model Maintenance Procedures

Table 3 - Model Maintenance Procedures

Identifier	Name	Check One		If not applicable, state brief reason
		Included	Not Applicable	
Fixed Facility Model Maintenance Procedures				
FF2	Building Maintenance and Repair	X		
FF3	Equipment Maintenance and Repair	X		
FF4	Fueling	X		
FF5	Landscape Maintenance	X		
FF6	Material Loading and Unloading	X		
FF7	Material Storage, Handling, and Disposal	X		
FF8	Minor Construction		X	Minor construction not a part of project.
FF9	Parking Lot Maintenance	X		
FF10	Spill Prevention and Control	X		
FF11	Vehicle and Equipment Cleaning	X		
FF12	Vehicle and Equipment Storage	X		
FF13	Waste Handling and Disposal	X		
Drainage Facility Model Maintenance Procedure				
DF-1	Drainage Facility Operation and Maintenance	X		
Field Program Model Maintenance Procedures				
FP1	Lake Management		X	No lakes in the area.
FP2	Landscape Maintenance	X		
FP3	Roads, Streets, and Highways Operations and Maintenance		X	Not roadway or highway operations and maintenance
FP4	Sidewalk, Plaza, and Fountain Cleaning		X	No pressure wash cleaning proposed.
FP5	Solid Waste Handling		X	No large-scale solid waste handling/sorting operations.
FP6	Water and Sewer Utility Ops and Maint.		X	Not applicable to this site.
FP7	Fire Department Activities	X		

DF1 - Drainage Facility Operation and Maintenance

All catch basins will be inspected on an annual basis and will be cleaned per permit requirements. This will reduce the potential for sediment, trash & debris, and other pollutants to accumulate within the storm drain system.

IV.2.3 Routine Structural BMPs

Table 4

Routine Structural BMPs

Name	Check One		If not applicable, state brief reason
	Included	Not Applicable	
Provide storm drain system stenciling and signage- "No Dumping – Drains to Ocean"	X		
Design and construct outdoor material storage areas to reduce pollution introduction		X	No outdoor material storage areas.
Design and construct trash and waste storage areas to reduce pollution introduction	X		
Use efficient irrigation systems & landscape design	X		
Protect slopes and channels and provide energy dissipation		X	No slopes/channels.
Incorporate requirements applicable to individual project features			
a. Dock areas		X	No dock areas
b. Maintenance bays		X	No maintenance bays
c. Vehicle or community wash areas	X		
d. Outdoor processing areas		X	No outdoor processing areas
e. Equipment wash areas		X	No equipment wash areas
f. Fueling areas	X		
g. Hillside landscaping		X	No hillside landscaping
h. Wash water control for food preparation areas			No food preparation areas

S1. Provide storm drain system stenciling and signage (BMP No. SD-13): All storm drains and catch basins within the project area will continue to be inspected for legibility, annually. The phrase "No Dumping – Drains to Ocean" will be re-stenciled as needed, as this message serves to reinforce the city of Orange's stormwater program to the public reminding them of the prohibition on pollutants entering into the public right-of-way and storm drain system.

S3. Design and construct trash and waste storage areas to reduce pollution introduction (BMP No. SD-32): The designed trash storage facility is designed to contain pollutants that could occur within the area. The area is enclosed on three sides and the parking lot paving directly adjacent to the trash storage area is sloped away from the trash enclosure in order to prevent run-on to the area. Interior trash bins shall remain closed at all times when not in use. The City shall inspect the trash storage areas for the integrity of the designed trash enclosure a minimum of once per year.

S4. Use efficient irrigation systems & landscape design (BMP No. SD-10): The landscape design for the site has been designed to minimize impervious land coverage. Irrigation is provided using a drip-irrigation system, which will prevent the possibility of non-stormwater discharge due to over-spray. The project will comply with City of Orange Code for water efficient landscaping.

Vehicle Wash Area: BMP No. SD-33 – Vehicle Washing Areas: The vehicle washing area for the Fire Station is located within the building in the apparatus room. The room has been designed to transport waste from vehicle and equipment washing to an oil/sand interceptor, which will then discharge to the sanitary sewer line. The oil/sand interceptor will ensure that the runoff that enters the sanitary sewer has been treated to separate oil and debris before discharge. It is the City's responsibility to make sure that vehicles are being washed properly and all waste from washing enters the proper inlets and no flow enters the storm drain system located outside the apparatus room. The City should achieve this through their employee-training plan BMP No. N12.

BMP No. SD-30 – Fueling Areas: The fuel tank located onsite is enclosed on all sides with a curb to prevent any fuel spill or leak from entering the storm drain system. The surface of the fuel enclosure is concrete, which will prevent seepage of the fuel due to a spill or leak. A spill cleanup sign and post will be installed at the fuel enclosure to provide the information necessary in the event of a fuel spill. The implementation of these BMPs ensures that all fuel leaks or spills will be contained and will always remain separate from stormwater runoff. The fuel tank enclosure shall be inspected within 24 hours of a storm event. Any accumulated liquids within the enclosure area shall be discharged to the sanitary sewer after authorization from the local sewer agency. No accumulated liquids within the fuel tank enclosure shall be permitted to enter the storm drain system.

IV.3 Low Impact Development BMP Selection

IV.3.1 Infiltration BMPs

Table 5 - Infiltration BMPs

Name	Check If Used
Bioretention without underdrains	<input type="checkbox"/>
Rain gardens	<input type="checkbox"/>
Porous landscaping	<input type="checkbox"/>
Infiltration planters	<input type="checkbox"/>
Retention swales	<input type="checkbox"/>
Infiltration trenches	<input type="checkbox"/>
Infiltration basins	<input type="checkbox"/>
Drywells	<input type="checkbox"/>
Subsurface infiltration galleries (INF-7)	<input checked="" type="checkbox"/>
French drains	<input type="checkbox"/>
Permeable asphalt	<input type="checkbox"/>
Permeable concrete	<input type="checkbox"/>
Permeable concrete pavers	<input type="checkbox"/>
Other:	<input type="checkbox"/>
Other:	<input type="checkbox"/>

The LID design storm capture volume is met with two new proposed infiltration systems. For the fire station site the system will be placed near the southwest corner of the site, approximately 250 feet south of Chapman Avenue. For the parking lot site the system will be placed near the south limits of the parking lot, approximately 475 feet south of Chapman Avenue. For the fire station site, the underground infiltration system will consist of 42 linear feet of 8' diameter perforated corrugated steel pipe surrounded by 1 foot of drainage gravel. For the parking lot site, the underground infiltration system will consist of 24 linear feet of 8' diameter perforated corrugated steel pipe surrounded by 1 foot of drainage gravel. Onsite stormwater runoff is collected within new drain box inlets that contain Kristar Fossil Filter inserts for initial pre-treatment and to collect large debris that will occur within the parking lot.

IV.4 Drainage Management Area (DMA)

Describe each DMA used in project, the BMPs in each DMA and the area treated.

DMA Number	BMPs	Area Treated
A1	Underground Infiltration	46,998 s.f.
A2	Underground Infiltration	31,447 s.f.
B	N/A	
Total Area		78,445 s.f.

Total Project Area = 87,165 s.f.

IV.5 Calculations

1. Worksheet B: Simple Design Capture Volume
2. Worksheet H: Factor of Safety and Design Infiltration Rate Worksheet
3. INF-7: Underground Infiltration Fact Sheet and Sizing

Worksheet B: Simple Design Capture Volume Sizing Method

Step 1: Determine the design capture storm depth used for calculating volume				A1	
1	Enter design capture storm depth from Figure III.1, d (inches)	$d =$	0.80	inches	0.80
2	Enter the effect of provided HSCs, d_{HSC} (inches) (Worksheet A)	$d_{HSC} =$		inches	
3	Calculate the remainder of the design capture storm depth, $d_{remainder}$ (inches) (Line 1 - Line 2)	$d_{remainder} =$	0.80	inches	0.80
Step 2: Calculate the DCV					
1	Enter Project area tributary to BMP (s), A (acres)	$A =$	1.08	acres	0.72
2	Enter Project Imperviousness, imp (unitless)	$imp =$	0.969		0.841
3	Calculate runoff coefficient, $C = (0.75 \times imp) + 0.15$	$C =$	0.88		0.78
4	Calculate runoff volume, $V_{design} = (C \times d_{remainder} \times A \times 43560 \times (1/12))$	$V_{design} =$	2,760	cu-ft	1,631
Step 3: Design BMPs to ensure full retention of the DCV					
Step 3a: Determine design infiltration rate					
1	Enter measured infiltration rate, $K_{observed}^1$ (in/hr) (Appendix VII)	$K_{observed} =$	4.5	In/hr	
2	Enter combined safety factor from Worksheet H, S_{total} (unitless)	$S_{total} =$	2.8		
3	Calculate design infiltration rate, $K_{design} = K_{observed} / S_{total}$	$K_{design} =$	1.61	In/hr	
Step 3b: Determine minimum BMP footprint				N/A for INF-7: Underground Infiltration. See drawdown calculations within INF-7 worksheet provided.	
4	Enter drawdown time, T (max 48 hours)	$T =$		Hours	
5	Calculate max retention depth that can be drawn down within the drawdown time (feet), $D_{max} = K_{design} \times T \times (1/12)$	$D_{max} =$		feet	
6	Calculate minimum area required for BMP (sq-ft), $A_{min} = V_{design} / d_{max}$	$A_{min} =$		sq-ft	

¹ $K_{observed}$ is the vertical infiltration measured in the field, before applying a factor of safety. If field testing measures a rate that is different than the vertical infiltration rate (for example, three-dimensional borehole percolation rate), then this rate must be adjusted by an acceptable method (for example, Porchet method) to yield the field estimate of vertical infiltration rate, $K_{observed}$. See Appendix VII.

Worksheet H: Factor of Safety and Design Infiltration Rate and Worksheet

Factor Category		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) $p = w \times v$
A	Suitability Assessment	Soil assessment methods	0.25	2	0.50
		Predominant soil texture	0.25	1	0.25
		Site soil variability	0.25	1	0.25
		Depth to groundwater / impervious layer	0.25	1	0.25
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			
B	Design	Tributary area size	0.25	2	0.50
		Level of pretreatment/ expected sediment loads	0.25	3	0.75
		Redundancy	0.25	3	0.50
		Compaction during construction	0.25	2	0.50
		Design Safety Factor, $S_B = \Sigma p$			
Combined Safety Factor, $S_{Total} = S_A \times S_B$				2.8	
Observed Infiltration Rate, inch/hr, $K_{observed}$ (corrected for test-specific bias)				4.5	
Design Infiltration Rate, in/hr, $K_{DESIGN} = K_{Observed} / S_{Total}$				1.61	
Supporting Data					
<p>Briefly describe infiltration test and provide reference to test forms: Infiltration tests were performed in two of the excavated borings during the Geotechnical Investigation. Well permeameter tests were performed. Additional information is provided on Page 13 of the Geotechnical Investigation provided in Appendix E</p>					

Note: The minimum combined adjustment factor shall not be less than 2.0 and the maximum combined adjustment factor shall not exceed 9.0.

INF-7: Underground Infiltration

Underground infiltration is a vault or chamber with an open bottom that used to store runoff and percolate into the subsurface. A number of vendors offer proprietary infiltration products that allow for similar or enhanced rates of infiltration and subsurface storage while offering durable prefrabricated structures. There are many varieties of proprietary infiltration BMPs that can be used for roads and parking lots, parks and open spaces, single and multi-family residential, or mixed-use and commercial uses.



Feasibility Screening Considerations

- Infiltration bays shall pass infeasible screening criteria to be considered for use.
- Underground infiltration galleries pose a potential risk of groundwater contamination; pretreatment should be used.

Opportunity Criteria

- Soils are adequate for infiltration or can be amended to provide an adequate infiltration rate.
- Appropriate for sites with limited surface space.
- Can be placed beneath roads, parking lots, parks, and athletic fields.
- Potential for groundwater contamination can be mitigated through isolation of pollutant sources, pretreatment of inflow, and/or demonstration of adequate treatment capacity of underlying soils.
- Infiltration is into native soil, or depth of engineered fill is ≤ 5 feet from the bottom of the facility to native material and infiltration into fill is approved by a geotechnical professional.
- Tributary area land uses include mixed-use and commercial, single-family and multi-family, roads and parking lots, and parks and open spaces. High pollutant land uses should not be tributary to infiltration BMPs.

OC-Specific Design Criteria and Considerations

- Placement of BMPs should observe geotechnical recommendations with respect to geological hazards (e.g. landslides, liquefaction zones, erosion, etc.) and set-backs (e.g., foundations, utilities, roadways, etc.)
- Minimum separation to mounded seasonally high groundwater of 10 feet shall be observed.
- Minimum pretreatment should be provided upstream of the infiltration facility, and water bypassing pretreatment should not be directed to the facility.
- Underground infiltration should not be used for drainage areas with high sediment production potential unless preceded by full treatment control with a BMP effective for sediment removal.
- Design infiltration rate should be determined as described in [Appendix VII](#).
- Inspection ports or similar design features shall be provided to verify continued system performance and identify need for major maintenance.

- For infiltration facilities beneath roads and parking areas, structural requirements should meet H-20 load requirements.

Computing Underground Infiltration Device Size

Underground infiltration devices vary by design and by proprietary designs. The sizing method selected for use must be based on the BMP type it most strongly resembles.

- For underground infiltration devices with open pore volume (e.g., vaults, crates, pipe sections, etc), sizing will be most similar to infiltration basins.
- For underground infiltration devices with pore space (e.g., aggregate reservoirs), sizing will be most similar to permeable pavement.

Additional References for Design Guidance

- Los Angeles Unified School District (LAUSD) Stormwater Technical Manual, Chapter 5: [http://www.laschools.org/employee/design/fs-studies-and-reports/download/white_paper_report_material/Storm Water Technical Manual 2009-opt-red.pdf?version_id=76975850](http://www.laschools.org/employee/design/fs-studies-and-reports/download/white_paper_report_material/Storm_Water_Technical_Manual_2009-opt-red.pdf?version_id=76975850)

Volume Provided

Area A1

$$Volume\ Pipe = 42' * \pi * \frac{8^2}{4} = 2,111\ cf$$

$$Volume\ Voids = 0.4 * (44' * 10' * 9' - 2,111cf) = 740\ cf$$

$$Total\ Volume = 2,111cf + 740cf = 2,851\ cf$$

Area A2

$$Volume\ Pipe = 24' * \pi * \frac{8^2}{4} = 1,206\ cf$$

$$Volume\ Voids = 0.4 * (26' * 10' * 9' - 1,206cf) = 454\ cf$$

$$Total\ Volume = 1,206cf + 454cf = 1,660\ cf$$

Drawdown

Design Infiltration Rate = 1.61 in/hr

BMP Footprint, Area A1 = 44'*10' = 440s.f.; Area A2 = 26'*10' = 260s.f.

Drawdown Rate, Area A1 = 1.61in/hr*440 sf*1ft/12in=59.0cf/hr

Area A2 = 1.61in/hr*260 sf*1ft/12in=34.9cf/hr

Drawdown Time, Area A1 = 2,851cf/59.0cf/hr = 48.3 hours*

Area A2 = 1,660cf/34.9cf/hr = 47.6 hours*

*Per TGD XI 3.2 for Infiltration BMPs "Surface drawdown shall not exceed 96 hours because of vector issues. Drawdown time of subsurface storage may exceed 96 hours, however consideration should be given to maintenance activities and plant survival, as applicable, in selecting a maximum subsurface drawdown time."

V. Implementation, Maintenance and Inspection Responsibility for BMPs (O&M Plan)

Responsible Party Information (Local Contact Information)

Name: _____ Title: _____

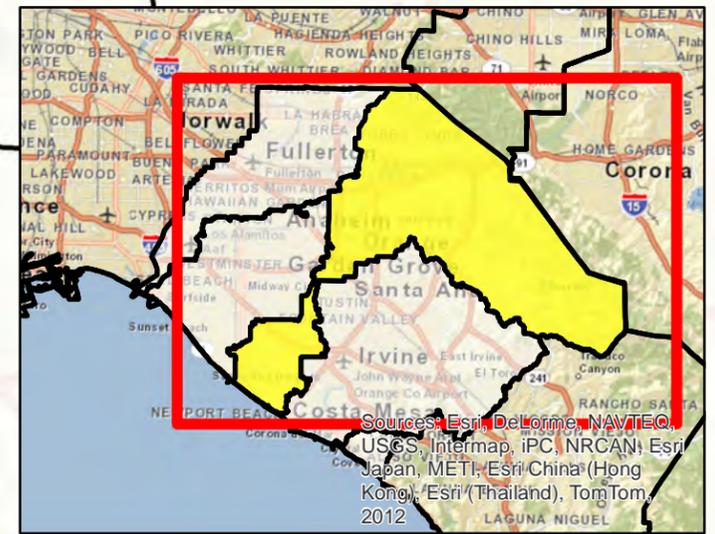
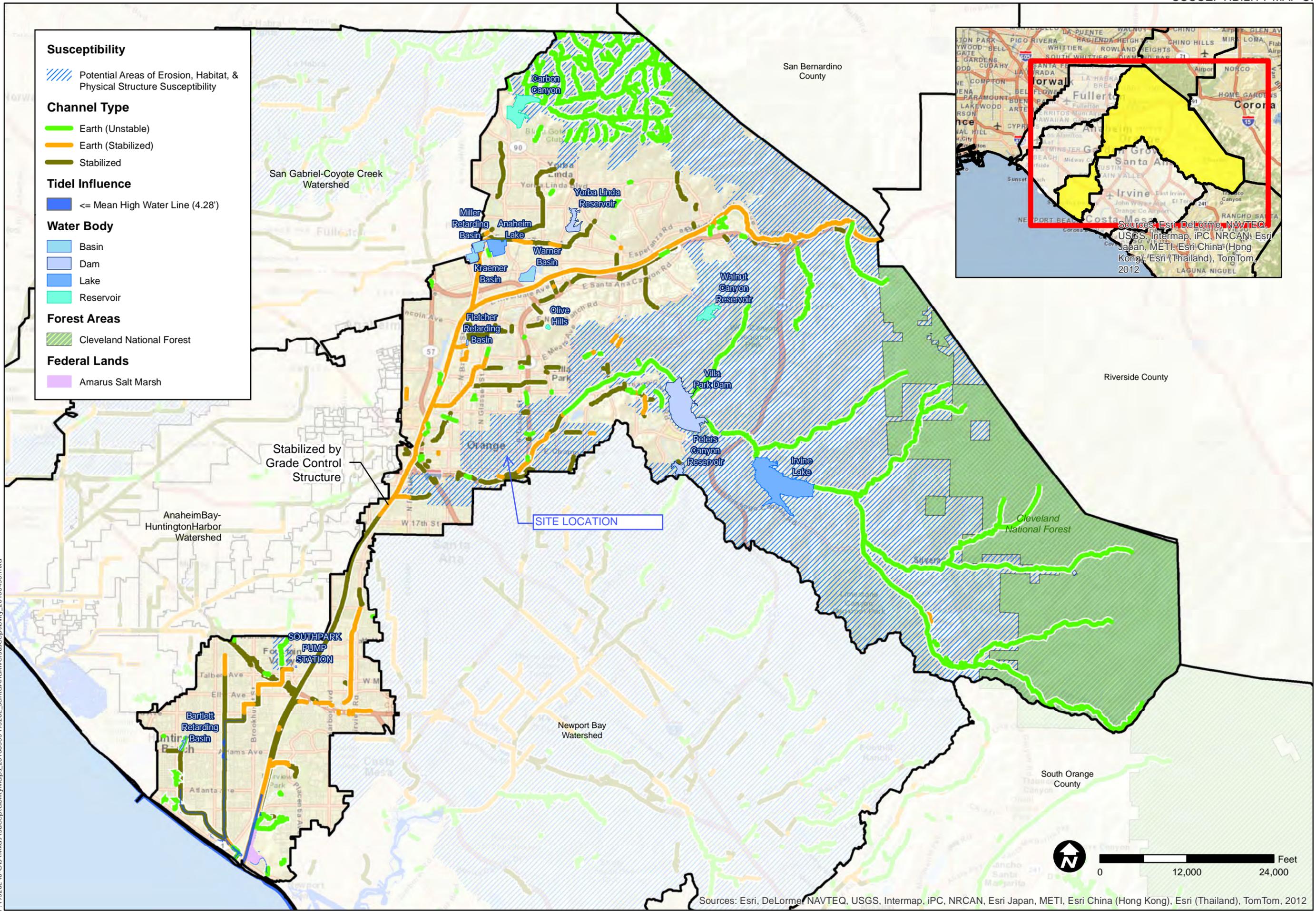
Company: _____ Phone Number: _____

Complete frequency matrix. Expand or increase each cell box to provide the information required.

Table 6 - Frequency Inspection Matrix

BMP	Responsible Party	*Maintenance Activity	*Inspection/ Maintenance Frequency
Source Control BMPs (Structural and Non-structural)			
SD-13 Storm Drain Signage	City of Orange	Stencilling shall be inspected annually and repaired at anytime the stencilling is deemed illegible.	Annually
SD-32 Trash Storage Area	City of Orange	Inspect storage area containment and trench drain annually.	Annually
SD-10 Site Design and Landscape Planning	City of Orange	Inspect vegetation annually.	Annually
Low Impact Development and Treatment BMPs			
MP-52 Drain Inserts	City of Orange	3 annual inspections of the filters and have the filter medium replaced once per year. In addition the filters should be cleaned whenever an inspection shows that the filter is more than 25% clogged.	3 Times per year.
INF-7 Underground Infiltration	City of Orange	Annual inspection of infiltration piping and outlet structure. Vacuum out all sediment and remove any debris from within the pipes. Ensure structure outlet is free of debris and not damaged.	Annually

VI. Location Map, Site Plan, and BMP Details



- Susceptibility**
- Blue hatched: Potential Areas of Erosion, Habitat, & Physical Structure Susceptibility
- Channel Type**
- Green line: Earth (Unstable)
 - Orange line: Earth (Stabilized)
 - Brown line: Stabilized
- Tidel Influence**
- Blue box: <= Mean High Water Line (4.28')
- Water Body**
- Light blue box: Basin
 - Medium blue box: Dam
 - Dark blue box: Lake
 - Cyan box: Reservoir
- Forest Areas**
- Green hatched box: Cleveland National Forest
- Federal Lands**
- Purple box: Amarus Salt Marsh

SUSCEPTIBILITY ANALYSIS
 SANTA ANA RIVER

ORANGE COUNTY
 WATERSHED
 MASTER PLANNING

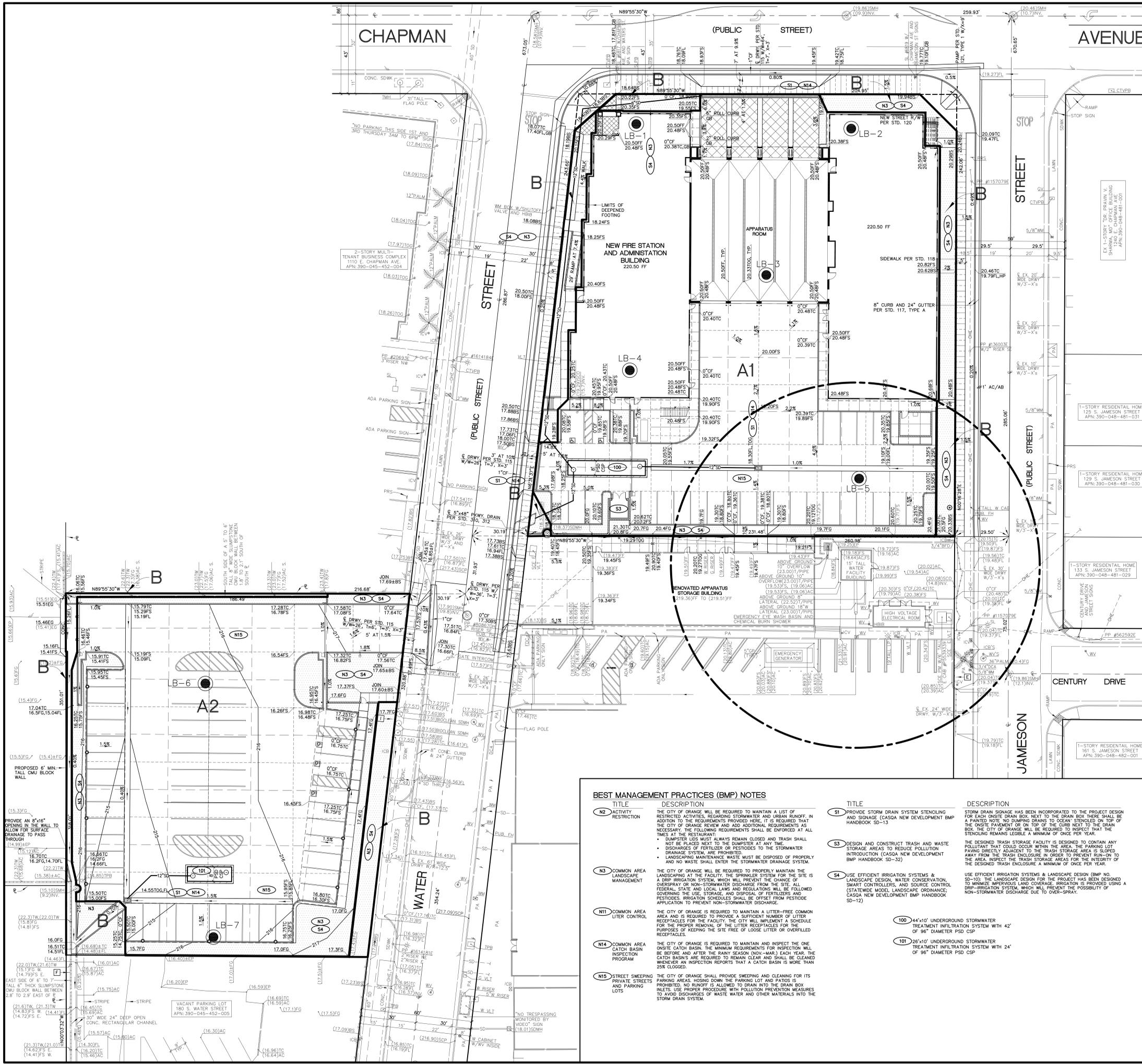
SCALE	1" = 12000'
DESIGNED	TH
DRAWING	TH
CHECKED	BMP
DATE	04/30/10
JOB NO.	9526 E



FIGURE

P:\9526E\6-GIS\MapDocs\Susceptibility\Maps_20100505\9526E_SantaAnaRiverSusceptibility_20100430.mxd

Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2012



PARTIAL LEGEND

- NEW 24"x36" CONCRETE DRAIN BOX INLET WITH A FLOORED PLUS FOSSIL FILTER INSERT FOR THE PRE-TREATMENT OF STORM WATER RUNOFF.
- PROPOSED CITY OF ORANGE INSTALLED AND MAINTAINED LANDSCAPED PLANTER AND IRRIGATION SYSTEM ON SITE
- GEOTECHNICAL INVESTIGATION BORING LOCATION

LIMITS OF 100' RADIUS FROM EXISTING WELL FACILITY, NO INFILTRATION TO BE PROVIDED WITHIN LIMITS.

WOMP NOTES

- THIS SITE WILL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SANTA ANA REGION ORDER NO. R8-2009-0030 DISCHARGE REQUIREMENTS (MS4 PERMIT).
- THE BMP'S, SHOWN ON THE APPROVED SITE PLAN ARE ONLY PRELIMINARY AND WILL BE REVISED OR MODIFIED AS NECESSARY UPON COMPLETION OF THE WOMP. PRIOR TO THE ISSUANCE OF THE GRADING PERMIT, THE APPROVED GRADING/UTILITY PLAN SHALL INCORPORATE ALL REQUIRED STRUCTURAL BMP'S.
- ALL BUILDING ROOF DRAINS AND DOWNSPOUTS WILL BE COLLECTED AND ROUTED TO THE PROPOSED INFILTRATION SYSTEM.

DRAINAGE AREAS			
ID	AREA (SF)	IMPERVIOUS (SF/%)	PERVIOUS (SF/%)
A1	46,998	45,532/96.9%	1,466/3.1%
A2	31,447	26,439/84.1%	5,008/15.9%
B	78,445	71,971/91.7%	6,474/8.3%
TOTAL	87,165	74,021/84.9%	13,144/15.1%

ARCHITECTS

WLC

CLIENT FOCUSED • PASSION DRIVEN

SOUTHERN CALIFORNIA

8163 ROCHESTER AVENUE, SUITE 100
RANCHO CUCAMONGA
CALIFORNIA 91730-0729

TEL: 909-987-0909
www.wlcarchitects.com

ORANGE FIRE STATION No. 1 HEADQUARTERS

CITY OF ORANGE FIRE DEPARTMENT

105 SOUTH WATER STREET, ORANGE, CA

RELEASED ARCHITECTURAL DRAWING

KELLY NEEDHAM
C-19064
16/03/21/21

REGISTERED PROFESSIONAL ENGINEER
MARK S. LAPOURDRE
No. 38382
STATE OF CALIFORNIA

CONSULTANT
MSL ENGINEERING, INC.
CIVIL ENGINEERS AND LAND SURVEYORS
SPECIALIZING IN SITE DEVELOPMENT

301 NORTH SAN DIMAS AVENUE
SAN DIMAS, CA 91773
(909) 305-2395 FAX (909) 305-2397

Mark S. Lapourdre
DATE: 06-22-2020
REVISIONS

NO	DATE BY	DESCRIPTION

DRAWN: G.R.H. CHECKED: M.S.L.
DATE: 06/22/2020 SCALE: 1"=20'
PROJECT NUMBER: 19137

PRELIMINARY
WOMP SITE PLAN

DRAWING NUMBER: **C20**

BEST MANAGEMENT PRACTICES (BMP) NOTES

- | TITLE | DESCRIPTION |
|---|--|
| (N2) ACTIVITY RESTRICTION | THE CITY OF ORANGE WILL BE REQUIRED TO MAINTAIN A LIST OF RESTRICTED ACTIVITIES REGARDING STORMWATER AND URBAN RUNOFF. IN ADDITION TO THE REQUIREMENTS PROVIDED HEREIN IT IS REQUIRED THAT THE CITY OF ORANGE REVIEW AND ADD ADDITIONAL REQUIREMENTS AS NECESSARY. THE FOLLOWING REQUIREMENTS SHALL BE ENFORCED AT ALL TIMES AT THE RESTAURANT:
• DUMPSTER LIDS MUST ALWAYS REMAIN CLOSED AND TRASH SHALL NOT BE PLACED NEXT TO THE DUMPSTER AT ANY TIME.
• DISCHARGES OF FERTILIZER OR PESTICIDES TO THE STORMWATER DRAINAGE SYSTEM, ARE PROHIBITED.
• LANDSCAPE MAINTENANCE WASTE MUST BE DISPOSED OF PROPERLY AND NO WASTE SHALL ENTER THE STORMWATER DRAINAGE SYSTEM. |
| (N3) COMMON AREA LANDSCAPE MANAGEMENT | THE CITY OF ORANGE WILL BE REQUIRED TO PROPERLY MAINTAIN THE LANDSCAPING AT THE FACILITY. THE SPRINKLER SYSTEM FOR THE SITE IS A Drip Irrigation System, WHICH PREVENTS THE CHANCE OF OVERSPRAY OR NON-STORMWATER DISCHARGE FROM THE SITE. ALL FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS WILL BE FOLLOWED GOVERNING THE USE, STORAGE, AND DISPOSAL OF FERTILIZERS AND PESTICIDES. IRRIGATION SCHEDULES SHALL BE OFFSET FROM PESTICIDE APPLICATION TO PREVENT NON-STORMWATER DISCHARGE. |
| (N11) COMMON AREA LITTER CONTROL | THE CITY OF ORANGE IS REQUIRED TO MAINTAIN A LITTER-FREE COMMON AREA AND IS REQUIRED TO PROVIDE A SUFFICIENT NUMBER OF LITTER RECEPTACLES FOR THE FACILITY. THE CITY WILL IMPLEMENT A SCHEDULE FOR THE PROPER REMOVAL OF THE LITTER RECEPTACLES FOR THE PURPOSES OF KEEPING THE SITE FREE OF LOOSE LITTER OR OVERFILLED RECEPTACLES. |
| (N14) COMMON AREA CATCH BASIN INSPECTION PROGRAM | THE CITY OF ORANGE IS REQUIRED TO MAINTAIN AND INSPECT THE ONE CATCH BASIN. THE MINIMUM REQUIREMENTS FOR INSPECTION WILL BE BEFORE AND AFTER THE RAINY SEASON (NOV-MAR.) EACH YEAR. THE CATCH BASIN IS REQUIRED TO REMAIN CLEAR AND SHALL BE CLEANED WHENEVER AN INSPECTION REPORTS THAT A CATCH BASIN IS MORE THAN 25% CLOGGED. |
| (N15) STREET SWEEPING | THE CITY OF ORANGE SHALL PROVIDE SWEEPING AND CLEANING FOR ITS PRIVATE STREETS DOWN THE PARKING LOT AND PATIOS IS PROHIBITED. NO RUNOFF IS ALLOWED TO DRAIN INTO THE DRAIN BOX. WEEDS, USE PROPER PROCEDURE WITH WEED LOTTERS TO AVOID DISCHARGES OF WASTE WATER AND OTHER MATERIALS INTO THE STORM DRAIN SYSTEM. |

- | TITLE | DESCRIPTION |
|--|--|
| (S1) PROVIDE STORM DRAIN SYSTEM STENCILING AND SIGNAGE (CASQA NEW DEVELOPMENT BMP HANDBOOK SD-13) | STORM DRAIN SIGNAGE HAS BEEN INCORPORATED TO THE PROJECT DESIGN FOR EACH ON-SITE DRAIN BOX. NEXT TO THE DRAIN BOX THERE SHALL BE A PAINTED NOTE, NO DUMPING DRAINS TO OCEAN STENCILED ON TOP OF THE ON-SITE PAVEMENT OR ON TOP OF THE CURB NEXT TO THE DRAIN BOX. THE CITY OF ORANGE WILL BE REQUIRED TO INSPECT THAT THE STENCILING REMAINS LEGIBLE A MINIMUM OF ONCE PER YEAR. |
| (S3) DESIGN AND CONSTRUCT TRASH AND WASTE STORAGE AREAS TO REDUCE POLLUTION (CASQA NEW DEVELOPMENT BMP HANDBOOK SD-32) | THE DESIGNED TRASH STORAGE FACILITY IS DESIGNED TO CONTAIN ANY POLLUTANT THAT COULD OCCUR WITHIN THE AREA. THE PARKING LOT PAVING DIRECTLY ADJACENT TO THE TRASH STORAGE AREA IS SLOPED AWAY FROM THE TRASH ENCLOSURE IN ORDER TO PREVENT RUN-OFF TO THE AREA. INSPECT THE TRASH STORAGE AREAS FOR THE INTEGRITY OF THE DESIGNED TRASH ENCLOSURE A MINIMUM OF ONCE PER YEAR. |
| (S4) USE EFFICIENT IRRIGATION SYSTEMS & LANDSCAPE DESIGN (BMP NO. 10) - THE LANDSCAPE DESIGN FOR THE PROJECT HAS BEEN DESIGNED TO MINIMIZE IMPERVIOUS LAND COVERAGE. IRRIGATION IS PROVIDED USING A DRIP-IRRIGATION SYSTEM, WHICH WILL PREVENT THE POSSIBILITY OF NON-STORMWATER DISCHARGE DUE TO OVER-SPRAY. | |

- (100)** 44"x10" UNDERGROUND STORMWATER TREATMENT INFILTRATION SYSTEM WITH 42" OF 96" DIAMETER PSD CSP
- (101)** 26"x10" UNDERGROUND STORMWATER TREATMENT INFILTRATION SYSTEM WITH 24" OF 96" DIAMETER PSD CSP

Underground Service Alert

Call: Toll Free
811

TWO WORKING DAYS BEFORE YOU DIG

PROJECT NORTH TRUE NORTH

GRAPHIC SCALE
SCALE: 1"=20'

0 10 20 40 60

VII. Educational Materials

Refer to the City’s website www.cityoforange.org or the Orange County Stormwater Program (ocwatersheds.com) for a library of materials available. Attach *only* the educational materials specifically applicable to the project.

Education Materials			
Residential Material (http://www.ocwatersheds.com)	Check If Applicable	Business Material (http://www.ocwatersheds.com)	Check If Applicable
The Ocean Begins at Your Front Door	<input type="checkbox"/>	Tips for the Automotive Industry	<input type="checkbox"/>
Tips for Car Wash Fund-raisers	<input type="checkbox"/>	Tips for Using Concrete and Mortar	<input type="checkbox"/>
Tips for the Home Mechanic	<input type="checkbox"/>	Tips for the Food Service Industry	<input checked="" type="checkbox"/>
Homeowners Guide for Sustainable Water Use	<input type="checkbox"/>	Proper Maintenance Practices for Your Business	<input checked="" type="checkbox"/>
Household Tips	<input type="checkbox"/>	Other Material	Check If Attached
Proper Disposal of Household Hazardous Waste	<input type="checkbox"/>		
Recycle at Your Local Used Oil Collection Center (North County)	<input type="checkbox"/>	OCwatersheds.com “Tips for the Food Service Industry”	<input type="checkbox"/>
Recycle at Your Local Used Oil Collection Center (Central County)	<input type="checkbox"/>	OCwatersheds.com “Sewer Spill”	<input checked="" type="checkbox"/>
Recycle at Your Local Used Oil Collection Center (South County)	<input type="checkbox"/>	CASQA BMP SC-41 “Building & Grounds Maintenance”	<input checked="" type="checkbox"/>
Tips for Maintaining a Septic Tank System	<input type="checkbox"/>	CASQA BMP SC-34 “Waste Handling and Disposal”	<input checked="" type="checkbox"/>
Responsible Pest Control	<input type="checkbox"/>	CASQA BMP SD-13 “Storm Drain Signage”	<input checked="" type="checkbox"/>
Sewer Spill Response	<input checked="" type="checkbox"/>	CASQA BMP SD-32 “Trash Storage Areas”	<input checked="" type="checkbox"/>
Tips for the Home Improvement Projects	<input type="checkbox"/>	CASQA BMP SD-10 “Site Design & Landscape Planning”	<input checked="" type="checkbox"/>
Tips for Horse Care	<input type="checkbox"/>	CASQA BMP SD-52 “Drain Inserts”	<input checked="" type="checkbox"/>
Tips for Landscaping and Gardening	<input type="checkbox"/>		<input type="checkbox"/>
Tips for Pet Care	<input type="checkbox"/>		<input type="checkbox"/>
Tips for Pool Maintenance	<input type="checkbox"/>		<input type="checkbox"/>
Tips for Residential Pool, Landscape and Hardscape Drains	<input type="checkbox"/>		<input type="checkbox"/>
Tips for Projects Using Paint	<input type="checkbox"/>		<input type="checkbox"/>

Appendix A:

Conditions of Approval

Resolution Number _____ dated _____

Appendix B:

Educational Material

Sewage Spill Regulatory Requirements

Allowing sewage to discharge to a gutter or storm drain may subject you to penalties and/or out-of-pocket costs to reimburse cities or public agencies for clean-up efforts.

Here are the pertinent codes, fines, and agency contact information that apply.

Orange County Stormwater Program

24 Hour Water Pollution Reporting Hotline

1-877-89-SPILL (1-877-897-7455)

- County and city water quality ordinances prohibit discharges containing pollutants.

Orange County Health Care Agency Environmental Health

(714) 433-6419

California Health and Safety Code, Sections 5410-5416

- No person shall discharge raw or treated sewage or other waste in a manner that results in contamination, pollution or a nuisance.
- Any person who causes or permits a sewage discharge to any state waters:
 - must immediately notify the local health agency of the discharge.
 - shall reimburse the local health agency for services that protect the public's health and safety (water-contact receiving waters).
 - who fails to provide the required notice to the local health agency is guilty of a misdemeanor and shall be punished by a fine (between \$500–\$1,000) and/or imprisonment for less than one year.

Regional Water Quality Control Board Santa Ana Region San Diego Region

(951) 782-4130

(858) 467-2952

- Requires the prevention, mitigation, response to and reporting of sewage spills.

California Office of Emergency Services

(800) 852-7550

California Water Code, Article 4, Chapter 4, Sections 13268-13271
California Code of Regulations, Title 23, Division 3, Chapter 9.2, Article 2, Sections 2250-2260

- Any person who causes or permits sewage in excess of 1,000 gallons to be discharged to state waters shall immediately notify the Office of Emergency Services.
- Any person who fails to provide the notice required by this section is guilty of a misdemeanor and shall be punished by a fine (less than \$20,000) and/or imprisonment for not more than one year.

Sewage Spill Reference Guide

Your Responsibilities as a Private Property Owner

Residences
Businesses
Homeowner/Condominium Associations
Federal and State Complexes
Military Facilities



Orange County
Sanitation District



Health Care Agency
Environmental Health



www.ocwatersheds.com

This brochure was designed courtesy of the Orange County Sanitation District (OCS D).
For additional information, call (714) 962-2411, or visit their website at www.ocsd.com

What is a Sewage Spill?

Sewage spills occur when the wastewater being transported via underground pipes overflows through a manhole, cleanout or broken pipe. Sewage spills can cause health hazards, damage to homes and businesses, and threaten the environment, local waterways and beaches.

Common Causes of Sewage Spills

Grease builds up inside and eventually blocks sewer pipes. Grease gets into the sewer from food establishments, household drains, as well as from poorly maintained commercial grease traps and interceptors.

Structure problems caused by tree roots in the lines, broken/cracked pipes, missing or broken cleanout caps or undersized sewers can cause blockages.

Infiltration and inflow (I/I) impacts pipe capacity and is caused when groundwater or rainwater enters the sewer system through pipe defects and illegal connections.

You Are Responsible for a Sewage Spill Caused by a Blockage or Break in Your Sewer Lines!

Time is of the essence in dealing with sewage spills. You are required to **immediately**:

Control and minimize the spill. Keep spills contained on private property and out of gutters, storm drains and public waterways by shutting off or not using the water.

Use sandbags, dirt and/or plastic sheeting to prevent sewage from entering the storm drain system.

Clear the sewer blockage. Always wear gloves and wash your hands. It is recommended that a plumbing professional be called for clearing blockages and making necessary repairs.

Always notify your city sewer/public works department or public sewer district of sewage spills. If the spill enters the storm drains also notify the Health Care Agency. In addition, if it exceeds 1,000 gallons notify the Office of Emergency Services. Refer to the numbers listed in this brochure.

Overflowing
cleanout pipe
located on
private property



You Could Be Liable

Allowing sewage from your home, business or property to discharge to a gutter or storm drain may subject you to penalties and/or out-of-pocket costs to reimburse cities or public agencies for clean-up and enforcement efforts. See Regulatory Codes & Fines section for pertinent codes and fines that apply.

What to Look For

Sewage spills can be a very noticeable gushing of water from a manhole or a slow water leak that may take time to be noticed. Don't dismiss unaccounted-for wet areas.

Look for:

- Drain backups inside the building.
- Wet ground and water leaking around manhole lids onto your street.
- Leaking water from cleanouts or outside drains.
- Unusual odorous wet areas: sidewalks, external walls or ground/landscape around a building.

Caution

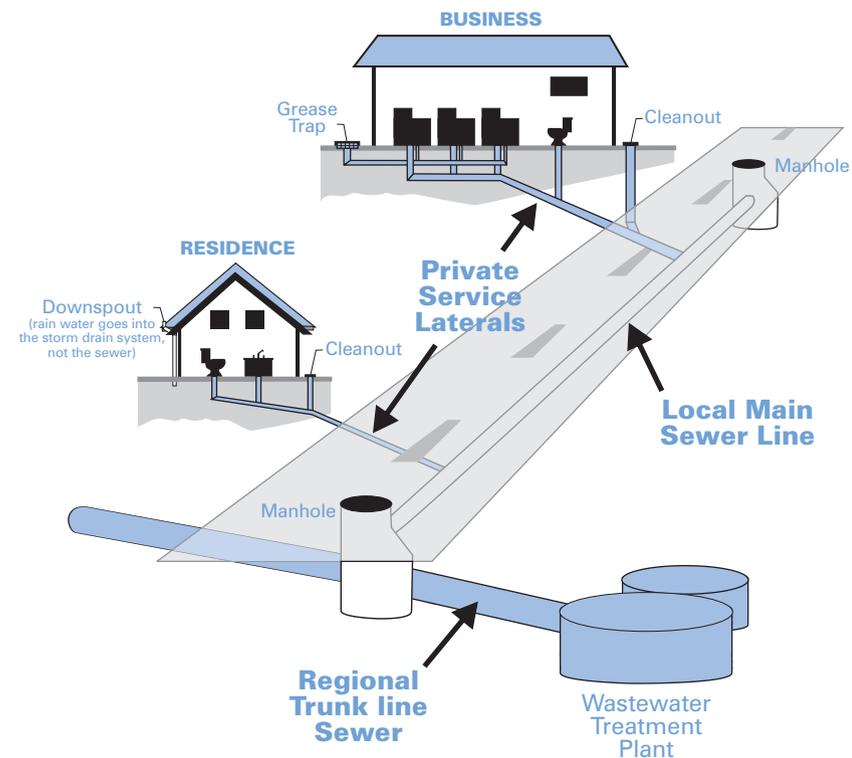
Keep people and pets away from the affected area. Untreated sewage has high levels of disease-causing viruses and bacteria. Call your local health care agency listed on the back for more information.

**If You See a Sewage Spill Occurring,
Notify Your City Sewer/Public Works
Department or Public Sewer District
IMMEDIATELY!**

How a Sewer System Works

A property owner's sewer pipes are called service laterals and are connected to larger local main and regional trunk lines. Service laterals run from the connection at the home to the connection with the public sewer (including the area under the street). These laterals are the responsibility of the property owner and must be maintained by the property owner. Many city agencies have adopted ordinances requiring maintenance of service laterals. Check with your city sewer/local public works department for more information.

Operation and maintenance of **local and regional sewer lines** are the responsibility of the city sewer/public works departments and public sewer districts.



Preventing Grease Blockages

The drain is not a dump! Recycle or dispose of grease properly and never pour grease down the drain.

Homeowners should mix fats, oils and grease with absorbent waste materials such as paper, coffee grounds, or kitty litter and place it in the trash. Wipe food scraps from plates and pans and dump them in the trash.

Restaurants and commercial food service establishments should always use "Kitchen Best Management Practices." These include:

- Collecting all cooking grease and liquid oil from pots, pans and fryers in covered grease containers for recycling.
- Scraping or dry-wiping excess food and grease from dishes, pots, pans and fryers into the trash.
- Installing drain screens on all kitchen drains.
- Having spill kits readily available for cleaning up spills.
- Properly maintaining grease traps or interceptors by having them serviced regularly. Check your local city codes.

How You Can Prevent Sewage Spills

- 1 Never put grease down garbage disposals, drains or toilets.**
- 2 Perform periodic cleaning to eliminate grease, debris and roots in your service laterals.**
- 3 Repair any structural problems in your sewer system and eliminate any rainwater infiltration/inflow leaks into your service laterals.**

Sewage spills can cause damage to the environment. Help prevent them!

Orange County Agency Responsibilities

- **City Sewer/Public Works Departments**— Responsible for protecting city property and streets, the local storm drain system, sewage collection system and other public areas.
- **Public Sewer/Sanitation District**— Responsible for collecting, treating and disposing of wastewater.
- **County of Orange Health Care Agency**— Responsible for protecting public health by closing ocean/bay waters and may close food-service businesses if a spill poses a threat to public health.
- **Regional Water Quality Control Boards**— Responsible for protecting State waters.
- **Orange County Stormwater Program**— Responsible for preventing harmful pollutants from being discharged or washed by stormwater runoff into the municipal storm drain system, creeks, bays and the ocean.

You Could Be Liable for Not Protecting the Environment

Local and state agencies have legal jurisdiction and enforcement authority to ensure that sewage spills are remedied.

They may respond and assist with containment, relieving pipe blockages, and/or clean-up of the sewage spill, especially if the spill is flowing into storm drains or onto public property.

A property owner may be charged for costs incurred by these agencies responding to spills from private properties.

Report Sewage Spills!

City Sewer/Public Works Departments

Aliso Viejo	(949) 425-2500
Anaheim	(714) 765-6860
Brea	(714) 990-7691
Buena Park	(714) 562-3655
Costa Mesa	(949) 645-8400
Cypress	(714) 229-6760
Dana Point	(949) 248-3562
Fountain Valley	(714) 593-4600
Fullerton	(714) 738-6897
Garden Grove	(714) 741-5375
Huntington Beach	(714) 536-5921
Irvine	(949) 453-5300
Laguna Beach	(949) 497-0765
Laguna Hills	(949) 707-2650
Laguna Niguel	(949) 362-4337
Laguna Woods	(949) 639-0500
La Habra	(562) 905-9792
Lake Forest	(949) 461-3480
La Palma	(714) 690-3310
Los Alamitos	(562) 431-3538
Mission Viejo	(949) 831-2500
Newport Beach	(949) 644-3011
Orange	(714) 532-6480
Orange County	(714) 567-6363
Placentia	(714) 993-8245
Rancho Santa Margarita	(949) 635-1800
San Clemente	(949) 366-1553
San Juan Capistrano	(949) 443-6363
Santa Ana	(714) 647-3380
Seal Beach	(562) 431-2527
Stanton	(714) 379-9222
Tustin	(714) 962-2411
Villa Park	(714) 998-1500
Westminster	(714) 893-3553
Yorba Linda	(714) 961-7170

Public Sewer/Water Districts

Costa Mesa Sanitary District	(714) 393-4433/ (949) 645-8400
El Toro Water District	(949) 837-0660
Emerald Bay Service District	(949) 494-8571
Garden Grove Sanitary District	(714) 741-5375
Irvine Ranch Water District	(949) 453-5300
Los Alamitos/Rossmoor Sewer District	(562) 431-2223
Midway City Sanitary District (Westminster)	(714) 893-3553
Moulton Niguel Water District	(949) 831-2500
Orange County Sanitation District	(714) 962-2411
Santa Margarita Water District	(949) 459-6420
South Coast Water District	(949) 499-4555
South Orange County Wastewater Authority	(949) 234-5400
Sunset Beach Sanitary District	(562) 493-9932
Trabuco Canyon Sanitary District	(949) 858-0277
Yorba Linda Water District	(714) 777-3018

Other Agencies

Orange County Health Care Agency	(714) 433-6419
Office of Emergency Services	(800) 852-7550



Preventing water pollution at your commercial/industrial site

Clean beaches and healthy creeks, rivers, bays and ocean are important to Orange County. However, many landscape and building maintenance activities can lead to water pollution if you're not careful. Paint, chemicals, plant clippings and other materials can be blown or washed into storm drains that flow to the ocean. Unlike water in sanitary sewers (from sinks and toilets), water in storm drains is not treated before entering our waterways.

You would never pour soap or fertilizers into the ocean, so why would you let them enter the storm drains? Follow these easy tips to help prevent water pollution.

Some types of industrial facilities are required to obtain coverage under the State General Industrial Permit. For more information visit: www.swrcb.ca.gov/stormwater/industrial.html

For more information, please call the **Orange County Stormwater Program** at **1-877-89-SPILL** (1-877-897-7455) or visit www.ocwatersheds.com

To report a spill, call the **Orange County 24-Hour Water Pollution Problem Reporting Hotline** at **1-877-89-SPILL** (1-877-897-7455).

For emergencies, dial 911.



RECYCLE
USED OIL



Printed on Recycled Paper

Help Prevent Ocean Pollution:

Proper Maintenance Practices for Your Business



The Ocean Begins at Your Front Door



Proper Maintenance Practices for your Business

Landscape Maintenance

- Compost grass clippings, leaves, sticks and other vegetation, or dispose of it at a permitted landfill or in green waste containers. Do not dispose of these materials in the street, gutter or storm drain.
- Irrigate slowly and inspect the system for leaks, overspraying and runoff. Adjust automatic timers to avoid overwatering.
- Follow label directions for the use and disposal of fertilizers and pesticides.
- Do not apply pesticides or fertilizers if rain is expected within 48 hours or if wind speeds are above 5 mph.
- Do not spray pesticides within 100 feet of waterways.
- Fertilizers should be worked into the soil rather than dumped onto the surface.
- If fertilizer is spilled on the pavement or sidewalk, sweep it up immediately and place it back in the container.

Building Maintenance

- Never allow washwater, sweepings or sediment to enter the storm drain.
- Sweep up dry spills and use cat litter, towels or similar materials to absorb wet spills. Dispose of it in the trash.
- If you wash your building, sidewalk or parking lot, you **must** contain the water. Use a shop vac to collect the water and contact your city or sanitation agency for proper disposal information. Do not let water enter the street, gutter or storm drain.
- Use drop cloths underneath outdoor painting, scraping, and sandblasting work, and properly dispose of materials in the trash.
- Use a ground cloth or oversized tub for mixing paint and cleaning tools.
- Use a damp mop or broom to clean floors.
- Cover dumpsters to keep insects, animals, rainwater and sand from entering. Keep the area around the dumpster clear of trash and debris. Do not overfill the dumpster.

- Call your trash hauler to replace leaking dumpsters.
- Do not dump any toxic substance or liquid waste on the pavement, the ground, or near a storm drain. Even materials that seem harmless such as latex paint or biodegradable cleaners can damage the environment.
- Recycle paints, solvents and other materials. For more information about recycling and collection centers, visit www.oclandfills.com.
- Store materials indoors or under cover and away from storm drains.
- Use a construction and demolition recycling company to recycle lumber, paper, cardboard, metals, masonry, carpet, plastic, pipes, drywall, rocks, dirt, and green waste. For a listing of construction and demolition recycling locations in your area, visit www.ciwmb.ca.gov/recycle.
- Properly label materials. Familiarize employees with Material Safety Data Sheets.

NEVER DISPOSE
OF ANYTHING
IN THE STORM
DRAIN.



Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize
- Product Substitution

Description

Stormwater runoff from building and grounds maintenance activities can be contaminated with toxic hydrocarbons in solvents, fertilizers and pesticides, suspended solids, heavy metals, and abnormal pH. Utilizing the following protocols will prevent or reduce the discharge of pollutants to stormwater from building and grounds maintenance activities by washing and cleaning up with as little water as possible, following good landscape management practices, preventing and cleaning up spills immediately, keeping debris from entering the storm drains, and maintaining the stormwater collection system.

Approach

Pollution Prevention

- Switch to non-toxic chemicals for maintenance when possible.
- Choose cleaning agents that can be recycled.
- Encourage proper lawn management and landscaping, including use of native vegetation.
- Encourage use of Integrated Pest Management techniques for pest control.
- Encourage proper onsite recycling of yard trimmings.
- Recycle residual paints, solvents, lumber, and other material as much as possible.

Targeted Constituents

Sediment	<input checked="" type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/>
Trash	<input checked="" type="checkbox"/>
Metals	<input checked="" type="checkbox"/>
Bacteria	<input checked="" type="checkbox"/>
Oil and Grease	<input checked="" type="checkbox"/>
Organics	<input checked="" type="checkbox"/>
Oxygen Demanding	<input checked="" type="checkbox"/>



SC-41 Building & Grounds Maintenance

Suggested Protocols

Pressure Washing of Buildings, Rooftops, and Other Large Objects

- In situations where soaps or detergents are used and the surrounding area is paved, pressure washers must use a waste water collection device that enables collection of wash water and associated solids. A sump pump, wet vacuum or similarly effective device must be used to collect the runoff and loose materials. The collected runoff and solids must be disposed of properly.
- If soaps or detergents are not used, and the surrounding area is paved, wash water runoff does not have to be collected but must be screened. Pressure washers must use filter fabric or some other type of screen on the ground and/or in the catch basin to trap the particles in wash water runoff.
- If you are pressure washing on a grassed area (with or without soap), runoff must be dispersed as sheet flow as much as possible, rather than as a concentrated stream. The wash runoff must remain on the grass and not drain to pavement. Ensure that this practice does not kill grass.

Landscaping Activities

- Do not apply any chemicals (insecticide, herbicide, or fertilizer) directly to surface waters, unless the application is approved and permitted by the state.
- Dispose of grass clippings, leaves, sticks, or other collected vegetation as garbage, or by composting. Do not dispose of collected vegetation into waterways or storm drainage systems.
- Use mulch or other erosion control measures on exposed soils.
- Check irrigation schedules so pesticides will not be washed away and to minimize non-stormwater discharge.

Building Repair, Remodeling, and Construction

- Do not dump any toxic substance or liquid waste on the pavement, the ground, or toward a storm drain.
- Use ground or drop cloths underneath outdoor painting, scraping, and sandblasting work, and properly dispose of collected material daily.
- Use a ground cloth or oversized tub for activities such as paint mixing and tool cleaning.
- Clean paint brushes and tools covered with water-based paints in sinks connected to sanitary sewers or in portable containers that can be dumped into a sanitary sewer drain. Brushes and tools covered with non-water-based paints, finishes, or other materials must be cleaned in a manner that enables collection of used solvents (e.g., paint thinner, turpentine, etc.) for recycling or proper disposal.

- Use a storm drain cover, filter fabric, or similarly effective runoff control mechanism if dust, grit, wash water, or other pollutants may escape the work area and enter a catch basin. The containment device(s) must be in place at the beginning of the work day, and accumulated dirty runoff and solids must be collected and disposed of before removing the containment device(s) at the end of the work day.
- If you need to de-water an excavation site, you may need to filter the water before discharging to a catch basin or off-site. In which case you should direct the water through hay bales and filter fabric or use other sediment filters or traps.
- Store toxic material under cover with secondary containment during precipitation events and when not in use. A cover would include tarps or other temporary cover material.

Mowing, Trimming, and Planting

- Dispose of leaves, sticks, or other collected vegetation as garbage, by composting or at a permitted landfill. Do not dispose of collected vegetation into waterways or storm drainage systems.
- Use mulch or other erosion control measures when soils are exposed.
- Place temporarily stockpiled material away from watercourses and drain inlets, and berm or cover stockpiles to prevent material releases to the storm drain system.
- Consider an alternative approach when bailing out muddy water; do not put it in the storm drain, pour over landscaped areas.
- Use hand or mechanical weeding where practical.

Fertilizer and Pesticide Management

- Follow all federal, state, and local laws and regulations governing the use, storage, and disposal of fertilizers and pesticides and training of applicators and pest control advisors.
- Follow manufacturers' recommendations and label directions. Pesticides must never be applied if precipitation is occurring or predicted. Do not apply insecticides within 100 feet of surface waters such as lakes, ponds, wetlands, and streams.
- Use less toxic pesticides that will do the job, whenever possible. Avoid use of copper-based pesticides if possible.
- Do not use pesticides if rain is expected.
- Do not mix or prepare pesticides for application near storm drains.
- Use the minimum amount needed for the job.
- Calibrate fertilizer distributors to avoid excessive application.
- Employ techniques to minimize off-target application (e.g. spray drift) of pesticides, including consideration of alternative application techniques.

SC-41 Building & Grounds Maintenance

- Apply pesticides only when wind speeds are low.
- Work fertilizers into the soil rather than dumping or broadcasting them onto the surface.
- Irrigate slowly to prevent runoff and then only as much as is needed.
- Clean pavement and sidewalk if fertilizer is spilled on these surfaces before applying irrigation water.
- Dispose of empty pesticide containers according to the instructions on the container label.
- Use up the pesticides. Rinse containers, and use rinse water as product. Dispose of unused pesticide as hazardous waste.
- Implement storage requirements for pesticide products with guidance from the local fire department and County Agricultural Commissioner. Provide secondary containment for pesticides.

Inspection

- Inspect irrigation system periodically to ensure that the right amount of water is being applied and that excessive runoff is not occurring. Minimize excess watering, and repair leaks in the irrigation system as soon as they are observed.

Training

- Educate and train employees on use of pesticides and in pesticide application techniques to prevent pollution.
- Train employees and contractors in proper techniques for spill containment and cleanup.
- Be sure the frequency of training takes into account the complexity of the operations and the nature of the staff.

Spill Response and Prevention

- Refer to SC-11, Spill Prevention, Control & Cleanup
- Keep your Spill Prevention Control and countermeasure (SPCC) plan up-to-date, and implement accordingly.
- Have spill cleanup materials readily available and in a known location.
- Cleanup spills immediately and use dry methods if possible.
- Properly dispose of spill cleanup material.

Other Considerations

- Alternative pest/weed controls may not be available, suitable, or effective in many cases.

Requirements

Costs

- Overall costs should be low in comparison to other BMPs.

Maintenance

- Sweep paved areas regularly to collect loose particles, and wipe up spills with rags and other absorbent material immediately, do not hose down the area to a storm drain.

Supplemental Information

Further Detail of the BMP

Fire Sprinkler Line Flushing

Building fire sprinkler line flushing may be a source of non-stormwater runoff pollution. The water entering the system is usually potable water though in some areas it may be non-potable reclaimed wastewater. There are subsequent factors that may drastically reduce the quality of the water in such systems. Black iron pipe is usually used since it is cheaper than potable piping but it is subject to rusting and results in lower quality water. Initially the black iron pipe has an oil coating to protect it from rusting between manufacture and installation; this will contaminate the water from the first flush but not from subsequent flushes. Nitrates, poly-phosphates and other corrosion inhibitors, as well as fire suppressants and antifreeze may be added to the sprinkler water system. Water generally remains in the sprinkler system a long time, typically a year, between flushes and may accumulate iron, manganese, lead, copper, nickel and zinc. The water generally becomes anoxic and contains living and dead bacteria and breakdown products from chlorination. This may result in a significant BOD problem and the water often smells. Consequently dispose fire sprinkler line flush water into the sanitary sewer. Do not allow discharge to storm drain or infiltration due to potential high levels of pollutants in fire sprinkler line water.

References and Resources

California's Nonpoint Source Program Plan <http://www.swrcb.ca.gov/nps/index.html>

King County - <ftp://dnr.metrokc.gov/wlr/dss/spcm/Chapter%203.PDF>

Orange County Stormwater Program

http://www.ocwatersheds.com/StormWater/swp_introduction.asp

Mobile Cleaners Pilot Program: Final Report. 1997. Bay Area Stormwater Management Agencies Association (BASSMA) <http://www.basmaa.org/>

Pollution from Surface Cleaning Folder. 1996. Bay Area Stormwater Management Agencies Association (BASMAA) <http://www.basmaa.org/>

San Diego Stormwater Co-permittees Jurisdictional Urban Runoff Management Program (URMP) -

<http://www.projectcleanwater.org/pdf/Model%20Program%20Municipal%20Facilities.pdf>



Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize
- Product Substitution

Description

Improper storage and handling of solid wastes can allow toxic compounds, oils and greases, heavy metals, nutrients, suspended solids, and other pollutants to enter stormwater runoff. The discharge of pollutants to stormwater from waste handling and disposal can be prevented and reduced by tracking waste generation, storage, and disposal; reducing waste generation and disposal through source reduction, re-use, and recycling; and preventing runoff and runoff.

Approach

Pollution Prevention

- Reduction in the amount of waste generated can be accomplished using the following source controls such as:
 - Production planning and sequencing
 - Process or equipment modification
 - Raw material substitution or elimination
 - Loss prevention and housekeeping
 - Waste segregation and separation
 - Close loop recycling
- Establish a material tracking system to increase awareness about material usage. This may reduce spills and minimize contamination, thus reducing the amount of waste produced.
- Recycle materials whenever possible.

Targeted Constituents

Sediment	<input checked="" type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/>
Trash	<input checked="" type="checkbox"/>
Metals	<input checked="" type="checkbox"/>
Bacteria	<input checked="" type="checkbox"/>
Oil and Grease	<input checked="" type="checkbox"/>
Organics	<input checked="" type="checkbox"/>
Oxygen Demanding	<input checked="" type="checkbox"/>



Suggested Protocols*General*

- Cover storage containers with leak proof lids or some other means. If waste is not in containers, cover all waste piles (plastic tarps are acceptable coverage) and prevent stormwater runoff and runoff with a berm. The waste containers or piles must be covered except when in use.
- Use drip pans or absorbent materials whenever grease containers are emptied by vacuum trucks or other means. Grease cannot be left on the ground. Collected grease must be properly disposed of as garbage.
- Check storage containers weekly for leaks and to ensure that lids are on tightly. Replace any that are leaking, corroded, or otherwise deteriorating.
- Sweep and clean the storage area regularly. If it is paved, do not hose down the area to a storm drain.
- Dispose of rinse and wash water from cleaning waste containers into a sanitary sewer if allowed by the local sewer authority. Do not discharge wash water to the street or storm drain.
- Transfer waste from damaged containers into safe containers.
- Take special care when loading or unloading wastes to minimize losses. Loading systems can be used to minimize spills and fugitive emission losses such as dust or mist. Vacuum transfer systems can minimize waste loss.

Controlling Litter

- Post “No Littering” signs and enforce anti-litter laws.
- Provide a sufficient number of litter receptacles for the facility.
- Clean out and cover litter receptacles frequently to prevent spillage.

Waste Collection

- Keep waste collection areas clean.
- Inspect solid waste containers for structural damage or leaks regularly. Repair or replace damaged containers as necessary.
- Secure solid waste containers; containers must be closed tightly when not in use.
- Place waste containers under cover if possible.
- Do not fill waste containers with washout water or any other liquid.
- Ensure that only appropriate solid wastes are added to the solid waste container. Certain wastes such as hazardous wastes, appliances, fluorescent lamps, pesticides, etc. may not be

disposed of in solid waste containers (see chemical/ hazardous waste collection section below).

- Do not mix wastes; this can cause chemical reactions, make recycling impossible, and complicate disposal.

Good Housekeeping

- Use all of the product before disposing of the container.
- Keep the waste management area clean at all times by sweeping and cleaning up spills immediately.
- Use dry methods when possible (e.g. sweeping, use of absorbents) when cleaning around restaurant/food handling dumpster areas. If water must be used after sweeping/using absorbents, collect water and discharge through grease interceptor to the sewer.
- Stencil storm drains on the facility's property with prohibitive message regarding waste disposal.

Chemical/Hazardous Wastes

- Select designated hazardous waste collection areas on-site.
- Store hazardous materials and wastes in covered containers protected from vandalism, and in compliance with fire and hazardous waste codes.
- Place hazardous waste containers in secondary containment.
- Make sure that hazardous waste is collected, removed, and disposed of only at authorized disposal areas.

Runon/Runoff Prevention

- Prevent stormwater runon from entering the waste management area by enclosing the area or building a berm around the area.
- Prevent the waste materials from directly contacting rain.
- Cover waste piles with temporary covering material such as reinforced tarpaulin, polyethylene, polyurethane, polypropylene or hypalon.
- Cover the area with a permanent roof if feasible.
- Cover dumpsters to prevent rain from washing waste out of holes or cracks in the bottom of the dumpster.
- Move the activity indoor after ensuring all safety concerns such as fire hazard and ventilation are addressed.

Inspection

- Inspect and replace faulty pumps or hoses regularly to minimize the potential of releases and spills.
- Check waste management areas for leaking containers or spills.
- Repair leaking equipment including valves, lines, seals, or pumps promptly.

Training

- Train staff pollution prevention measures and proper disposal methods.
- Train employees and contractors proper spill containment and cleanup. The employee should have the tools and knowledge to immediately begin cleaning up a spill if one should occur.
- Train employees and subcontractors in proper hazardous waste management.

Spill Response and Prevention

- Refer to SC-11, Spill Prevention, Control & Cleanup.
- Keep your Spill Prevention Control and countermeasure (SPCC) plan up-to-date, and implement accordingly.
- Have spill cleanup materials readily available and in a known location.
- Cleanup spills immediately and use dry methods if possible.
- Properly dispose of spill cleanup material.
- Vehicles transporting waste should have spill prevention equipment that can prevent spills during transport. The spill prevention equipment includes:
 - Vehicles equipped with baffles for liquid waste
 - Trucks with sealed gates and spill guards for solid waste

Other Considerations

- Hazardous waste cannot be re-used or recycled; it must be disposed of by a licensed hazardous waste hauler.

Requirements***Costs***

- Capital and operation and maintenance costs will vary substantially depending on the size of the facility and the types of waste handled. Costs should be low if there is an inventory program in place.

Maintenance

- None except for maintaining equipment for material tracking program.

Supplemental Information

Further Detail of the BMP

Land Treatment System

- Minimize the runoff of polluted stormwater from land application of municipal waste on-site by:
 - Choosing a site where slopes are under 6%, the soil is permeable, there is a low water table, it is located away from wetlands or marshes, there is a closed drainage system.
 - Avoiding application of waste to the site when it is raining or when the ground is saturated with water.
 - Growing vegetation on land disposal areas to stabilize soils and reduce the volume of surface water runoff from the site.
 - Maintaining adequate barriers between the land application site and the receiving waters. Planted strips are particularly good.
 - Using erosion control techniques such as mulching and matting, filter fences, straw bales, diversion terracing, and sediment basins.
 - Performing routine maintenance to ensure the erosion control or site stabilization measures are working.

References and Resources

King County Stormwater Pollution Control Manual - <http://dnr.metrokc.gov/wlr/dss/spcm.htm>

Orange County Stormwater Program

http://www.ocwatersheds.com/StormWater/swp_introduction.asp

Pollution from Surface Cleaning Folder. 1996. Bay Area Stormwater Management Agencies Associations (BASMAA). On-line: <http://www.basmaa.org>



Design Objectives

- Maximize Infiltration
- Provide Retention
- Slow Runoff
- Minimize Impervious Land Coverage
- Prohibit Dumping of Improper Materials
- Contain Pollutants
- Collect and Convey

Description

Waste materials dumped into storm drain inlets can have severe impacts on receiving and ground waters. Posting notices regarding discharge prohibitions at storm drain inlets can prevent waste dumping. Storm drain signs and stencils are highly visible source controls that are typically placed directly adjacent to storm drain inlets.

Approach

The stencil or affixed sign contains a brief statement that prohibits dumping of improper materials into the urban runoff conveyance system. Storm drain messages have become a popular method of alerting the public about the effects of and the prohibitions against waste disposal.

Suitable Applications

Stencils and signs alert the public to the destination of pollutants discharged to the storm drain. Signs are appropriate in residential, commercial, and industrial areas, as well as any other area where contributions or dumping to storm drains is likely.

Design Considerations

Storm drain message markers or placards are recommended at all storm drain inlets within the boundary of a development project. The marker should be placed in clear sight facing toward anyone approaching the inlet from either side. All storm drain inlet locations should be identified on the development site map.

Designing New Installations

The following methods should be considered for inclusion in the project design and show on project plans:

- Provide stenciling or labeling of all storm drain inlets and catch basins, constructed or modified, within the project area with prohibitive language. Examples include “NO DUMPING



– DRAINS TO OCEAN” and/or other graphical icons to discourage illegal dumping.

- Post signs with prohibitive language and/or graphical icons, which prohibit illegal dumping at public access points along channels and creeks within the project area.

Note - Some local agencies have approved specific signage and/or storm drain message placards for use. Consult local agency stormwater staff to determine specific requirements for placard types and methods of application.

Redeveloping Existing Installations

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define “redevelopment” in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. If the project meets the definition of “redevelopment”, then the requirements stated under “designing new installations” above should be included in all project design plans.

Additional Information

Maintenance Considerations

- Legibility of markers and signs should be maintained. If required by the agency with jurisdiction over the project, the owner/operator or homeowner’s association should enter into a maintenance agreement with the agency or record a deed restriction upon the property title to maintain the legibility of placards or signs.

Placement

- Signage on top of curbs tends to weather and fade.
- Signage on face of curbs tends to be worn by contact with vehicle tires and sweeper brooms.

Supplemental Information

Examples

- Most MS4 programs have storm drain signage programs. Some MS4 programs will provide stencils, or arrange for volunteers to stencil storm drains as part of their outreach program.

Other Resources

A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), Los Angeles County Department of Public Works, May 2002.

Model Standard Urban Storm Water Mitigation Plan (SUSMP) for San Diego County, Port of San Diego, and Cities in San Diego County, February 14, 2002.

Model Water Quality Management Plan (WQMP) for County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County, Draft February 2003.

Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures, July 2002.

Description

Trash storage areas are areas where a trash receptacle (s) are located for use as a repository for solid wastes. Stormwater runoff from areas where trash is stored or disposed of can be polluted. In addition, loose trash and debris can be easily transported by water or wind into nearby storm drain inlets, channels, and/or creeks. Waste handling operations that may be sources of stormwater pollution include dumpsters, litter control, and waste piles.

Approach

This fact sheet contains details on the specific measures required to prevent or reduce pollutants in stormwater runoff associated with trash storage and handling. Preventative measures including enclosures, containment structures, and impervious pavements to mitigate spills, should be used to reduce the likelihood of contamination.

Suitable Applications

Appropriate applications include residential, commercial and industrial areas planned for development or redevelopment. (Detached residential single-family homes are typically excluded from this requirement.)

Design Considerations

Design requirements for waste handling areas are governed by Building and Fire Codes, and by current local agency ordinances and zoning requirements. The design criteria described in this fact sheet are meant to enhance and be consistent with these code and ordinance requirements. Hazardous waste should be handled in accordance with legal requirements established in Title 22, California Code of Regulation.

Wastes from commercial and industrial sites are typically hauled by either public or commercial carriers that may have design or access requirements for waste storage areas. The design criteria in this fact sheet are recommendations and are not intended to be in conflict with requirements established by the waste hauler. The waste hauler should be contacted prior to the design of your site trash collection areas. Conflicts or issues should be discussed with the local agency.

Designing New Installations

Trash storage areas should be designed to consider the following structural or treatment control BMPs:

- Design trash container areas so that drainage from adjoining roofs and pavement is diverted around the area(s) to avoid run-on. This might include berming or grading the waste handling area to prevent run-on of stormwater.
- Make sure trash container areas are screened or walled to prevent off-site transport of trash.

Design Objectives

- Maximize Infiltration
- Provide Retention
- Slow Runoff
- Minimize Impervious Land Coverage
- Prohibit Dumping of Improper Materials
- Contain Pollutants
- Collect and Convey



- Use lined bins or dumpsters to reduce leaking of liquid waste.
- Provide roofs, awnings, or attached lids on all trash containers to minimize direct precipitation and prevent rainfall from entering containers.
- Pave trash storage areas with an impervious surface to mitigate spills.
- Do not locate storm drains in immediate vicinity of the trash storage area.
- Post signs on all dumpsters informing users that hazardous materials are not to be disposed of therein.

Redeveloping Existing Installations

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define “redevelopment” in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. The definition of “redevelopment” must be consulted to determine whether or not the requirements for new development apply to areas intended for redevelopment. If the definition applies, the steps outlined under “designing new installations” above should be followed.

Additional Information***Maintenance Considerations***

The integrity of structural elements that are subject to damage (i.e., screens, covers, and signs) must be maintained by the owner/operator. Maintenance agreements between the local agency and the owner/operator may be required. Some agencies will require maintenance deed restrictions to be recorded of the property title. If required by the local agency, maintenance agreements or deed restrictions must be executed by the owner/operator before improvement plans are approved.

Other Resources

A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), Los Angeles County Department of Public Works, May 2002.

Model Standard Urban Storm Water Mitigation Plan (SUSMP) for San Diego County, Port of San Diego, and Cities in San Diego County, February 14, 2002.

Model Water Quality Management Plan (WQMP) for County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County, Draft February 2003.

Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures, July 2002.

Site Design & Landscape Planning SD-10



Design Objectives

- Maximize Infiltration
- Provide Retention
- Slow Runoff
- Minimize Impervious Land Coverage
- Prohibit Dumping of Improper Materials
- Contain Pollutants
- Collect and Convey

Description

Each project site possesses unique topographic, hydrologic, and vegetative features, some of which are more suitable for development than others. Integrating and incorporating appropriate landscape planning methodologies into the project design is the most effective action that can be done to minimize surface and groundwater contamination from stormwater.

Approach

Landscape planning should couple consideration of land suitability for urban uses with consideration of community goals and projected growth. Project plan designs should conserve natural areas to the extent possible, maximize natural water storage and infiltration opportunities, and protect slopes and channels.

Suitable Applications

Appropriate applications include residential, commercial and industrial areas planned for development or redevelopment.

Design Considerations

Design requirements for site design and landscapes planning should conform to applicable standards and specifications of agencies with jurisdiction and be consistent with applicable General Plan and Local Area Plan policies.



SD-10 Site Design & Landscape Planning

Designing New Installations

Begin the development of a plan for the landscape unit with attention to the following general principles:

- Formulate the plan on the basis of clearly articulated community goals. Carefully identify conflicts and choices between retaining and protecting desired resources and community growth.
- Map and assess land suitability for urban uses. Include the following landscape features in the assessment: wooded land, open unwooded land, steep slopes, erosion-prone soils, foundation suitability, soil suitability for waste disposal, aquifers, aquifer recharge areas, wetlands, floodplains, surface waters, agricultural lands, and various categories of urban land use. When appropriate, the assessment can highlight outstanding local or regional resources that the community determines should be protected (e.g., a scenic area, recreational area, threatened species habitat, farmland, fish run). Mapping and assessment should recognize not only these resources but also additional areas needed for their sustenance.

Project plan designs should conserve natural areas to the extent possible, maximize natural water storage and infiltration opportunities, and protect slopes and channels.

Conserve Natural Areas during Landscape Planning

If applicable, the following items are required and must be implemented in the site layout during the subdivision design and approval process, consistent with applicable General Plan and Local Area Plan policies:

- Cluster development on least-sensitive portions of a site while leaving the remaining land in a natural undisturbed condition.
- Limit clearing and grading of native vegetation at a site to the minimum amount needed to build lots, allow access, and provide fire protection.
- Maximize trees and other vegetation at each site by planting additional vegetation, clustering tree areas, and promoting the use of native and/or drought tolerant plants.
- Promote natural vegetation by using parking lot islands and other landscaped areas.
- Preserve riparian areas and wetlands.

Maximize Natural Water Storage and Infiltration Opportunities Within the Landscape Unit

- Promote the conservation of forest cover. Building on land that is already deforested affects basin hydrology to a lesser extent than converting forested land. Loss of forest cover reduces interception storage, detention in the organic forest floor layer, and water losses by evapotranspiration, resulting in large peak runoff increases and either their negative effects or the expense of countering them with structural solutions.
- Maintain natural storage reservoirs and drainage corridors, including depressions, areas of permeable soils, swales, and intermittent streams. Develop and implement policies and

Site Design & Landscape Planning SD-10

regulations to discourage the clearing, filling, and channelization of these features. Utilize them in drainage networks in preference to pipes, culverts, and engineered ditches.

- Evaluating infiltration opportunities by referring to the stormwater management manual for the jurisdiction and pay particular attention to the selection criteria for avoiding groundwater contamination, poor soils, and hydrogeological conditions that cause these facilities to fail. If necessary, locate developments with large amounts of impervious surfaces or a potential to produce relatively contaminated runoff away from groundwater recharge areas.

Protection of Slopes and Channels during Landscape Design

- Convey runoff safely from the tops of slopes.
- Avoid disturbing steep or unstable slopes.
- Avoid disturbing natural channels.
- Stabilize disturbed slopes as quickly as possible.
- Vegetate slopes with native or drought tolerant vegetation.
- Control and treat flows in landscaping and/or other controls prior to reaching existing natural drainage systems.
- Stabilize temporary and permanent channel crossings as quickly as possible, and ensure that increases in run-off velocity and frequency caused by the project do not erode the channel.
- Install energy dissipaters, such as riprap, at the outlets of new storm drains, culverts, conduits, or channels that enter unlined channels in accordance with applicable specifications to minimize erosion. Energy dissipaters shall be installed in such a way as to minimize impacts to receiving waters.
- Line on-site conveyance channels where appropriate, to reduce erosion caused by increased flow velocity due to increases in tributary impervious area. The first choice for linings should be grass or some other vegetative surface, since these materials not only reduce runoff velocities, but also provide water quality benefits from filtration and infiltration. If velocities in the channel are high enough to erode grass or other vegetative linings, riprap, concrete, soil cement, or geo-grid stabilization are other alternatives.
- Consider other design principles that are comparable and equally effective.

Redeveloping Existing Installations

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define “redevelopment” in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. The definition of “redevelopment” must be consulted to determine whether or not the requirements for new development apply to areas intended for redevelopment. If the definition applies, the steps outlined under “designing new installations” above should be followed.

SD-10 Site Design & Landscape Planning

Redevelopment may present significant opportunity to add features which had not previously been implemented. Examples include incorporation of depressions, areas of permeable soils, and swales in newly redeveloped areas. While some site constraints may exist due to the status of already existing infrastructure, opportunities should not be missed to maximize infiltration, slow runoff, reduce impervious areas, disconnect directly connected impervious areas.

Other Resources

A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), Los Angeles County Department of Public Works, May 2002.

Stormwater Management Manual for Western Washington, Washington State Department of Ecology, August 2001.

Model Standard Urban Storm Water Mitigation Plan (SUSMP) for San Diego County, Port of San Diego, and Cities in San Diego County, February 14, 2002.

Model Water Quality Management Plan (WQMP) for County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County, Draft February 2003.

Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures, July 2002.

Description

Drain inserts are manufactured filters or fabric placed in a drop inlet to remove sediment and debris. There are a multitude of inserts of various shapes and configurations, typically falling into one of three different groups: socks, boxes, and trays. The sock consists of a fabric, usually constructed of polypropylene. The fabric may be attached to a frame or the grate of the inlet holds the sock. Socks are meant for vertical (drop) inlets. Boxes are constructed of plastic or wire mesh. Typically a polypropylene “bag” is placed in the wire mesh box. The bag takes the form of the box. Most box products are one box; that is, the setting area and filtration through media occur in the same box. Some products consist of one or more trays or mesh grates. The trays may hold different types of media. Filtration media vary by manufacturer. Types include polypropylene, porous polymer, treated cellulose, and activated carbon.

California Experience

The number of installations is unknown but likely exceeds a thousand. Some users have reported that these systems require considerable maintenance to prevent plugging and bypass.

Advantages

- Does not require additional space as inserts as the drain inlets are already a component of the standard drainage systems.
- Easy access for inspection and maintenance.
- As there is no standing water, there is little concern for mosquito breeding.
- A relatively inexpensive retrofit option.

Limitations

Performance is likely significantly less than treatment systems that are located at the end of the drainage system such as ponds and vaults. Usually not suitable for large areas or areas with trash or leaves than can plug the insert.

Design and Sizing Guidelines

Refer to manufacturer’s guidelines. Drain inserts come any many configurations but can be placed into three general groups: socks, boxes, and trays. The sock consists of a fabric, usually constructed of polypropylene. The fabric may be attached to a frame or the grate of the inlet holds the sock. Socks are meant for vertical (drop) inlets. Boxes are constructed of plastic or wire mesh. Typically a polypropylene “bag” is placed in the wire mesh box. The bag takes the form of the box. Most box products are

Design Considerations

- Use with other BMPs
- Fit and Seal Capacity within Inlet

Targeted Constituents

- Sediment
- Nutrients
- Trash
- Metals
- Bacteria
- Oil and Grease
- Organics

Removal Effectiveness

See New Development and Redevelopment Handbook-Section 5.



one box; that is, the setting area and filtration through media occurs in the same box. One manufacturer has a double-box. Stormwater enters the first box where setting occurs. The stormwater flows into the second box where the filter media is located. Some products consist of one or more trays or mesh grates. The trays can hold different types of media. Filtration media vary with the manufacturer: types include polypropylene, porous polymer, treated cellulose, and activated carbon.

Construction/Inspection Considerations

Be certain that installation is done in a manner that makes certain that the stormwater enters the unit and does not leak around the perimeter. Leakage between the frame of the insert and the frame of the drain inlet can easily occur with vertical (drop) inlets.

Performance

Few products have performance data collected under field conditions.

Siting Criteria

It is recommended that inserts be used only for retrofit situations or as pretreatment where other treatment BMPs presented in this section area used.

Additional Design Guidelines

Follow guidelines provided by individual manufacturers.

Maintenance

Likely require frequent maintenance, on the order of several times per year.

Cost

- The initial cost of individual inserts ranges from less than \$100 to about \$2,000. The cost of using multiple units in curb inlet drains varies with the size of the inlet.
- The low cost of inserts may tend to favor the use of these systems over other, more effective treatment BMPs. However, the low cost of each unit may be offset by the number of units that are required, more frequent maintenance, and the shorter structural life (and therefore replacement).

References and Sources of Additional Information

Hrachovec, R., and G. Minton, 2001, Field testing of a sock-type catch basin insert, Planet CPR, Seattle, Washington

Interagency Catch Basin Insert Committee, Evaluation of Commercially-Available Catch Basin Inserts for the Treatment of Stormwater Runoff from Developed Sites, 1995

Larry Walker Associates, June 1998, NDMP Inlet/In-Line Control Measure Study Report

Manufacturers literature

Santa Monica (City), Santa Monica Bay Municipal Stormwater/Urban Runoff Project - Evaluation of Potential Catch basin Retrofits, Woodward Clyde, September 24, 1998

Woodward Clyde, June 11, 1996, Parking Lot Monitoring Report, Santa Clara Valley Nonpoint Source Pollution Control Program.



Photo Credit: Geoff Brosseau

Design Objectives

- Maximize Infiltration
 - Provide Retention
 - Slow Runoff
 - Minimize Impervious Land Coverage
 - Prohibit Dumping of Improper Materials
- Contain Pollutants
- Collect and Convey

Description

Vehicle washing, equipment washing, and steam cleaning may contribute high concentrations of metals, oil and grease, solvents, phosphates, and suspended solids to wash waters that drain to stormwater conveyance systems.

Approach

Project plans should include appropriately designed area(s) for washing-steam cleaning of vehicles and equipment. Depending on the size and other parameters of the wastewater facility, wash water may be conveyed to a sewer, an infiltration system, recycling system or other alternative. Pretreatment may be required for conveyance to a sanitary sewer.

Suitable Applications

Appropriate applications include commercial developments, restaurants, retail gasoline outlets, automotive repair shops and others.

Design Considerations

Design requirements for vehicle maintenance are governed by Building and Fire Codes, and by current local agency ordinances, and zoning requirements. Design criteria described in this fact sheet are meant to enhance and be consistent with these code requirements.

Designing New Installations

Areas for washing/steam cleaning should incorporate one of the following features:

- Be self-contained and/or covered with a roof or overhang
- Be equipped with a clarifier or other pretreatment facility
- Have a proper connection to a sanitary sewer



- Include other features which are comparable and equally effective

CAR WASH AREAS - Some jurisdictions' stormwater management plans include vehicle-cleaning area source control design requirements for community car wash racks in complexes with a large number of dwelling units. In these cases, wash water from the areas may be directed to the sanitary sewer, to an engineered infiltration system, or to an equally effective alternative. Pre-treatment may also be required.

Depending on the jurisdiction, developers may be directed to divert surface water runoff away from the exposed area around the wash pad (parking lot, storage areas), and wash pad itself to alternatives other than the sanitary sewer. Roofing may be required for exposed wash pads.

It is generally advisable to cover areas used for regular washing of vehicles, trucks, or equipment, surround them with a perimeter berm, and clearly mark them as a designated washing area. Sumps or drain lines can be installed to collect wash water, which may be treated for reuse or recycling, or for discharge to the sanitary sewer. Jurisdictions may require some form of pretreatment, such as a trap, for these areas.

Redeveloping Existing Installations

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define "redevelopment" in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. The definition of "redevelopment" must be consulted to determine whether or not the requirements for new development apply to areas intended for redevelopment.

Additional Information

Maintenance Considerations

Stormwater and non-stormwater will accumulate in containment areas and sumps with impervious surfaces. Contaminated accumulated water must be disposed of in accordance with applicable laws and cannot be discharged directly to the storm drain or sanitary sewer system without the appropriate permit.

Other Resources

A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), Los Angeles County Department of Public Works, May 2002.

Model Standard Urban Storm Water Mitigation Plan (SUSMP) for San Diego County, Port of San Diego, and Cities in San Diego County, February 14, 2002.

Model Water Quality Management Plan (WQMP) for County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County, Draft February 2003.

Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures, July 2002.



Photo Credit: Geoff Brosseau

Design Objectives

- Maximize Infiltration
- Provide Retention
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- Prohibit Dumping of Improper Materials
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Description

Fueling areas have the potential to contribute oil and grease, solvents, car battery acid, coolant and gasoline to the stormwater conveyance system. Spills at vehicle and equipment fueling areas can be a significant source of pollution because fuels contain toxic materials and heavy metals that are not easily removed by stormwater treatment devices.

Approach

Project plans must be developed for cleaning near fuel dispensers, emergency spill cleanup, containment, and leak prevention.

Suitable Applications

Appropriate applications include commercial, industrial, and any other areas planned to have fuel dispensing equipment, including retail gasoline outlets, automotive repair shops, and major non-retail dispensing areas.

Design Considerations

Design requirements for fueling areas are governed by Building and Fire Codes and by current local agency ordinances and zoning requirements. Design requirements described in this fact sheet are meant to enhance and be consistent with these code and ordinance requirements.

Designing New Installations

Covering



Fuel dispensing areas should provide an overhanging roof structure or canopy. The cover's minimum dimensions must be equal to or greater than the area within the grade break. The cover must not drain onto the fuel dispensing area and the downspouts must be routed to prevent drainage across the fueling area. The fueling area should drain to the project's treatment control BMP(s) prior to discharging to the stormwater conveyance system. Note - If fueling large equipment or vehicles that would prohibit the use of covers or roofs, the fueling island should be designed to sufficiently accommodate the larger vehicles and equipment and to prevent stormwater run-on and runoff. Grade to direct stormwater to a dead-end sump.

Surfacing

Fuel dispensing areas should be paved with Portland cement concrete (or equivalent smooth impervious surface). The use of asphalt concrete should be prohibited. Use asphalt sealant to protect asphalt paved areas surrounding the fueling area. This provision may be made to sites that have pre-existing asphalt surfaces.

The concrete fuel dispensing area should be extended a minimum of 6.5 ft from the corner of each fuel dispenser, or the length at which the hose and nozzle assembly may be operated plus 1 ft, whichever is less.

Grading/Contouring

Dispensing areas should have an appropriate slope to prevent ponding, and be separated from the rest of the site by a grade break that prevents run-on of urban runoff. (Slope is required to be 2 to 4% in some jurisdictions' stormwater management and mitigation plans.)

Fueling areas should be graded to drain toward a dead-end sump. Runoff from downspouts/roofs should be directed away from fueling areas. Do not locate storm drains in the immediate vicinity of the fueling area.

Redeveloping Existing Installations

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define "redevelopment" in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. The definition of "redevelopment" must be consulted to determine whether or not the requirements for new development apply to areas intended for redevelopment. If the definition applies, the steps outlined under "designing new installations" above should be followed.

Additional Information

- In the case of an emergency, provide storm drain seals, such as isolation valves, drain plugs, or drain covers, to prevent spills or contaminated stormwater from entering the stormwater conveyance system.

Other Resources

A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), Los Angeles County Department of Public Works, May 2002.

Model Standard Urban Storm Water Mitigation Plan (SUSMP) for San Diego County, Port of San Diego, and Cities in San Diego County, February 14, 2002.

Model Water Quality Management Plan (WQMP) for County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County, Draft February 2003.

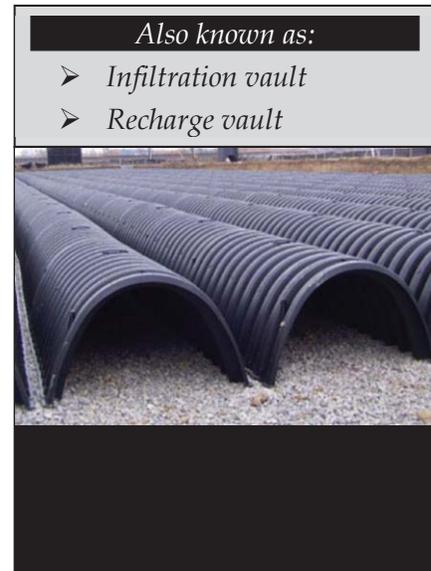
Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures, July 2002.

Appendix C:

BMP Details

INF-7: Underground Infiltration

Underground infiltration is a vault or chamber with an open bottom that used to store runoff and percolate into the subsurface. A number of vendors offer proprietary infiltration products that allow for similar or enhanced rates of infiltration and subsurface storage while offering durable prefrabricated structures. There are many varieties of proprietary infiltration BMPs that can be used for roads and parking lots, parks and open spaces, single and multi-family residential, or mixed-use and commercial uses.



Feasibility Screening Considerations

- Infiltration bays shall pass infeasible screening criteria to be considered for use.
- Underground infiltration galleries pose a potential risk of groundwater contamination; pretreatment should be used.

Opportunity Criteria

- Soils are adequate for infiltration or can be amended to provide an adequate infiltration rate.
- Appropriate for sites with limited surface space.
- Can be placed beneath roads, parking lots, parks, and athletic fields.
- Potential for groundwater contamination can be mitigated through isolation of pollutant sources, pretreatment of inflow, and/or demonstration of adequate treatment capacity of underlying soils.
- Infiltration is into native soil, or depth of engineered fill is ≤ 5 feet from the bottom of the facility to native material and infiltration into fill is approved by a geotechnical professional.
- Tributary area land uses include mixed-use and commercial, single-family and multi-family, roads and parking lots, and parks and open spaces. High pollutant land uses should not be tributary to infiltration BMPs.

OC-Specific Design Criteria and Considerations

- Placement of BMPs should observe geotechnical recommendations with respect to geological hazards (e.g. landslides, liquefaction zones, erosion, etc.) and set-backs (e.g., foundations, utilities, roadways, etc.)
- Minimum separation to mounded seasonally high groundwater of 10 feet shall be observed.
- Minimum pretreatment should be provided upstream of the infiltration facility, and water bypassing pretreatment should not be directed to the facility.
- Underground infiltration should not be used for drainage areas with high sediment production potential unless preceded by full treatment control with a BMP effective for sediment removal.
- Design infiltration rate should be determined as described in [Appendix VII](#).
- Inspection ports or similar design features shall be provided to verify continued system performance and identify need for major maintenance.

- For infiltration facilities beneath roads and parking areas, structural requirements should meet H-20 load requirements.

Computing Underground Infiltration Device Size

Underground infiltration devices vary by design and by proprietary designs. The sizing method selected for use must be based on the BMP type it most strongly resembles.

- For underground infiltration devices with open pore volume (e.g., vaults, crates, pipe sections, etc), sizing will be most similar to infiltration basins.
- For underground infiltration devices with pore space (e.g., aggregate reservoirs), sizing will be most similar to permeable pavement.

Additional References for Design Guidance

- Los Angeles Unified School District (LAUSD) Stormwater Technical Manual, Chapter 5:
http://www.laschools.org/employee/design/fs-studies-and-reports/download/white_paper_report_material/Storm_Water_Technical_Manual_2009-opt-red.pdf?version_id=76975850

Appendix D:

BMP Maintenance Information



FLOGARD+PLUS[®] CATCH BASIN INSERT FILTER

Inspection and Maintenance Guide



A division of
Oldcastle Infrastructure

SCOPE:

Federal, State and Local Clean Water Act regulations and those of insurance carriers require that stormwater filtration systems be maintained and serviced on a recurring basis. The intent of the regulations is to ensure that the systems, on a continuing basis, efficiently remove pollutants from stormwater runoff thereby preventing pollution of the nation's water resources. These specifications apply to the FloGard+Plus® Catch Basin Insert Filter.

RECOMMENDED FREQUENCY OF SERVICE:

Drainage Protection Systems (DPS) recommends that installed FloGard+Plus Catch Basin Insert Filters be serviced on a recurring basis. Ultimately, the frequency depends on the amount of runoff, pollutant loading and interference from debris (leaves, vegetation, cans, paper, etc.); however, it is recommended that each installation be serviced a minimum of three times per year, with a change of filter medium once per year. DPS technicians are available to do an on-site evaluation, upon request.

RECOMMENDED TIMING OF SERVICE:

DPS guidelines for the timing of service are as follows:

1. For areas with a definite rainy season: Prior to, during and following the rainy season.
2. For areas subject to year-round rainfall: On a recurring basis (at least three times per year).
3. For areas with winter snow and summer rain: Prior to and just after the snow season and during the summer rain season.
4. For installed devices not subject to the elements (wash racks, parking garages, etc.): On a recurring basis (no less than three times per year).

SERVICE PROCEDURES:

1. The catch basin grate shall be removed and set to one side. The catch basin shall be visually inspected for defects and possible illegal dumping. If illegal dumping has occurred, the proper authorities and property owner representative shall be notified as soon as practicable.
2. Using an industrial vacuum, the collected materials shall be removed from the liner. (Note: DPS uses a truck-mounted vacuum for servicing FloGard+Plus catch basin inserts).
3. When all of the collected materials have been removed, the filter medium pouches shall be removed by unsnapping the tether from the D-ring and set to one side. The filter liner, gaskets, stainless steel frame and mounting brackets, etc., shall be inspected for continued serviceability. Minor damage or defects found shall be corrected on-the-spot and a notation made on the Maintenance Record. More extensive deficiencies that affect the efficiency of the filter (torn liner, etc.), if approved by the customer representative, will be corrected and an invoice submitted to the representative along with the Maintenance Record.
4. The filter medium pouches shall be inspected for defects and continued serviceability and replaced as necessary, and the pouch tethers re-attached to the liner's D-ring.
5. The grate shall be replaced.

REPLACEMENT AND DISPOSAL OF EXPOSED FILTER MEDIUM AND COLLECTED DEBRIS

The frequency of filter medium exchange will be in accordance with the existing DPS-Customer Maintenance Contract. DPS recommends that the medium be changed at least once per year. During the appropriate service, or if so determined by the service technician during a non-scheduled service, the filter medium will be replaced with new material. Once the exposed pouches and debris have been removed, DPS has possession and must dispose of it in accordance with local, state and federal agency requirements.

DPS also has the capability of servicing all manner of storm drain filters, catch basin inserts and catch basins without inserts, underground oil/water separators, stormwater interceptors and other such devices. All DPS personnel are highly qualified technicians and are confined-space trained and certified. Call us at (888) 950-8826 for further information and assistance.

FLOGARD+PLUS[®] CATCH BASIN INSERT FILTER

OUR MARKETS



BUILDING
STRUCTURES



COMMUNICATIONS



WATER



ENERGY



TRANSPORTATION

Appendix E:

Geotechnical Information

(Storm water infiltration BMP evaluation)

**GEOTECHNICAL INVESTIGATION
PROPOSED FIRE STATION 1 (SP-4071),
105 SOUTH WATER STREET,
CITY OF ORANGE, CALIFORNIA**

Prepared For:

WLC ARCHITECTS, INC.
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, California 91730

Project No. 12482.001

September 26, 2019



Leighton Consulting, Inc.

A LEIGHTON GROUP COMPANY



Leighton Consulting, Inc.
A LEIGHTON GROUP COMPANY

September 26, 2019

Project No. 12482.001

To: WLC Architects, Inc.
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, California 91730

Attention: Mr. Kelley Needham

Subject: Geotechnical Investigation, Proposed Fire Station 1 (SP-4071), 105 South Water Street, City of Orange, California

In accordance with our proposal dated March 22, 2019 and your authorization on July 28, 2019, Leighton Consulting, Inc. (Leighton) has conducted a geotechnical investigation for the proposed Fire Station 1 facility (SP-4071), located at 105 South Water Street in the City of Orange, California. The purpose of this study has been to evaluate the subsurface conditions at the site with respect to the proposed fire station development and to provide geotechnical recommendations for design and construction.

Based on this investigation, the proposed development of the fire station is feasible from a geotechnical standpoint. Significant geotechnical issues for this project are those related to the potential for strong seismic shaking and potentially compressible soils. Good planning and design of the project can limit the impact of these constraints. This report presents our findings, conclusions, and geotechnical recommendations for the project.

We appreciate the opportunity to work with you on this project. If you have any questions regarding this report, please call us at your convenience.



Respectfully submitted,

LEIGHTON CONSULTING, INC.

A handwritten signature in blue ink that reads "Jason D. Hertzberg".

Jason D. Hertzberg, GE 2711
Principal Engineer



A handwritten signature in blue ink that reads "Joe Roe".

Joe Roe PG, CEG 2456
Principal Geologist

MM/LP/JDH/JR/rsm

Distribution: (1) Addressee



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GBA “Important Information about This Geotechnical Engineering Report”

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1.0 INTRODUCTION

1.1 Site Location and Description

The site contains two (2) parcels located at the southeast corner of Chapman Avenue and South Water Street and at the northwest corner of Almond Avenue and South Water Street, in Orange, California. The site previously contained several buildings and appears to have been vacant since early 2010. Concrete slabs were observed in the northern and western regions with asphalt paved areas located throughout the northern parcel. The site is surrounded by office buildings and single-family residential homes to the north, east and west. The City of Orange Water Division Department of Public Works is located to the south. The parcel located northwest of South Water Street and Almond Avenue is currently occupied by a car dealership lot.

The site and surroundings are relatively flat, with site elevations ranging from about 214 to 219 feet above mean sea level, with drainage to the south. The site location (latitude 33.7873°, longitude -117.8411°) and immediate vicinity are shown on Figure 1, Site Location Map.

1.2 Proposed Improvements

Based on our review of the proposed site plan *Fire Station 1 Headquarters City of Orange Fire Department 105 South Water Street, Orange, CA*, prepared by WLC Architects dated July 30, 2019, the proposed fire station development includes a headquarters/administration building on the western portion and a separate reserve apparatus building on the southeast portion of the site.

We understand that the site will be designed in stages such that the City has the option to construct an operational Fire Station 1 first and the Fire Headquarters building portion added at a later date. The proposed fire station facility is composed of a two-story, approximate 24,300-square-foot building, of which approximately 5,700 square feet make up the main apparatus building portion.

Additional overflow parking will be constructed on the existing site located northwest of the intersection of Almond Avenue and South Water Street. We assume that remedial cuts and fills of 5 feet or less with localized deeper excavations to remove undocumented fill will be required to attain finish grades for the new structures.

1.3 Purpose of Exploration

The purpose of this study has been to evaluate the general geotechnical conditions at the site with respect to the proposed improvements and to provide geotechnical recommendations for design and construction.

Our geotechnical exploration included hollow-stem auger soil borings, laboratory testing and geotechnical analysis to evaluate existing conditions and develop the recommendations contained in this report. Infiltration testing was conducted to evaluate general infiltration characteristics at the locations and depths tested to support infiltration system design by the civil engineer.

1.4 Scope of Investigation

The scope of our study has included the following tasks:

- Geologic Hazards Review: We reviewed pertinent, readily available geologic and geotechnical literature covering the site. Our review included regional geologic maps and reports available from our in-house library. Key documents reviewed are referenced in Appendix A, *References*.
- Utility Coordination: We contacted Underground Service Alert (USA) prior to our subsurface exploration to have underground utilities located and marked.
- Field Exploration: Our field investigation included drilling, logging, and sampling of five (5) hollow-stem auger borings (LB-1 through LB-5) at representative locations in the areas of the proposed building to depths ranging from approximately 6 feet to 51.5 feet below the existing ground surface (bgs). Additionally, two hollow-stem auger borings (LB-6 and LB-7) were drilled, logged, and sampled in the area of the proposed overflow parking lot to depths of approximately 9 feet bgs. Encountered earth materials were logged in the field by our representative and described in accordance with the Unified Soil Classification System (ASTM D 2488). Relatively undisturbed soil samples were obtained at selected intervals within these borings using a California Ring Sampler. Standard Penetration Tests (SPT) were conducted at selected depths and samples were obtained from the SPT split-spoon sampler. Representative bulk samples were also collected at shallow depths from the borings.

Two infiltration tests were conducted within borings LB-4 and LB-5 to evaluate general infiltration rates of the subsurface soils with bottom depths of 14 feet bgs and 20.5 feet bgs.

All excavations were backfilled with the soil cuttings. An asphalt concrete patch was placed at the top of LB-6 and LB-7 to match the existing ground surface. Logs of the geotechnical borings are presented in Appendix B, *Exploration Logs*. Approximate boring locations are shown on Figure 2, *Exploration Location Map*.

- Geotechnical Laboratory Testing: Geotechnical laboratory tests were conducted on selected relatively undisturbed and bulk soil samples obtained during our field investigation. This testing program was designed to evaluate engineering characteristics of the onsite soils. Laboratory tests conducted during this investigation include:
 - In situ moisture content and dry density
 - Proctor Compaction Test
 - Sieve analysis
 - Atterberg Limits
 - Expansion Index
 - Water-soluble sulfate concentration in the soil
 - Resistivity, chloride content and pH

The in situ moisture content and dry density test results are shown on the boring logs in Appendix B. The other laboratory test results are presented in Appendix C, *Geotechnical Laboratory Test Results*.

- Engineering Analysis: Data obtained from our background review, field exploration and geotechnical laboratory testing was evaluated and analyzed to develop geotechnical conclusions and provide recommendations presented in this report.
- Report Preparation: Results of our geotechnical investigation have been summarized in this report, presenting our findings, conclusions and geotechnical recommendations for design and construction of the proposed Fire Station development as currently planned.

2.0 FINDINGS

2.1 Geologic Hazards Review

We have reviewed pertinent, readily available geologic and geotechnical literature covering the site. Our review included regional geologic maps and reports available from our library. Documents reviewed are listed in Appendix A, *References*. Potential geologic hazards are discussed in the following sections. Our review has considered California Geological Survey's Note 48, *Checklist of the Review of Engineering Geology and Seismology Reports for California Public Schools, Hospitals, and Essential Services Buildings*.

2.1.1 Site History

Our review of site history included analysis of historical topographic maps between the dates of 1896 and 2015 and historical aerial photographs between the dates of 1946 and 2016. The purpose of this evaluation was to help understand the origin of the current site profile, former site use, as well as past grading activities.

In its original undeveloped state, up until early 1930, the properties consisted of gently southerly sloping terrain, with the Santiago Creek drainage channel situated approximately 0.20 mile to the east. Between approximately 1940 and 1963, both properties were utilized for agricultural purposes with the western area of proposed parking overflow as orchard and the proposed fire station site as buildings likely associated with the agriculture activities.

While the overall use of the buildings and foundation elements are unknown, structures onsite were not observed in 2010 aerial imagery. It is unknown if all foundation elements were removed and should be anticipated in the subsurface during grading of the site.

2.2 Regional Geologic Conditions

The project site is located in the western part of the Tustin Plain within the Peninsular Ranges geomorphic province west of Santiago Creek drainage. The Peninsular Ranges geomorphic province extends 900 miles southward from the Los Angeles Basin to the tip of Baja California (Yerkes et al., 1965) and is



characterized by elongate northwest-trending mountain ranges separated by sediment-floored valleys. The most dominant structural features of the province are the northwest-trending fault zones, most of which die out, merge with, or are terminated by the steep reverse faults at the southern margin of the Transverse Ranges geomorphic province.

East of the site are the northwest-trending Santa Ana Mountains, a large range which has been uplifted on its eastern side along the Whittier-Elsinore Fault Zone, producing a tilted, irregular highland that slopes westward toward the sea. Sediments eroded from the Santa Ana Mountains have been transported by Santiago Creek and the lower reach of the Santa Ana River to build a large, broad alluvial fan known as the Tustin Plain. The Tustin Plain is comprised of relatively flat-lying, unconsolidated to semi-consolidated clastic sediments that are approximately 1,000 to 1,100 feet thick (Singer, 1973; Sprotte et al., 1980a and 1980b). Beneath the site, the near surface, unconsolidated, relatively fine-grained sediments are Holocene age (less than 11,000 years old) and consist of predominately youthful alluvial fan deposits (Sprotte et al., 1980a and 1980b). These sediments in turn are underlain at depth by sedimentary bedrock of Tertiary age.

The surficial geologic units mapped in the vicinity of the site are shown on Figure 3, *Regional Geology Map*.

2.3 Subsurface Soil Conditions

Based upon our review of pertinent geotechnical literature and our subsurface exploration, the site is underlain by undocumented fill (Map Symbol: Afu) in the upper five to seven feet, localized deeper fill to seven feet below grade was interpreted in boring LB-5 due to the presence of fresh, mechanically fractured black slaty gravels and cobble size rock fragments. Review of historic aerial imagery indicates former structures were onsite until circa 2010. Foundation elements should be anticipated in the subsurface during grading of the site. Refusal at shallow depth in boring LB-2 was encountered which is within the footprint of a historical structure formerly located onsite (NETR, 2019). The artificial fill is underlain by Quaternary-age old alluvial fan deposits (Map Symbol: Qof) extending to the maximum exploration depth of 51 feet bgs. The overlying undocumented fill (Afu) encountered within our excavations generally consisted of a loose to dense silty sand and sand with gravel and small mechanically fractured cobbles. The native soils (Qof) were generally composed of slightly

moist to moist, dense to very dense, well-graded gravel with sand and silt, sand with gravel, and silty sand with small weathered cobbles derived from the sedimentary formations in the Santa Ana Mountains. The in-situ moisture content within the upper approximately 15 feet generally ranged from 2 to 7 percent. More detailed descriptions of the subsurface soil are presented on the boring logs in Appendix B.

2.3.1 Compressible and Collapsible Soil

Soil compressibility refers to a soil's potential for settlement when subjected to increased loads as from a fill surcharge or a new structure. Based on our observations and the laboratory test results, the native soil encountered is generally considered slightly compressible. Removal and recompaction of this material under shallow foundations is recommended to reduce the potential for adverse total and differential settlement of the proposed improvements.

Collapse potential (moisture sensitivity, sometimes referred to as 'hydrocollapse') refers to the potential settlement of a soil under existing stresses upon being wetted. Based upon the dense nature of encountered sands and gravel, the hydrocollapse potential of the onsite soil is expected to be very low.

2.3.2 Expansive Soils

Expansive soils contain significant amounts of clay particles that swell considerably when wetted and shrink when dried. Foundations constructed on these soils are subjected to large uplifting forces caused by the swelling. Without proper measures taken, heaving and cracking of building foundations and slabs-on-grade could result.

A near-surface soil sample from the proposed fire station building area was tested for expansion index. The results of the tests indicated soil with very low expansion potential. Based on these test results, the near surface soil is expected to have a very low expansion potential. The results of the expansion testing are included in Appendix C of this report

2.3.3 Sulfate Content

Water-soluble sulfates in soil can react adversely with concrete. However, concrete in contact with soil containing sulfate concentrations of less than 0.1 percent by weight is considered to have negligible sulfate exposure based on the American Concrete Institute (ACI) provisions, adopted by the 2016 CBC (CBC, 2016, Chapter 19; and ACI, 2008).

A near-surface soil sample was tested for soluble sulfate content. The result of this test indicated a sulfate content of less than 0.02 percent by weight, indicating negligible sulfate exposure. As such, the soils exposed at pad grade are not expected to pose a significant potential for sulfate reaction with concrete. The results of the chemical analyses are included in Appendix C of this report

2.3.4 Resistivity, Chloride and pH

Soil corrosivity to ferrous metals can be estimated by the soil's electrical resistivity, chloride content and pH. In general, soil having a minimum resistivity between 1,000 and 2,000 ohm-cm is considered corrosive, and soil having a minimum resistivity less than 1,000 ohm-cm is considered severely corrosive. Soil with a chloride content of 500 parts-per-million (ppm) or more is considered corrosive to ferrous metals.

As a screening for potentially corrosive soil, a soil sample was tested during this investigation to determine its minimum resistivity, chloride content, and pH. These tests indicated a minimum resistivity of 1,570 ohm-cm, chloride content of 187 ppm, and pH of 7.1. Based on these results, the onsite soil is considered corrosive to ferrous metals. The results of the chemical analyses are included in Appendix C of this report.

2.4 Groundwater

Groundwater was not encountered in our borings excavated to a maximum depth of 51 feet below the existing ground surface (bgs). The historical high groundwater level in the area was estimated to have been on the order of 172 feet bgs in State Well 04S09W33M001S, located 0.6 miles southeast of the site (CDWR, 2019). The California Geological Survey (1997) Seismic Hazard Zone Report for this region shows the site area as not having historically shallow

groundwater levels (greater than 40 feet bgs). Based on this, groundwater has historically been deep, and shallow groundwater is not expected at the site.

Fluctuations of the groundwater level and localized zones of perched water should be anticipated below grade during and following the rainy season. Irrigation of landscaped areas and infiltration of groundwater can also cause a fluctuation of local groundwater levels and may create temporary zones of perched water.

2.5 Faulting and Seismicity

In general, the primary seismic hazards for sites in the region include surface rupture along active faults and strong ground shaking. The potential for fault rupture and seismic shaking are discussed below.

2.5.1 Surface Faulting

One of the primary seismic hazards for this region is surface fault rupture. Our assessment of the possible presence of active faulting through the proposed improvement project site included a review of available literature, maps, and aerial photographs.

Our review of available in-house literature indicates that there are no known active faults traversing the site and the site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone. Therefore, the potential risk for surface fault rupture through the site is considered low.

The closest known active or potentially active faults are the Elysian Park Blind Thrust and the Puente Hills Blind Thrust fault systems located approximately 9 miles northwest of the project site. The known regional active and potentially active faults that could produce the most significant ground shaking at the site include the Whittier-Elsinore, San Andreas, Sierra Madre, San Jacinto, Newport-Inglewood, Raymond, Puente Hills, Verdugo-Eagle Rock, Elysian Park and Norwalk faults. Active faults within a 60-mile radius from the site are listed in Appendix D.

2.5.2 Seismic Design Parameters

The principal seismic hazard to the site is ground shaking resulting from an earthquake occurring along any of several major active and potentially active faults in southern California, see Figure 4, *Regional Fault and Historical Seismicity Map*. The intensity of ground shaking at a given location depends primarily upon the earthquake magnitude, the distance from the source, and the site response characteristics. Accordingly, design of the project should be performed in accordance with all applicable current codes and standards utilizing the appropriate seismic design parameters to reduce seismic risk as defined by California Geological Survey (CGS) Chapter 2 of Special Publication 117A (CGS, 2008). The 2016 edition of the California Building Code (CBC) is the current edition of the code. Through compliance with these regulatory requirements and the utilization of appropriate seismic design parameters selected by the design professionals, potential effects relating to seismic shaking can be reduced. A summary of the analysis is provided in Appendix D, *Seismic Analysis*.

The following code-based seismic parameters should be considered for design under the 2016 CBC:

Table 1 - 2016 CBC Seismic Design Parameters

Description (2016 CBC reference)	Parameter	Design Value
Site Latitude, degrees		33.7873
Site Longitude, degrees		-117.8411
Site Class Definition (1613A.3.2)		D
Mapped MCE Spect Resp Accel at 0.2s for (Fig 1613.3.1(1)), using USGS	S_s	1.5
Mapped MCE Spect Resp Accel at 1.0s for (Fig 1613.3.1(2)) using USGS	S_1	0.549
Short Period Site Coefficient (Table 1613A.3.3(1))	F_a	1.0
Long Period Site Coefficient (Table 1613A.3.3(2))	F_v	1.5
Adjusted MCE Spectral Response Acceleration at 0.2s Period [$=F_a S_s$] (Eq. 16-37)	S_{MS}	1.5
Adjusted MCE Spectral Response Acceleration at 1s Period [$=F_v S_1$] (Eq. 16-38)	S_{M1}	0.823
Design Spectral Response Acceleration at 0.2s Period, 5% damped [$=2/3 S_{MS}$] (Eq. 16-39)	S_{DS}	1.0
Design Spectral Response Acceleration at 1s Period, 5% damped [$=2/3 S_{M1}$] (Eq 16-40)	S_{D1}	0.549
Is S_1 greater than or equal to 0.75?		No
Seismic Design Category [$=$ "D" if $S_1 < 0.75$] (1613A.2.5)		D

2.5.3 Seismic Parameters for Geotechnical Evaluation

Based on ASCE 7-10 Equation 11.8-1, the F_{PGA} is 1.0, the PGA is 0.515g, and the PGA_M is 0.51g. This is the value used for seismic analysis of the onsite soils. As an added check, PGA and hazard deaggregation were also estimated using the United States Geological Survey's (USGS) 2008 Interactive Deaggregations utility. The results of this analysis indicate that the predominant modal earthquake has a PGA of 0.58g with magnitude of approximately 6.9 (M_W) at a distance on the order of 12.8 kilometers for the Maximum Considered Earthquake (2% probability of exceedance in 50 years); 2/3 of this value is 0.39g. Results are included in Appendix D. This is not an exhaustive site-specific analysis, yet is useful in evaluating the general seismic potential at the site as an added check.

2.5.4 Historical Seismicity

Figure 4, *Regional Fault and Historical Seismicity Map* shows recorded historical regional seismic events (those that have been recorded since the mid 1700s) with respect to the site. Based on this map, it appears that the site has been exposed to relatively significant seismic events; however, this site does not appear to have experienced more severe seismicity than compared to much of southern California in general. We are unaware of documentation indicating that past earthquake damage in the site vicinity has been significantly worse than for the majority of southern California. In addition, we are unaware of damage in the site vicinity as the result of liquefaction, lateral spreading, or other related phenomenon.

We also performed an evaluation of site historical seismicity with respect to significant past earthquakes (those recorded from the 1800s with magnitudes 5 or greater) using the EQSEARCH computer program (Blake, 2011; see Appendix D). This is a relatively simple analysis, based on epicenters, and does not include more complex characteristics of earthquakes, such as rupture length and direction; however, it gives an idea of past seismicity at the site. This analysis suggests that the largest ground acceleration at the site generated from the magnitude 6.3Mw 1933 Long Beach Earthquake along the Newport Inglewood Fault is estimated to have been roughly 0.16g.

2.6 Secondary Seismic Hazards

In general, secondary seismic hazards for sites in the region could include soil liquefaction, earthquake-induced settlement, lateral displacement, landsliding, and earthquake-induced flooding. The potential for secondary seismic hazards at the site is discussed below.

2.6.1 Liquefaction Potential

Liquefaction is the loss of soil shear strength due to a buildup of pore-water pressure during severe and sustained ground shaking. Liquefaction is associated primarily with loose (low density), saturated, fine-to-medium grained, cohesionless soils. As the shaking action of an earthquake progresses, the soil grains are rearranged and the soil densifies within a short period of time. Rapid densification of the soil results in a buildup of pore-water pressure. When the pore-water pressure approaches the total overburden pressure, the soil shear strength reduces greatly and this soil temporarily behaves similarly to a fluid. Effects of liquefaction can include sand boils, settlement, and bearing capacity failures below structural foundations.

As shown on the Seismic Hazard Zones map for the Orange Quadrangle (CGS, 1998), the project site is **not** located within an area that has been identified by the State of California as being potentially susceptible to liquefaction (Figure 5, *Seismic Hazard Map*).

We have evaluated liquefaction potential of the soil encountered in our borings assuming a historic high groundwater depth deeper than 50 feet. Our analysis was based on the modified Seed Simplified Procedure as detailed by Youd et al. (2001) and Martin and Lew (1999), which compares the seismic demand on a soil layer (Cyclic Stress Ratio, or CSR) to the capacity of the soil to resist liquefaction (Cyclic Resistance Ratio, or CRR), (Youd et al, 2001). A minimum required factor of safety of 1.3 was used in our analysis, with factor of safety defined as CRR/CSR. As required, our analysis assumes that the design earthquake would occur while the groundwater is at its estimated historically highest level. In the SPT method, soil resistance to liquefaction is estimated based on several factors, including SPT sampling blow counts normalized and corrected for several factors including fines content, and overburden

pressure. Soil plasticity and moisture content are also considered in an evaluation of liquefaction. Parameters utilized in our analysis include Standard Penetration Test (SPT) results from the borings, visual descriptions of soil samples retrieved, and geotechnical laboratory test results.

Based on our analysis, the nature of the onsite soils, and the historically deep groundwater level, the potential for liquefaction at the site is considered very low.

2.6.2 Seismically Induced Settlement

During a strong seismic event, seismically induced settlement can occur within loose to moderately dense, dry or saturated granular soil. Settlement caused by ground shaking is often nonuniformly distributed, which can result in differential settlement.

We have performed analyses to estimate the potential for seismically induced settlement using the method of Tokimatsu and Seed (1987), and based on Martin and Lew (1999), considering the maximum considered earthquake (MCE) peak ground acceleration (PGA_M). The results of our analyses suggest that the onsite soils are susceptible to less than an 1-inch of seismic settlement based on the MCE. Differential settlement due to seismic loading is assumed to be less than ½ inch over a horizontal distance of 40 feet based on the MCE. A summary of seismic settlement analysis is included in Appendix D.

2.6.3 Seiches and Tsunamis

Seiches are large waves generated in enclosed bodies of water in response to ground shaking. Tsunamis are waves generated in large bodies of water by fault displacement or major ground movement. Based on the location of the site and distance from contained water facilities, seiches and tsunamis are not a hazard to the site.

2.7 Slope Stability and Landslides

The potential for seismically induced landsliding to occur at the site is considered low due to the absence of slopes at the site. In addition, based on review of the

Seismic Hazard Zones Map for the Orange Quadrangle (CGS, 1998), the site is **not** located within an area that has been identified by the State of California as being potentially susceptible to seismically induced landslides (Figure 5, *Seismic Hazard Map*). Proposed slopes, while not anticipated, should be engineered and constructed at a gradient of 2:1 (horizontal:vertical) or flatter.

2.8 Flooding and Dam Inundation Potential

The site is not located within the 100-year or 500-year flood plain based on the Federal Emergency Management Agency (FEMA) flood maps (see Figure 7, *Flood Hazard Zone Map*).

Flooding can also result from the failure of dams. Based on our review of dam inundation data by the California Office of Emergency Services (OES), the site is not located near dams or in an area shown as susceptible to dam inundation, see Figure 6, *Dam Inundation Map*.

2.9 Infiltration Testing

Infiltration tests was conducted in two of the excavated borings (LB-4 and LB-5) to estimate the infiltration rate of the onsite soils at the depths tested. The infiltration test was conducted at bottom depths of approximately 14 and 20.5 feet below the existing ground surface.

Well permeameter tests are useful for field measurements of soil infiltration rates, and are suited for testing when the design depth of the basin or chamber is deeper than current existing grades. It should be noted that this is a clean-water, small-scale test, and that correction factors need to be applied. The test consists of excavating a boring to the depth of the test (or deeper if it is partially backfilled with soil and a bentonite plug with a thin soil covering is placed just below the design test elevation). A layer of clean sand or gravel is placed in the boring bottom to support temporary perforated well casing pipe and a float valve. In addition, coarse sand is poured around the outside of the well casing within the test zone to prevent the boring from caving/collapsing or eroding when water is added. The float valve, lowered into the boring inside the casing, adds water stored in barrels at the top of the hole to the boring as water infiltrates into the soil, while maintaining a relatively constant water head in the boring. The incremental infiltration rate as measured during intervals of the test is defined as the incremental flow rate of water infiltrated, divided by the surface area of the

infiltration interface. The test was conducted based on the USBR 7300-89 test method.

Raw infiltration rates for the well permeameter tests may be assumed to be about 4.5 in/hour within the gravel layer generally encountered at a depth of 15 to 20 feet bgs, but should be considered negligible in the clayey sand layer at a depth of approximately 10 feet in boring LB-4. These are raw values and do not include a factor of safety or correction. Results of infiltration testing are provided in Appendix B. Further discussion on infiltration testing and recommendations are included in Section 3.9.

2.10 Other Potential Hazards Listed on CGS Note 48

The following naturally occurring hazards are not believed to exist at the site nor in the region: methane gas, hydrogen-sulfide gas, tar seeps, volcanic eruption, radon-22 gas, and naturally occurring asbestos in geologic formations associated with serpentine.

We are unaware of significant subsidence or damage from subsidence near the site due to groundwater withdrawal.

3.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of this study, the proposed fire station is feasible from a geotechnical standpoint. No severe geologic or soils related issues were identified that would preclude development of the site for the proposed improvements. The most significant geotechnical issues at the site are those related to the potential for strong seismic shaking, undocumented fill soils and potentially compressible soils. Good planning and design of the project can limit the impact of these constraints. Remedial recommendations for these and other geotechnical issues are provided in the following sections.

3.1 General Earthwork and Grading

All grading should be performed in accordance with the General Earthwork and Grading Specifications presented in Appendix E, General Earthwork Recommendations, unless specifically revised or amended below or by future recommendations based on final development plans.

3.1.1 Site Preparation

Prior to construction, the site should be cleared of vegetation, trash and debris, which should be disposed of offsite. Any underground obstructions should be removed, as should trees and their root systems. Resulting cavities should be properly backfilled and compacted. Efforts should be made to locate existing utility lines. Those lines should be removed or rerouted if they interfere with the proposed construction, and the resulting cavities should be properly backfilled and compacted.

Although not encountered during this investigation, abandoned septic tanks, seepage pits, or other buried structures, or items related to past site uses may be present. If such items are encountered during grading, they will require further evaluation and special consideration.

3.1.2 Overexcavation and Recompanction

To reduce the potential for adverse differential settlement of the proposed improvements, the underlying subgrade soil should be prepared in such a manner that a uniform response to the applied loads is achieved. For the proposed fire station building and apparatus building constructed with

shallow foundations, we recommend that onsite soils be overexcavated and recompacted to a minimum depth of 2 feet below the bottom of the proposed footings or 5 feet below existing grade, whichever is deeper. In addition, existing undocumented artificial fill in structural areas should be removed to undisturbed native alluvial soil. Where feasible, overexcavation and recompaction should extend a minimum horizontal distance of 5 feet from perimeter edges of the proposed footings, or a distance equal to the depth of overexcavation, whichever is greater.

Local conditions, such as those interpreted in boring LB-5 may require that deeper overexcavation be performed; such areas should be evaluated by Leighton during grading.

Areas outside these overexcavation limits planned for asphalt or concrete pavement, flatwork, and areas to receive fill should be overexcavated to a minimum depth of 18 inches below the existing ground surface or 12 inches below the proposed subgrade, whichever is deeper. Overexcavation for site walls should extend a minimum 2 feet below the bottom of the wall footings.

All excavation or removal bottoms should be observed by a representative of the geotechnical engineer prior to placement of fill or other improvements to determine that geotechnically suitable soil is exposed. The overexcavation in the building area may also require observation by the City Grading Inspector prior to fill placement. Excavation bottoms observed to be suitable for fill placement or other improvements should be scarified to a depth of at least 8 inches, moisture-conditioned as necessary to achieve a moisture content approximately 2 to 3 percentage points above the optimum moisture content, and then compacted to a minimum of 90 percent of the laboratory derived maximum density as determined by ASTM Test Method D 1557 (Modified Proctor).

Once final development plans are completed and building loads have been calculated this information should be provided to Leighton for geotechnical review to ensure our recommendations have been properly interpreted and remain appropriate for the project as currently proposed.

3.1.3 Fill Placement and Compaction

The onsite soil is geotechnically suitable for use as compacted structural fill, provided it is free of debris and oversized material (cobbles) (greater than 6 inches in largest dimension). Any soil to be placed as fill, whether onsite or imported material, should be reviewed and possibly tested by Leighton.

Based upon the anticipated conceptual plan, site grading is not expected to require significant cut or fill; however, excavations as deep as 5 to 6 feet with localized deeper excavation should be expected for the removal and reworking of all undocumented fill and overexcavation of building foundations. All fill soil should be placed in thin, loose lifts, moisture-conditioned as necessary to achieve a moisture content approximately 2 to 3 percentage points above the optimum moisture content, and then compacted to a minimum of 90 percent of the laboratory derived maximum density as determined by ASTM Test Method D 1557 (Modified Proctor). Aggregate base for pavement should be compacted to a minimum of 95 percent relative compaction.

3.1.4 Import Fill Soil

If import soil is to be placed as fill, it should be geotechnically accepted by Leighton. Preferably at least 3 working days prior to proposed import to the site, the contractor should provide Leighton pertinent information of the proposed import soil, such as location of the soil, whether stockpiled or native in place, and pertinent geotechnical reports if available. We recommend that a Leighton representative visit the proposed import site to observe the soil conditions and obtain representative soil samples. Potential issues may include soil that is more expansive than onsite soil, soil that is too wet, soil that is too rocky or too dissimilar to onsite soils, oversize material, organics, debris, environmental unsuitability etc.

3.1.5 Shrinkage and Subsidence

The change in volume of excavated and recompacted soil varies according to soil type and location. This volume change is represented as a percentage increase (bulking) or decrease (shrinkage) in volume of fill after removal and recompaction. Subsidence occurs as in-place soil (e.g., natural ground) is moisture-conditioned and densified to receive fill, such

as in processing an overexcavation bottom. Subsidence is in addition to shrinkage due to recompaction of fill soil. Field and laboratory data used in our calculations included laboratory-measured maximum dry densities for soil types encountered at the subject site, the measured in-place densities of soils encountered, sampling blow counts, and our experience. We preliminarily estimate the following earth volume changes will occur during grading:

Shrinkage and Subsidence	
Shrinkage	Approximately 10 +/- 3 percent
Subsidence (overexcavation bottom processing)	Approximately 0.1 foot

The level of fill compaction, variations in the dry density of the existing soils and other factors influence the amount of volume change. Some adjustments to earthwork volume should be anticipated during grading of the site.

3.2 Foundation Recommendations

The following recommendations are based on soils with a very low expansion potential. The structural engineer should design the footing reinforcement in accordance with current California Building Code (CBC) requirements. Local agencies, the structural engineer or the CBC may have requirements that are more stringent.

Overexcavation and recompaction of the footing subgrade soil should be performed as detailed in Section 3.1.2.

3.2.1 Minimum Embedment and Width

Based on our preliminary investigation, footings should have a minimum embedment depth and width per the 2016 CBC. These minimums include a depth and width of 12 inches.

3.2.2 Allowable Bearing

An allowable bearing pressure of 2,000 pounds-per-square-foot (psf) may be used, based on the minimum embedment depth and width above. This allowable bearing value may be increased by 200 psf per foot increase in depth or width to a maximum allowable bearing pressure of 4,000 psf. These allowable bearing pressures are for total dead load and sustained live loads. Footing reinforcement should be designed by the structural engineer.

3.2.3 Lateral Load Resistance

Soil resistance available to withstand lateral loads on a shallow foundation is a function of the frictional resistance along the base of the footing and the passive resistance that may develop as the face of the structure tends to move into the soil. The frictional resistance between the base of the foundation and the subgrade soil may be computed using a coefficient of friction of 0.40. The passive resistance may be computed using an allowable equivalent fluid pressure of 240 pounds per cubic foot (pcf), assuming there is constant contact between the footing and undisturbed soil. The maximum passive resistance should not exceed 3,500 psf. The coefficient of friction and passive resistance may be combined without further reduction.

3.2.4 Increase in Bearing and Friction - Short Duration Loads

The allowable bearing pressure and coefficient of friction values may be increased by one-third when considering loads of short duration, such as those imposed by wind and seismic forces.

3.2.5 Settlement Estimates

The recommended allowable bearing capacity is generally based on a total allowable, post construction settlement of 1 inch. Differential settlement due to static loading is estimated at ½ inch over a horizontal distance of 30 feet. Since settlement is a function of footing sustained load, size and contact bearing pressure, differential settlement can be expected between adjacent columns or walls where a large differential loading condition exists.

3.3 Recommendations for Slabs-On-Grade

Concrete slabs-on-grade should be designed by the structural engineer in accordance with the current CBC for a soil with a very low expansion potential. Laboratory testing should be conducted at finish grade to evaluate the Expansion Index (EI) of near-surface subgrade soils. Where conventional light floor loading conditions exist, the following minimum recommendations should be used. More stringent requirements may be required by local agencies, the structural engineer, the architect, or the CBC. Slabs-on-grade should have the following minimum recommended components:

- Subgrade Moisture Conditioning: The subgrade soil should be moisture conditioned to at least 3 percentage points above optimum moisture content to a minimum depth of 18 inches prior to placing steel or concrete.
- Concrete Thickness: Thickness of slabs-on-grade should be designed by the structural engineer, but should be at least 4 inches thick (this is referring to the actual minimum thickness, not the nominal thickness). Reinforcing steel should be designed by the structural engineer, but as a minimum (for conventionally reinforced slabs) should be No. 4 rebar placed at 18 inches on center, each direction, mid-depth in the slab. Crack control joints should be placed at 13 feet on center or less, forming approximately square panels.

For the apparatus bay, the slab should be a minimum of 8 inches thick and underlain by 6 inches of aggregate base. Reinforcing steel should be designed by the structural engineer, but as a minimum should be No. 4 rebar placed at 18 inches on center, each direction, mid-depth in the slab. Construction joints should be designed by the structural engineer, but should be spaced no more than 13 feet on center, forming square sections.

- Moisture Vapor Retarder: We recommend a minimum of a 15-mil vapor retarder should be placed below slabs where moisture-sensitive floor coverings or equipment is planned. Since moisture will otherwise be transmitted up from the soil through the concrete, it is important that an intact vapor retarder be installed. We recommend that the vapor retarder intended for the specific conditions present be used and meet the requirements of ASTM E1745 and installed per ASTM E1643. The structural engineer should specify pertinent concrete design parameters and moisture migration prevention measures, such as whether or not a sand blotter layer should be

placed over the vapor retarder. If sand is placed on top of the vapor retarder, the contractor should not allow the sand to become wet prior to concrete placement (e.g., sand should not be placed if rain is expected). Sharp objects, such as gravel or other protruding objects that could puncture the moisture retarder should be removed from the subgrade prior to placing the vapor retarder, or a stronger vapor retarder intended for the specific conditions present can be used. *Mechanically fractured gravel and small cobbles observed during drilling and sampling resulted in angular sharp fragments that could puncture the barrier.*

Minor cracking of the concrete as it cures, due to drying and shrinkage is normal and should be expected. However, cracking is often aggravated by a high water/cement ratio, high concrete temperature at the time of placement, small nominal aggregate size, aggregate that is not sufficiently clean, and rapid moisture loss due to hot, dry, and/or windy weather conditions during placement and curing. Cracking due to temperature and moisture fluctuations can also be expected. Low slump concrete can reduce the potential for shrinkage cracking. Additionally, our experience indicates that reinforcement in slabs and foundations can generally reduce the potential for concrete cracking. The structural engineer should consider these components in slab design and specifications.

Moisture retarders can reduce, but not eliminate moisture vapor rise from the underlying soils up through the slab. Moisture retarders should be designed and constructed in accordance with the applicable American Concrete Institute, Portland Cement Association, Post-Tensioning Institute, ASTM International, and California Building Code requirements and guidelines.

Leighton does not practice in the field of moisture vapor transmission recommend that a qualified person, such as the flooring subcontractor and/or structural engineer, be consulted with to evaluate the general and specific moisture vapor transmission paths and any impact on the proposed construction. That person (or persons) should provide recommendations for mitigation of potential adverse impact of moisture vapor transmission on various components of the structures as deemed appropriate. In addition, the recommendations in this report and our services in general are not intended to address mold prevention, since we, along with geotechnical consultants in general, do not practice in the area of mold prevention. If specific

recommendations are desired, a professional mold prevention consultant should be contacted.

3.4 Seismic Design Parameters

Seismic parameters presented in this report should be considered during project design. In order to reduce the effects of ground shaking produced by regional seismic events, seismic design should be performed in accordance with the most recent edition of the California Building Code (CBC). The seismic design parameters listed in Table 1 of Section 0 of this report should be considered for the seismic analysis of the subject site.

3.5 Lateral Earth Pressures

The following retaining wall recommendations are included for design consideration of walls with a height less than 6 feet. We recommend that retaining walls be backfilled with very low expansive soil and constructed with a backdrain in accordance with the recommendations provided on Figure 8, *Retaining Wall Backfill and Subdrain Detail*. Using expansive soil as retaining wall backfill will result in higher lateral earth pressures exerted on the wall and are, therefore, not recommended. Retaining wall locations and configurations are unknown at the time of this report.

Table 2 - Retaining Wall Design Parameters

Static Equivalent Fluid Pressure (pcf)	
Condition	Level Backfill
Active	40
At-Rest (drained, compacted-fill backfill)	60
Passive (ultimate)	360 (Max. 5,000 psf)

The above values do not contain an appreciable factor of safety, so the structural engineer should apply the applicable factors of safety and/or load factors during design.

Cantilever walls that are designed to yield at least $0.001H$, where H is equal to the wall height, may be designed using the active condition. Rigid walls and walls braced at the top should be designed using the at-rest condition.

Passive pressure is used to compute soil resistance to lateral structural movement. In addition, for sliding resistance, a frictional resistance coefficient of 0.40 may be used at the concrete and soil interface. The lateral passive resistance should be taken into account only if it is ensured that the soil providing passive resistance, embedded against the foundation elements, will remain intact with time. A soil unit weight of 120 pcf may be assumed for calculating the actual weight of the soil over the wall footing.

In addition to the above lateral forces due to retained earth, surcharge due to improvements, such as an adjacent structure or traffic loading, should be considered in the design of the retaining wall. Loads applied within a 1:1 projection from the surcharging structure on the stem of the wall should be considered in the design. A third of uniform vertical surcharge-loads should be applied at the surface as a horizontal pressure on cantilever (active) retaining walls, while half of uniform vertical surcharge-loads should be applied as a horizontal pressure on braced (at-rest) retaining walls. To account for automobile parking surcharge, we suggest that a uniform horizontal pressure of 100 psf (for restrained walls) or 70 psf (for cantilever walls) be added for design, where autos are parked within a horizontal distance behind the retaining wall less than the height of the retaining wall stem.

We recommend that the wall designs for walls 6 feet tall or taller be checked seismically using an *additive seismic* Equivalent Fluid Pressure (EFP) of 28 pcf, which is added to the EFP. The *additive seismic* EFP should be applied at the retained midpoint.

Conventional retaining wall footings should have a minimum width of 24 inches and a minimum embedment of 12 inches below the lowest adjacent grade. An allowable bearing pressure of 2,000 psf may be used for retaining wall footing design, based on the minimum footing width and depth. This bearing value may be increased by 200 psf per foot increase in width or depth to a maximum allowable bearing pressure of 4,000 psf.

3.6 Cement Type and Corrosion Protection

Based on the results of laboratory testing (Appendix C), concrete structures in contact with the onsite soil will have negligible exposure to water-soluble sulfates in the soil. Therefore, common Type II cement may be used for concrete

construction. Concrete should be designed in accordance with ACI 318-14, Section 4.2 (ACI, 2014), adopted by the 2016 CBC (Section 1904A.2).

Based on our laboratory testing, the onsite soil is considered corrosive to ferrous metals. Metallic utilities should be avoided, or typical corrosion protection of underground metallic utilities should be considered. Corrosion information presented in this report should be provided to your underground utility contractors.

3.7 Pavement Design

Based on the design procedures outlined in the current Caltrans Highway Design Manual, and using an assumed design R-value of 40 for compacted silty sand subgrade soils, preliminary flexible pavement sections may consist of the following for the Traffic Indices (TI) indicated.

Table 3 – Hot Mix Asphalt (HMA) Pavement Sections

Traffic Index	Asphaltic Concrete (AC) Thickness (inches)	Class 2 Aggregate Base (AB) Thickness (inches)
5 or less (auto access)	3.0	4.0
7 (truck access)	4.0	4.0

For fire truck (60,000-pound “apparatus”) lanes, asphalt pavements designed for a TI=7 are recommended. However, note that undisturbed apparatus outrigger loads could cause local asphalt pavement punching damage. When possible, outrigger loads should be distributed over asphalt pavements with planks and plywood. Otherwise, areas where outrigger loads are anticipated could be paved with 8-inch-thick concrete as described below.

Portland cement concrete pavement sections were calculated in accordance with procedures developed by the Portland Cement Association. Concrete paving sections for three Traffic Indices (TIs) are presented below.

Table 4 – Portland Cement Concrete Pavement Sections

Traffic Index	Asphaltic Concrete (AC) Thickness (inches)	Class 2 Aggregate Base (AB) Thickness (inches)
5 or less (auto access)	6.0	4.0
7 (truck access)	8.0	6.0

We have assumed that this Portland cement concrete will have a compressive strength of at least 4,000 psi. Reinforcement should be specified by the structural engineer, but should be a minimum of #3 rebar at 18 inches on center each way. The PCC pavement sections should be provided with crack-control joints spaced no more than 13 feet on center each way. If sawcuts are used, they should have a minimum depth of $\frac{1}{4}$ of the slab thickness and made within 24 hours of concrete placement. We recommend that sections be as nearly square as possible.

PCC sidewalks should be at least 4 inches thick over prepared subgrade soil, with construction joints no more than 8 feet on center each way, with sections as nearly square as possible. Use of reinforcing will help reduce severity of cracking.

All pavement construction should be performed in accordance with the Standard Specifications for Public Works Construction. Field observations and periodic testing, as needed during placement of the base course materials, should be undertaken to ensure that the requirements of the standard specifications are fulfilled. Prior to placement of aggregate base, the subgrade soil should be processed to a minimum depth of 8 inches, moisture-conditioned, as necessary, and recompact to a minimum of 90 percent relative compaction. Aggregate base should be moisture conditioned, as necessary, and compacted to a minimum of 95 percent relative compaction.

3.8 Infiltration Recommendations

Infiltration Rate: We recommend an unfactored (small-scale) infiltration rate of 4.5 inches per hour be used for preliminary design for an infiltration system designed at a depth of 15 to 20 feet below the existing grade within the natural gravel layer. The infiltration chamber may be deepened by excavating trenches in the bottom of the infiltration chamber excavation for the length of the excavation, and backfilling



these trenches with ASTM C33 Fine Aggregate (washed concrete sand). Leighton should observe the soil in the excavation to confirm these recommendations.

We recommend that a correction factor/safety factor be applied to the infiltration rate in conformance with the Orange County guidelines, since monitoring of actual facility performance has shown that actual infiltration rates are lower than for small-scale tests. The small-scale infiltration rate should be divided by a correction factor of at least 2 for buried chambers, and at least 3 for open basins or for conditions where retained water will be exposed to the open atmosphere, but the correction/safety factor may be higher based on project-specific aspects.

The infiltration rates described herein are for a clean, unsilted infiltration surface in native, sandy alluvial soil. These values may be reduced over time as silting of the infiltration facility occurs. Furthermore, if the basin or chamber bottom is allowed to be compacted by heavy equipment, this value is expected to be significantly reduced. Infiltration of water through soil is highly dependent on such factors as grain size distribution of the soil particles, particle shape, fines content, clay content, and density. Small changes in soil conditions, including density, can cause large differences in observed infiltration rates. Infiltration is not suitable in compacted fill.

It should be noted that during periods of prolonged precipitation, the underlying soils tend to become saturated to greater and greater depths/extents. Therefore, infiltration rates tend to decrease with prolonged rainfall. It is difficult to extrapolate longer-term, full-scale infiltration rates from small-scale tests, and as such, this is a significant source of uncertainty in infiltration rates.

Additional Review and Evaluation: Infiltration rates are anticipated to vary significantly based on the location and depth. Infiltration concepts should be discussed with Leighton as infiltration plans are being developed. Leighton should review all infiltration plans, including specific locations and invert depths of proposed facilities. Further testing may be needed based on the design of infiltration facilities, particularly considering their type, depth and location.

General Design Considerations: The periodic flow of water carrying sediments into the infiltration facility, plus the introduction of wind-blown sediments and sediments from erosion of basin side walls, can eventually cause the bottom of the facility to accumulate a layer of silt, which has the potential of significantly reducing the overall infiltration rate. Therefore, we recommend that significant

amounts of silt/sediment not be allowed to flow into the facility within stormwater, especially during construction of the project and prior to achieving mature landscape on site. We recommend that an easily maintained, robust silt/sediment removal system be installed to pretreat storm water before it enters the infiltration facility.

As infiltrating water can seep within the soil strata nearly horizontally for long distances, it is important to consider the impact that infiltration facilities can have on nearby subterranean structures, such as basement walls or open excavations, whether onsite or offsite, and whether existing or planned. Any such nearby features should be identified and evaluated as to whether infiltrating water can impact these. Such features should be brought to Leighton's attention as they are identified.

Infiltration facilities should not be constructed adjacent to or under buildings. Setbacks should be discussed with Leighton during the planning process.

Infiltration facilities should be constructed with spillways or other appropriate means that would cause overflowing to not be a concern to the facility or nearby improvements.

For buried chambers, control/access manhole covers should not contain holes or should be screened to prevent mosquitos from entering the chambers.

Construction Considerations: We recommend that Leighton evaluate the infiltration facility excavations, to confirm that granular, undisturbed alluvium is exposed in the bottoms and sides. Additional excavation or evaluation may be required if silty or clayey soils are exposed.

It is critical to infiltration that the basin or chamber bottom not be allowed to be compacted during construction or maintenance; rubber-tired equipment and vehicles should not be allowed to operate on the bottom. We recommend that at least the bottom 3 feet of the basins or chambers be excavated with an excavator or similar.

If fill material is needed to be placed in the basin, such as due to removal of uncontrolled artificial fill, the fill material should be select and free-draining sand, and should be observed and evaluated by Leighton.

Maintenance Considerations: The infiltration facilities should be routinely monitored, especially before and during the rainy season, and corrective measures should be implemented as/when needed. Things to check for include proper upkeep, proper infiltration, absence of accumulated silt, and that de-silting filters/features are clean and functioning. Pretreatment desilting features should be cleaned and maintained per manufacturers' recommendations. Even with measures to prevent silt from flowing into the infiltration facility, accumulated silt may need to be removed occasionally as part of maintenance.

3.9 Temporary Excavations

All temporary excavations, including utility trenches, retaining wall excavations and other excavations should be performed in accordance with project plans, specifications and all OSHA requirements. Contractors should be advised that sand and gravelly fill soils should be considered Type C soils as defined in the California Construction Safety Orders.

No surcharge loads should be permitted within a horizontal distance equal to the height of cut or 5 feet, whichever is greater from the top of the slope, unless the cut is shored appropriately. Excavations that extend below an imaginary plane inclined at 45 degrees below the edge of any adjacent existing site foundation should be properly shored to maintain support of the adjacent structures.

Cantilever shoring should be designed based on an active equivalent fluid pressure of 35 pcf. If excavations are braced at the top and at specific design intervals, the active pressure may then be approximated by a rectangular soil pressure distribution with the pressure per foot of width equal to $25H$, where H is equal to the depth of the excavation being shored.

During construction, the soil conditions should be regularly evaluated to verify that conditions are as anticipated. The contractor should be responsible for providing the "competent person" required by OSHA, standards to evaluate soil conditions. Close coordination between the competent person and the geotechnical engineer should be maintained to facilitate construction while providing safe excavations.

3.10 Trench Backfill

Utility trenches should be backfilled with compacted fill in accordance with Sections 306-1.2 and 306-1.3 of the *Standard Specifications for Public Works Construction*, (SSPWC, "Greenbook"), 2018 Edition. Utility trenches may be backfilled with onsite material free of rubble, debris, organic and oversized material up to 3 inches in largest dimension. Prior to backfilling trenches, pipes should be bedded in and covered with either:

- (1) **Granular Bedding:** a uniform sand material with a Sand Equivalent (SE) greater-than-or-equal-to (\geq) 30, passing the No. 4 U.S. Standard Sieve (or as specified by the pipe manufacturer).
- (2) **CLSM:** Controlled Low Strength Material (CLSM) conforming to Section 201-6 of the SPWC. CLSM bedding should be placed to 6-inch (0.3 m) over the top of the conduit, and vibrated.

Pipe bedding should extend at least 4 inches below the pipeline invert and at least 12 inches over the top of the pipeline. The bedding and shading sand is recommended to be densified in place by vibratory, lightweight compaction equipment.

Trench backfill over the pipe bedding zone may consist of native and clean fill soils. All backfill should be placed in thin lifts (appropriate for the type of compaction equipment), moisture conditioned to slightly above optimum, and mechanically compacted to at least 90 percent of the laboratory derived maximum density as determined by ASTM Test Method D 1557.

3.11 Surface Drainage

Inadequate control of runoff water and/or poorly controlled irrigation can cause the onsite soils to expand and/or shrink, producing heaving and/or settlement of foundations, flatwork, walls, and other improvements. Maintaining adequate surface drainage, proper disposal of runoff water, and control of irrigation should help reduce the potential for future soil moisture problems. Positive surface drainage should be designed to be directed away from foundations and toward approved drainage devices, such as gutters, paved drainage swales, or watertight area drains and collector pipes.

Surface drainage should be provided to prevent ponding of water adjacent to the structures. In general, the area around the buildings should slope away from the building. We recommend that unpaved landscaped areas adjacent to the buildings be avoided. Roof runoff should be carried to suitable drainage outlets by watertight drain pipes or over paved areas.

3.12 Additional Geotechnical Services

The geotechnical recommendations presented in this report are based on subsurface conditions as interpreted from limited subsurface explorations and limited laboratory testing. Geotechnical recommendations provided in this report are based on information available at the time the report was prepared and may change as plans are developed. Additional geotechnical investigation and analysis may be required based on final improvement plans. Leighton should review the site and grading plans when available and comment further on the geotechnical aspects of the project. Geotechnical observation and testing should be conducted during excavation and all phases of grading operations. Our conclusions and preliminary recommendations should be reviewed and verified by Leighton during construction and revised accordingly if geotechnical conditions encountered vary from our preliminary findings and interpretations.

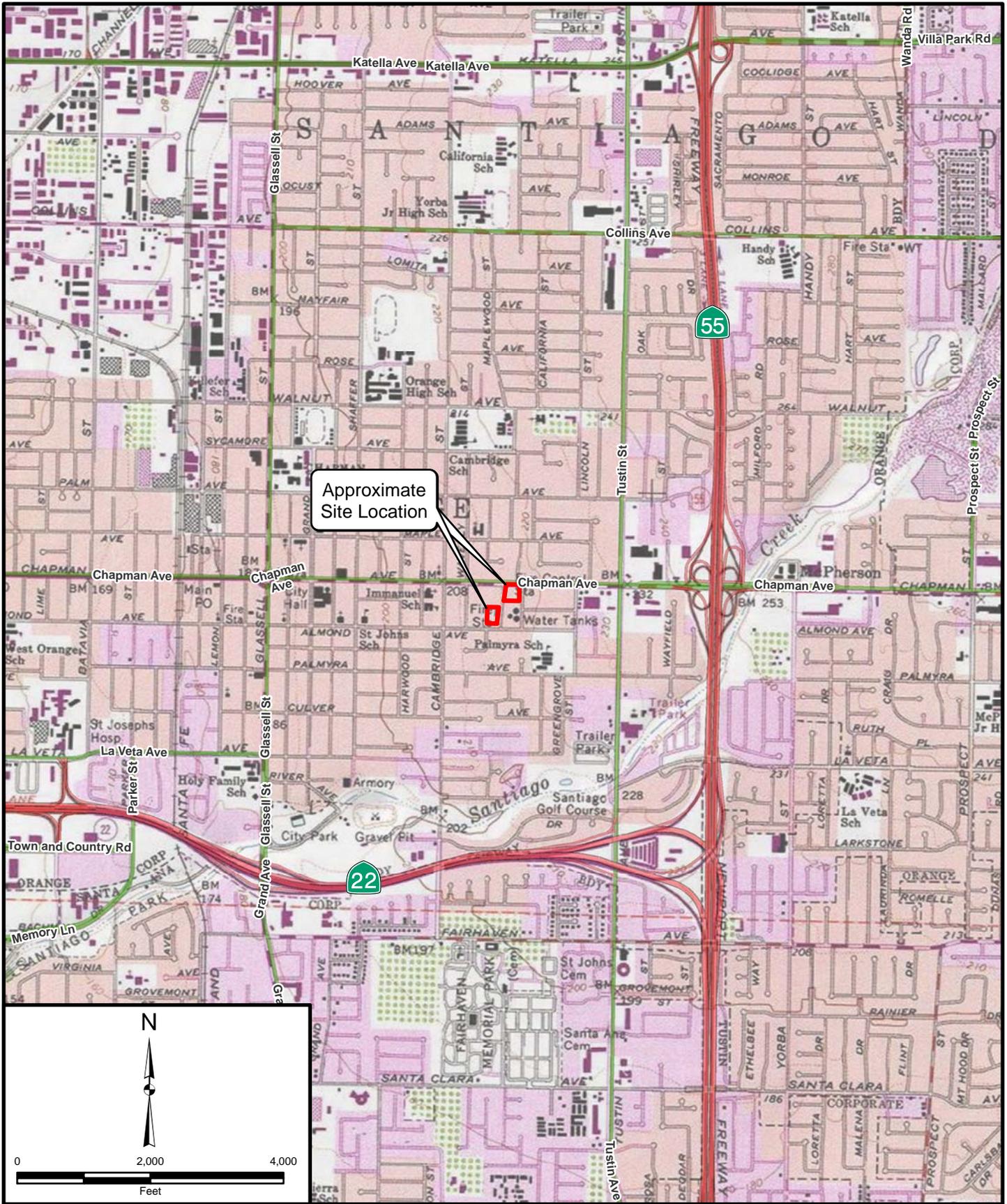
Geotechnical observation and testing should be provided:

- After completion of site clearing.
- During overexcavation of compressible soil.
- During compaction of all fill materials.
- After excavation of all footings and prior to placement of concrete.
- During utility trench backfilling and compaction.
- During pavement subgrade and base preparation.
- When any unusual conditions are encountered.

4.0 LIMITATIONS

This report was based in part on data obtained from a limited number of observations, site visits, soil excavations, samples, and tests. Such information is, by necessity, incomplete. The nature of many sites is such that differing soil or geologic conditions can be present within small distances and under varying climatic conditions. Changes in subsurface conditions can and do occur over time. Therefore, our findings, conclusions, and recommendations presented in this report are based on the assumption that Leighton Consulting, Inc. will provide geotechnical observation and testing during construction. Please refer to the GBA "Important Information about This Geotechnical Engineering Report" presented on at the end of this report.

This report was prepared for the sole use of WLC Architects, Inc. for application to the design of the proposed City of Orange Fire Station 1 in accordance with generally accepted geotechnical engineering practices at this time in California.

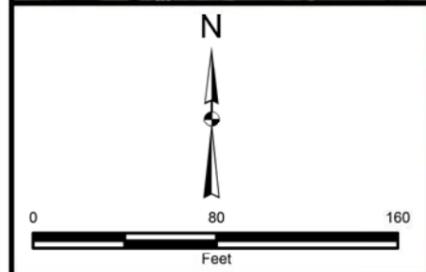


Project: 12482.001	Eng/Geol: JDH/PB
Scale: 1" = 2,000'	Date: September 2019
Base Map: ESRI ArcGIS Online 2019	
Thematic Information: Leighton	
Author: (kmanchikanti)	

SITE LOCATION MAP
Proposed Fire Station 1
105 South Water Street
City of Orange, California

Figure 1

Leighton



Project: 12482.001 Eng/Geol: JDH/PB
 Scale: 1" = 80' Date: September 2019
 Base Map: ESRI ArcGIS Online 2019
 Thematic Information: Leighton
 Author: (kmanc)

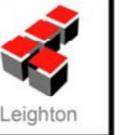
EXPLORATION LOCATION MAP

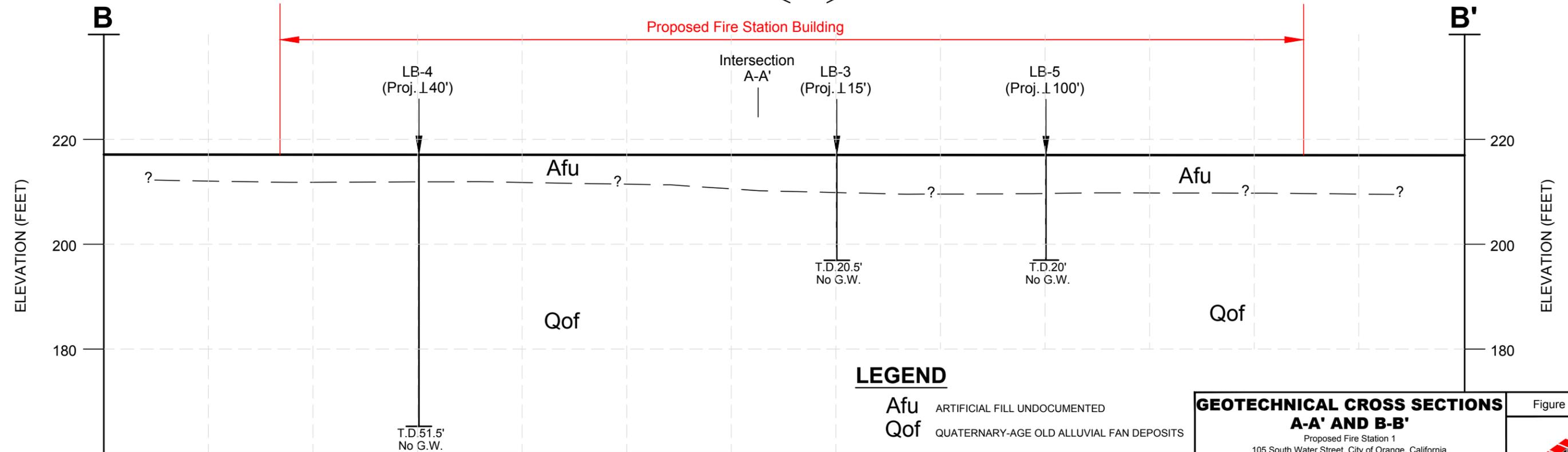
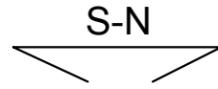
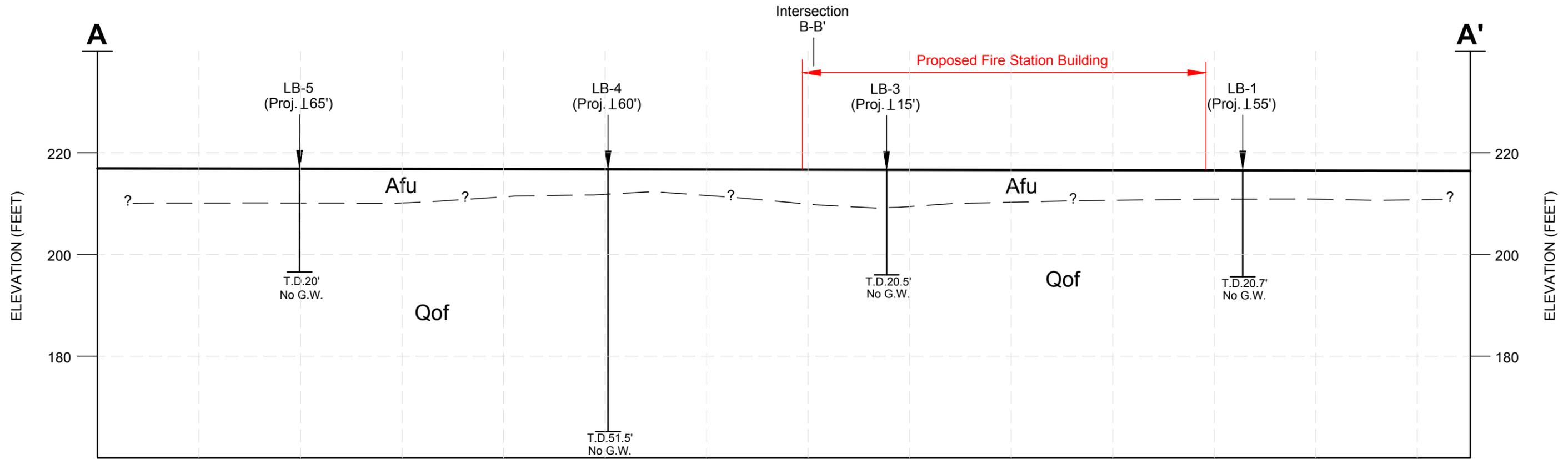
Proposed Fire Station 1
 105 South Water Street
 City of Orange, California

Legend

- Approximate boring location showing total depth (T.D.) in feet below ground surface. Groundwater (GW) not encountered during drilling
- Location of Geotechnical Cross-section (see Figure 2a)

Figure 2





LEGEND

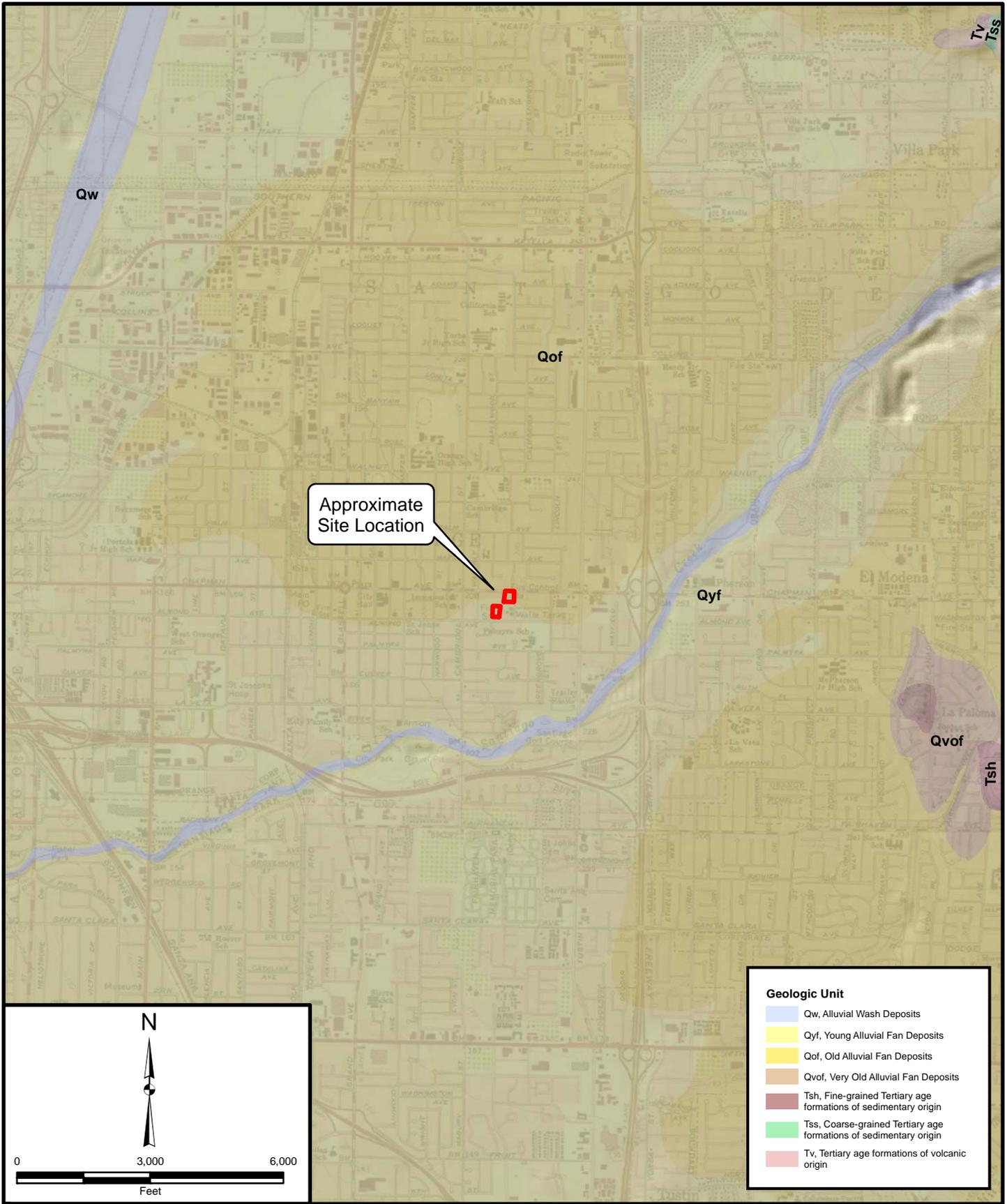
Afu ARTIFICIAL FILL UNDOCUMENTED

Qof QUATERNARY-AGE OLD ALLUVIAL FAN DEPOSITS

GEOTECHNICAL CROSS SECTIONS	
A-A' AND B-B'	
Proposed Fire Station 1 105 South Water Street, City of Orange, California	
Proj: 12482.001	Eng/Geol: JEH/PB
Scale: 1"=20'	Date: September 2019
<small>Drafted By: BOT</small>	<small>Checked By: BOT</small>

Figure 2A





Project: 12482.001	Eng/Geol: JDH/PB
Scale: 1" = 3,000'	Date: September 2019
Base Map: ESRI ArcGIS Online 2019 Thematic Information: Leighton, USGS Author: (kmanchikanti)	

REGIONAL GEOLOGY MAP

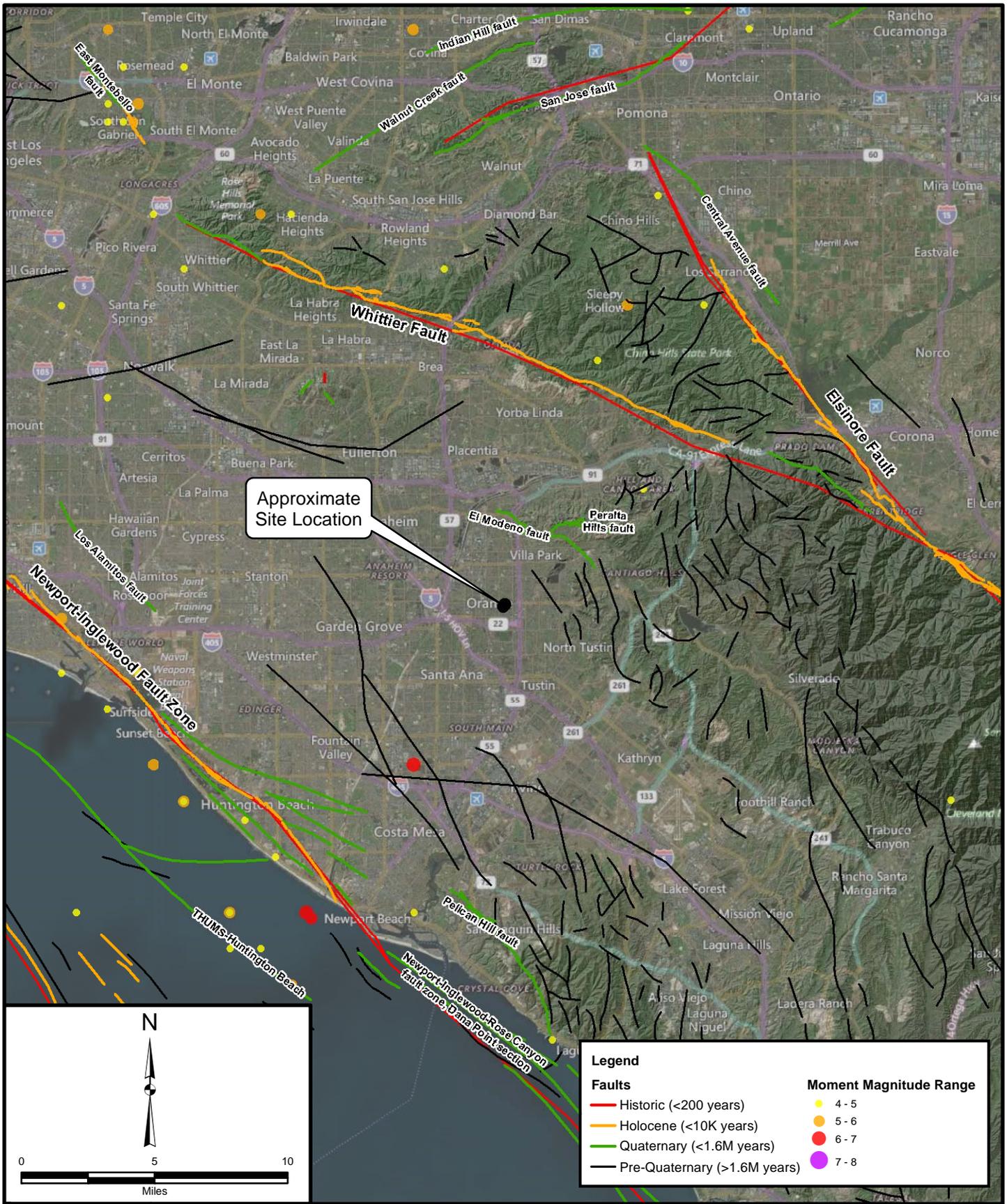
Proposed Fire Station 1

105 South Water Street

City of Orange, California

Figure 3

Leighton



Approximate Site Location

Legend	
Faults	Moment Magnitude Range
— Historic (<200 years)	● 4 - 5
— Holocene (<10K years)	● 5 - 6
— Quaternary (<1.6M years)	● 6 - 7
— Pre-Quaternary (>1.6M years)	● 7 - 8

Project: 12375.001 Eng/Geol: JDH/PB
 Scale: 1" = 5 miles Date: September 2019
 Base Map: ESRI ArcGIS Online 2019
 Thematic Information: Leighton
 Author: Leighton Geomatics (kmanchikanti)

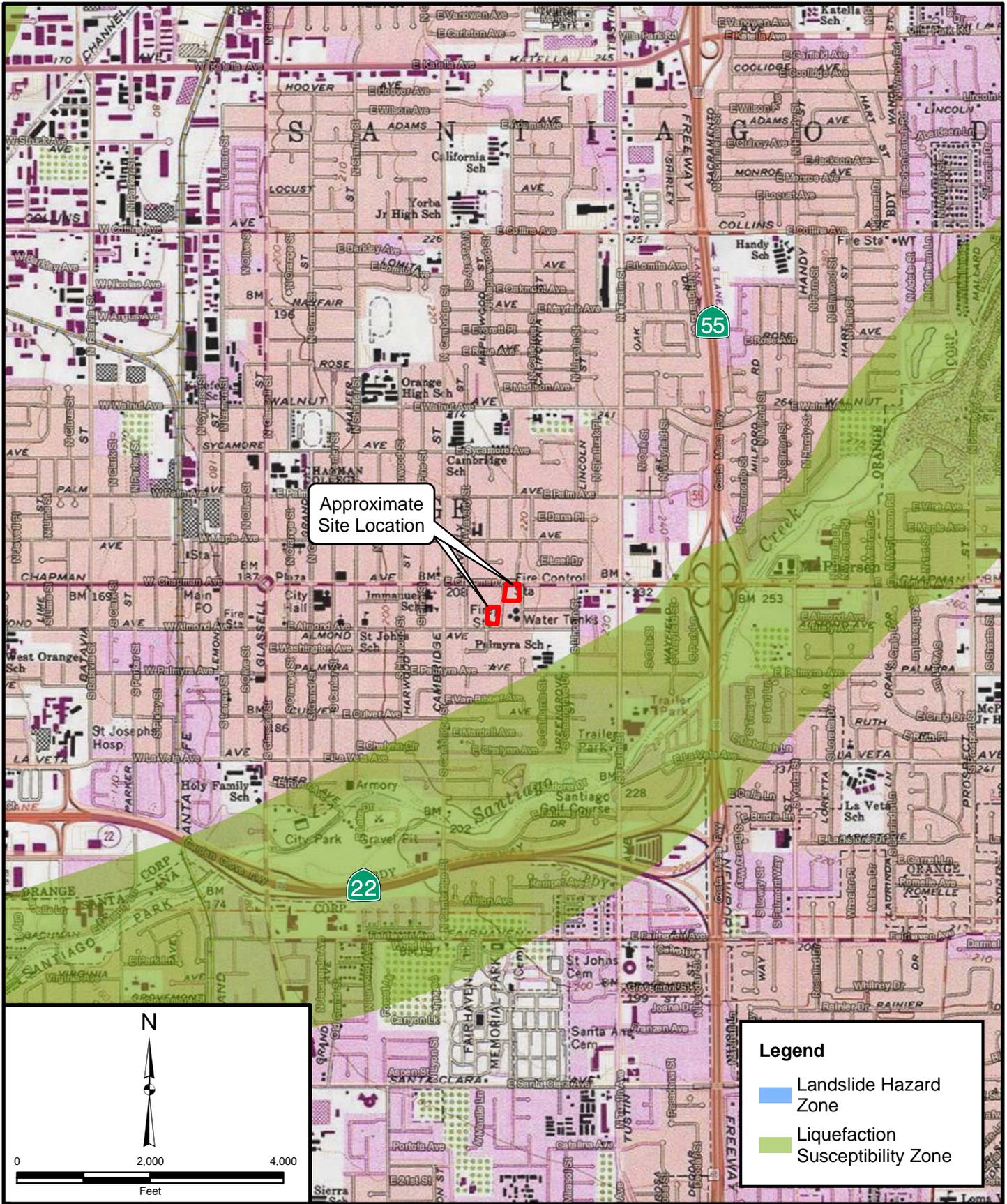
REGIONAL FAULT AND HISTORIC SEISMICITY MAP

Proposed Fire Station 1

105 South Water Street, City of Orange, California

Figure 4

Leighton



Approximate Site Location

Legend

- Landslide Hazard Zone
- Liquefaction Susceptibility Zone

N

0 2,000 4,000

Feet

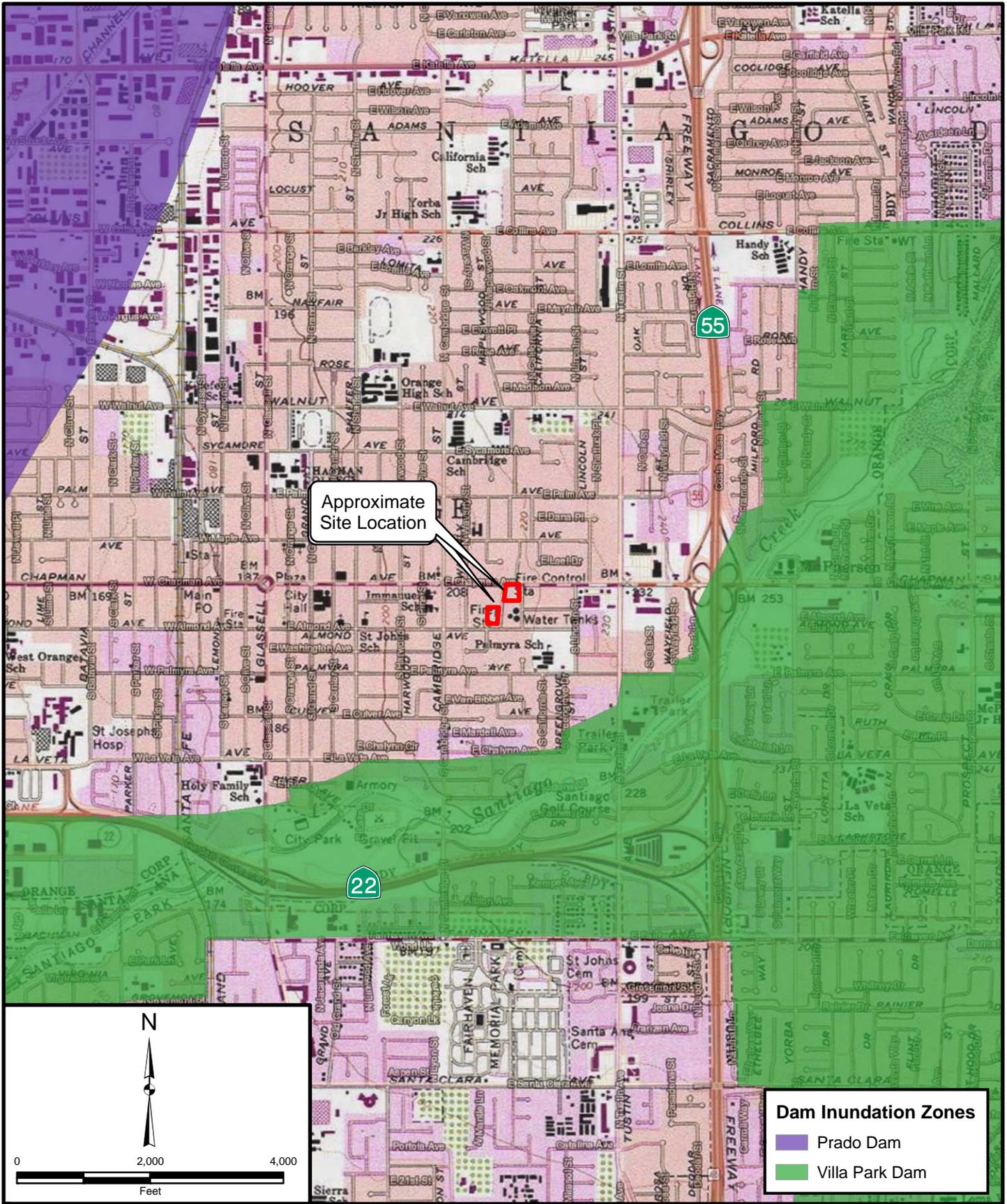
Project: 12482.001	Eng/Geol: JDH/PB
Scale: 1" = 2,000'	Date: September 2019
Base Map: ESRI ArcGIS Online 2019	
Thematic Information: Leighton	
Author: Leighton Geomatics (kmanchikanti)	

SEISMIC HAZARD MAP

Proposed Fire Station 1 105 South Water Street City of Orange, California

Figure 5

Leighton



Approximate Site Location

Dam Inundation Zones

- Prado Dam
- Villa Park Dam

Project: 12482.001	Eng/Geol: JDH/PB
Scale: 1" = 2,000'	Date: September 2019
Base Map: ESRI ArcGIS Online 2019 Thematic Information: Leighton, CA DWR, FEMA Author: Leighton Geomatics (kmanchikanti)	

DAM INUNDATION MAP

Proposed Fire Station 1 105 South Water Street City of Orange, California

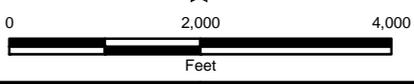
Figure 6

Leighton

FEMA Flood Zone

- 500 Year Flood Plain
- 100 Year Flood Plain

Approximate Site Location



Project: 12482.001	Eng/Geol: JDH/PB
Scale: 1" = 2,000'	Date: September 2019
Base Map: ESRI ArcGIS Online 2019 Thematic Information: Leighton; FEMA Author: Leighton Geomatics (kmanchikanti)	

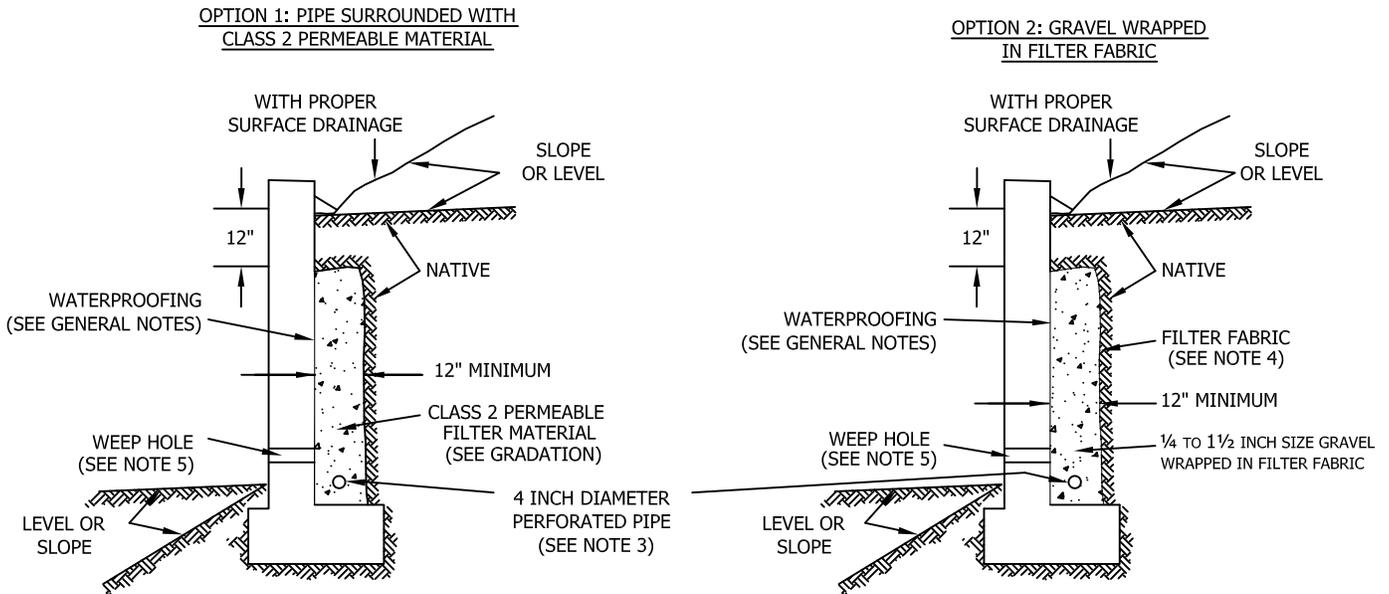
FLOOD HAZARD ZONE MAP

Proposed Fire Station 1 105 South Water Street City of Orange, California

Figure 7

Leighton

SUBDRAIN OPTIONS AND BACKFILL WHEN NATIVE MATERIAL HAS EXPANSION INDEX OF ≤ 50



Class 2 Filter Permeable Material Gradation
Per Caltrans Specifications

Sieve Size	Percent Passing
1"	100
3/4"	90-100
3/8"	40-100
No. 4	25-40
No. 8	18-33
No. 30	5-15
No. 50	0-7
No. 200	0-3

GENERAL NOTES:

- * Waterproofing should be provided where moisture nuisance problem through the wall is undesirable.
- * Water proofing of the walls is not under purview of the geotechnical engineer
- * All drains should have a gradient of 1 percent minimum
- * Outlet portion of the subdrain should have a 4-inch diameter solid pipe discharged into a suitable disposal area designed by the project engineer. The subdrain pipe should be accessible for maintenance (rodding)
- * Other subdrain backfill options are subject to the review by the geotechnical engineer and modification of design parameters.

Notes:

- 1) Sand should have a sand equivalent of 30 or greater and may be densified by water jetting.
- 2) 1 Cu. ft. per ft. of 1/4- to 1 1/2-inch size gravel wrapped in filter fabric
- 3) Pipe type should be ASTM D1527 Acrylonitrile Butadiene Styrene (ABS) SDR35 or ASTM D1785 Polyvinyl Chloride plastic (PVC), Schedule 40, Armco A2000 PVC, or approved equivalent. Pipe should be installed with perforations down. Perforations should be 3/8 inch in diameter placed at the ends of a 120-degree arc in two rows at 3-inch on center (staggered)
- 4) Filter fabric should be Mirafi 140NC or approved equivalent.
- 5) Weepholes should be 3-inch minimum diameter and provided at 10-foot maximum intervals. If exposure is permitted, weepholes should be located 12 inches above finished grade. If exposure is not permitted such as for a wall adjacent to a sidewalk/curb, a pipe under the sidewalk to be discharged through the curb face or equivalent should be provided. For a basement-type wall, a proper subdrain outlet system should be provided.
- 6) Retaining wall plans should be reviewed and approved by the geotechnical engineer.
- 7) Walls over six feet in height are subject to a special review by the geotechnical engineer and modifications to the above requirements.

RETAINING WALL BACKFILL AND SUBDRAIN DETAIL FOR WALLS 6 FEET OR LESS IN HEIGHT

WHEN NATIVE MATERIAL HAS EXPANSION INDEX OF ≤ 50



Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, clients can benefit from a lowered exposure to the subsurface problems that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed below, contact your GBA-member geotechnical engineer. Active involvement in the Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.

Geotechnical-Engineering Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical-engineering study conducted for a given civil engineer will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client. *Those who rely on a geotechnical-engineering report prepared for a different client can be seriously misled.* No one except authorized client representatives should rely on this geotechnical-engineering report without first conferring with the geotechnical engineer who prepared it. *And no one – not even you – should apply this report for any purpose or project except the one originally contemplated.*

Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read it *in its entirety*. Do not rely on an executive summary. Do not read selected elements only. *Read this report in full.*

You Need to Inform Your Geotechnical Engineer about Change

Your geotechnical engineer considered unique, project-specific factors when designing the study behind this report and developing the confirmation-dependent recommendations the report conveys. A few typical factors include:

- the client's goals, objectives, budget, schedule, and risk-management preferences;
- the general nature of the structure involved, its size, configuration, and performance criteria;
- the structure's location and orientation on the site; and
- other planned or existing site improvements, such as retaining walls, access roads, parking lots, and underground utilities.

Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light-industrial plant to a refrigerated warehouse;
- the elevation, configuration, location, orientation, or weight of the proposed structure;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.*

This Report May Not Be Reliable

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, that it could be unwise to rely on a geotechnical-engineering report whose reliability may have been affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If your geotechnical engineer has not indicated an "apply-by" date on the report, ask what it should be, and, in general, if you are the least bit uncertain about the continued reliability of this report, contact your geotechnical engineer before applying it.* A minor amount of additional testing or analysis – if any is required at all – could prevent major problems.

Most of the "Findings" Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site's subsurface through various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing were performed.* The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgment to form opinions about subsurface conditions throughout the site. Actual sitewide-subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team from project start to project finish, so the individual can provide informed guidance quickly, whenever needed.

This Report's Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, *they are not final*, because the geotechnical engineer who developed them relied heavily on judgment and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* revealed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

This Report Could Be Misinterpreted

Other design professionals' misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a full-time member of the design team, to:

- confer with other design-team members,
- help develop specifications,
- review pertinent elements of other design professionals' plans and specifications, and
- be on hand quickly whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction observation.

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note conspicuously that you've included the material for informational purposes only*. To avoid misunderstanding, you may also want to note that "informational purposes" means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report, but they may rely on the factual data relative to the specific times, locations, and depths/elevations referenced. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may

perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely*. Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a "phase-one" or "phase-two" environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures*. If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk-management guidance. As a general rule, *do not rely on an environmental report prepared for a different client, site, or project, or that is more than six months old*.

Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, none of the engineer's services were designed, conducted, or intended to prevent uncontrolled migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, *proper implementation of the geotechnical engineer's recommendations will not of itself be sufficient to prevent moisture infiltration*. Confront the risk of moisture infiltration by including building-envelope or mold specialists on the design team. *Geotechnical engineers are not building-envelope or mold specialists*.



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APPENDIX A
REFERENCES



APPENDIX A

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APPENDIX B
GEOTECHNICAL BORING AND INFILTRATION LOGS



GEOTECHNICAL BORING LOG LB-1

Project No. 12482.001
Project Proposed Fire Station 1
Drilling Co. 2R Drilling, Inc.
Drilling Method Hollow Stem Auger - 140lb - Autohammer - 30" Drop
Location See Figure 2 Exploration Location Map

Date Drilled 8-8-19
Logged By MM
Hole Diameter 8"
Ground Elevation 217'
Sampled By MM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.										
0	0	N S		B-1					@Surface: gravel, sand Artificial Fill, undocumented (Afu)	EI
215				R-1	8 14 17	111	3	SM	@2.5' SILTY SAND (SM), medium dense, orange brown, moist, fine sand, 30% fines (field estimate), 10% gravel (field estimate) subround, subangular, fine gravel, mechanically fractured	
5				R-2	11 23 20			SM	Quaternary Old Alluvial Fan (Qof) @5' SILTY SAND with gravel (SM), medium dense, orange brown, moist, fine sand, fine to medium gravel, angular due to mechanical fracturing (soil cuttings)	
210				R-3	50/5"	122	1	GW-GM	@10' GRAVEL with silt and sand (GW-GM), dense, orange brown, moist, fine sand, fine to coarse gravel and cobbles, no recovery	
205				R-4	41 50/5"	121	7	SP-SM	@15' SAND with silt to silty sand with gravel (SP-SM), dense, orange brown, moist, fine to medium sand, oxidized throughout, fine angular gravel, due to mechanical fracturing	
200				S-1	18 50/2.5"			SP-SM	@20' SAND with silt to silty sand with gravel (SP-SM), very dense, orange brown, moist, fine to medium sand, oxidized throughout, fine angular gravel, angular due to mechanical fracturing, low recovery	
195									Total Depth: 21 feet No groundwater encountered Backfilled with soil cuttings and tamped upon completion of drilling	
25										
190										
30										

SAMPLE TYPES:

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

TYPE OF TESTS:

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



GEOTECHNICAL BORING LOG LB-2

Project No. 12482.001
Project Proposed Fire Station 1
Drilling Co. 2R Drilling, Inc.
Drilling Method Hollow Stem Auger - 140lb - Autohammer - 30" Drop
Location See Figure 2 Exploration Location Map

Date Drilled 8-8-19
Logged By MM
Hole Diameter 8"
Ground Elevation 217'
Sampled By MM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
		N S			Bulk Driven				This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
215	0			B-1					@Surface: 2 inches Asphalt Concrete Artificial Fill, undocumented (Afu)	
	2.5			R-1	23 23 25	97	3	SM	@2.5' SILTY SAND with gravel (SM), medium dense, orange brown, moist, fine sand, fine to medium gravel, subangular to subround, majority of gravel in cuttings, no recovery	
	5			R-2	25 50/3"			GP	Quaternary Old Alluvial Fan (Qof) @5' GRAVEL with sand (GP), dense, grayish brown, slightly moist, fine sand, fine to medium gravel, subangular to subround, mechanically fractured gravel, low recovery	
210									Drilling refusal at 6 feet No groundwater encountered Backfilled with soil cuttings and tamped upon completion of drilling	
205	10									
200	15									
195	20									
190	25									
30	30									

SAMPLE TYPES:

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

TYPE OF TESTS:

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



GEOTECHNICAL BORING LOG LB-3

Project No. 12482.001
Project Proposed Fire Station 1
Drilling Co. 2R Drilling, Inc.
Drilling Method Hollow Stem Auger - 140lb - Autohammer - 30" Drop
Location See Figure 2 Exploration Location Map

Date Drilled 8-8-19
Logged By MM
Hole Diameter 8"
Ground Elevation 217'
Sampled By MM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION		Type of Tests
									<i>This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.</i>		
0		N S		B-1					@Surface: Gravel and sand Artificial Fill, undocumented (Afu)	MD, CR	
215				R-1	8 6 6	112	7	SM	@2.5' SILTY SAND (SM), loose, brown, moist, fine sand, gravel, fine gravel, angular to subangular gravel, 28% fines	-200	
5				R-2	7 11 15	124	2	SM	@5' SILTY SAND (SM), medium dense, brown, moist, fine sand, no recovery, cuttings same as @2.5'		
210									Quaternary Old Alluvial Fan (Qof)		
				R-3	10 15 18			SP	@8' SAND with gravel (SP), medium dense, light brown to grayish brown, slightly moist, fine sand, angular to subangular fine gravel		
10				R-4	10 18 32			SP	@10' SAND with gravel (SP), dense, light brown to grayish brown, slightly moist, fine to medium sand, fine to medium subangular gravel due to mechanical fracturing, clay with gravel in shoe		
205											
15				R-5	50/3"			GW-GM	@15' GRAVEL with silt and sand (GW-GM), very dense, no recovery, sand with gravel in cuttings		
200											
20				S-1	50/5"			GW-GM	@20' GRAVEL with silt and sand (GW-GM), very dense, no recovery, sand with gravel in cuttings		
195									Total Depth: 20.5 feet No groundwater encountered Backfilled with soil cuttings and tamped upon completion of drilling		
25											
190											
30											

SAMPLE TYPES:

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

TYPE OF TESTS:

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



GEOTECHNICAL BORING LOG LB-4

Project No. 12482.001
Project Proposed Fire Station 1
Drilling Co. 2R Drilling, Inc.
Drilling Method Hollow Stem Auger - 140lb - Autohammer - 30" Drop
Location See Figure 2 Exploration Location Map

Date Drilled 8-8-19
Logged By MM
Hole Diameter 8"
Ground Elevation 217'
Sampled By MM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
		N S			Bulk Driven				This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
0				B-1					@Surface: sand, gravel Artificial Fill, undocumented (Afu)	
215				R-1	19 12 9			SM	@2.5' SILTY SAND with gravel (SM), medium dense, brown	
5				R-2	13 20 27	136	3	GP	Quaternary Old Alluvial Fan (Qof) @5' SANDY GRAVEL (GP), medium dense, grayish brown, slightly moist, fine sand, rounded gravels, with few mechanically fractured during sampling, cobble-sized slaty bedrock fragments @8' gravel, hard drilling	
210				R-3	32 32 18	122	7	SC	CLAYEY SAND with gravel (SC), medium dense, reddish brown, moist, low to medium plasticity, 31% fines	-200
205				R-4	30 47 50/5"	108	4	GW-GM	@15' GRAVEL with silt and sand (GW-GM), very dense, reddish brown, moist, fine, subangular, well graded	SA
200				R-5	50/5"	115	4	GW-GM	@20' GRAVEL with silt and sand (GW-GM), very dense, reddish brown, moist, fine, subangular, well graded	
195				S-1	32 49 50/4"			SP	@25' SAND (SP), very dense, reddish brown, moist, fine to medium, subangular, trace silt	
190										
30										

SAMPLE TYPES:

B BULK SAMPLE
 C CORE SAMPLE
 G GRAB SAMPLE
 R RING SAMPLE
 S SPLIT SPOON SAMPLE
 T TUBE SAMPLE

TYPE OF TESTS:

-200 % FINES PASSING
 AL ATTERBERG LIMITS
 CN CONSOLIDATION
 CO COLLAPSE
 CR CORROSION
 CU UNDRAINED TRIAXIAL

DS DIRECT SHEAR
 EI EXPANSION INDEX
 H HYDROMETER
 MD MAXIMUM DENSITY
 PP POCKET PENETROMETER
 RV R VALUE

SA SIEVE ANALYSIS
 SE SAND EQUIVALENT
 SG SPECIFIC GRAVITY
 UC UNCONFINED COMPRESSIVE STRENGTH

*** This log is a part of a report by Leighton and should not be used as a stand-alone document. ***



GEOTECHNICAL BORING LOG LB-4

Project No.	12482.001	Date Drilled	8-8-19
Project	Proposed Fire Station 1	Logged By	MM
Drilling Co.	2R Drilling, Inc.	Hole Diameter	8"
Drilling Method	Hollow Stem Auger - 140lb - Autohammer - 30" Drop	Ground Elevation	217'
Location	See Figure 2 Exploration Location Map	Sampled By	MM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
		N S			Bulk Driven				This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
30		●●●●		R-6	50/2"			GW-GM	@30' GRAVEL with silt and sand (GW-GM), very dense, brown, no recovery	
185		▨▨▨▨		S-2	11 18 10			CL	@35' CLAY (CL), very stiff, orange brown, moist, low to medium plasticity	
35		▨▨▨▨		R-7	5 10 14	105	21	CL	@40' CLAY (CL), stiff, orange brown, moist, low to medium plasticity, with some gravel, 81% fines	-200, AL
180		▨▨▨▨		S-3	11 14 50/5"			SP	@45' SAND (SP), very dense, light brown, moist, fine grained	
40		●●●●		R-8	20 24 23	119	11	CL	@50' CLAY (CL), very stiff, orange brown, moist, low plasticity	
175		●●●●								
45		●●●●								
170		●●●●								
50		▨▨▨▨								
165		▨▨▨▨							Total Depth: 51.5 feet No groundwater encountered Caved at 30' Backfilled with soil cuttings and tamped upon completion of drilling	
55		▨▨▨▨								
160		▨▨▨▨								
60		▨▨▨▨								

SAMPLE TYPES: B BULK SAMPLE C CORE SAMPLE G GRAB SAMPLE R RING SAMPLE S SPLIT SPOON SAMPLE T TUBE SAMPLE	TYPE OF TESTS: -200 % FINES PASSING AL ATTERBERG LIMITS CN CONSOLIDATION CO COLLAPSE CR CORROSION CU UNDRAINED TRIAXIAL	DS DIRECT SHEAR EI EXPANSION INDEX H HYDROMETER MD MAXIMUM DENSITY PP POCKET PENETROMETER RV R VALUE	SA SIEVE ANALYSIS SE SAND EQUIVALENT SG SPECIFIC GRAVITY UC UNCONFINED COMPRESSIVE STRENGTH
---	--	---	--



GEOTECHNICAL BORING LOG LB-5

Project No. 12482.001
Project Proposed Fire Station 1
Drilling Co. 2R Drilling, Inc.
Drilling Method Hollow Stem Auger - 140lb - Autohammer - 30" Drop
Location See Figure 2 Exploration Location Map

Date Drilled 8-8-19
Logged By MM
Hole Diameter 8"
Ground Elevation 217'
Sampled By MM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
	0	N S							<i>This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.</i>	
	215			B-1					@Surface: 3.5 inches Asphalt Concrete Artificial Fill, undocumented (Afu)	
				R-1	11 29 30	127	3	SP	@2.5' SAND with gravel (SP), dense, light orange brown, moist, fine to medium, subangular, 4% fines	-200
	5			R-2	26 36 44	119	1	GP	@5' SANDY GRAVEL (GP), dense, grayish orange brown, moist, fine to medium, subangular slaty rock fragments @6' gravel, hard drilling, abundant mechanically fractured gravel, small cobble-sized slaty rock fragments	
	210								Quaternary Old Alluvial Fan (Qof)	
	10			R-3	21 50/4"	121	3	GP	@10' SANDY GRAVEL with cobbles (GP), dense, orange brown, moist, abundant mechanically fractured rock fragments	
	205			R-4	50/3"			GW-GM	@15' GRAVEL with silt and sand (GW-GM), very dense, reddish brown, moist, fine to medium, subangular, no recovery	
	200			S-1	50/1"			GW-GM	@20' GRAVEL with silt and sand (GW-GM), very dense, reddish brown, moist, fine to medium, subangular, no recovery	
	195								Total Depth: 20 feet No groundwater encountered Backfilled with soil cuttings and tamped upon completion of drilling	
	25									
	190									
	30									

SAMPLE TYPES:

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

TYPE OF TESTS:

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



GEOTECHNICAL BORING LOG LB-6

Project No. 12482.001
Project Proposed Fire Station 1
Drilling Co. 2R Drilling, Inc.
Drilling Method Hollow Stem Auger - 140lb - Autohammer - 30" Drop
Location See Figure 2 Exploration Location Map

Date Drilled 8-8-19
Logged By MM
Hole Diameter 8"
Ground Elevation 216'
Sampled By MM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
									This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
215	0	N S		B-1				SC	@Surface: 6 inches Asphalt Concrete Artificial Fill, undocumented (Afu)	
		N S		R-1	3 4 11	117	12	SC	@2.5 CLAYEY SAND (SC), stiff, brown, moist, fine, low plasticity, 43% fines	-200, AL
210	5	N S		R-2	50/5"			SP	Quaternary Old Alluvial Fan (Qof) @ 5' No Recovery	
		N S		R-3	17 24 29			SP	@ 6.5' SAND with gravel (SP), dense, light brown, slightly moist, fine, subangular	
205	10								Total Depth: 8' No groundwater encountered Backfilled with soil cuttings and tamped upon completion of drilling	
200	15									
195	20									
190	25									
	30									

SAMPLE TYPES:

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

TYPE OF TESTS:

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



GEOTECHNICAL BORING LOG LB-7

Project No. 12482.001
Project Proposed Fire Station 1
Drilling Co. 2R Drilling, Inc.
Drilling Method Hollow Stem Auger - 140lb - Autohammer - 30" Drop
Location See Figure 2 Exploration Location Map

Date Drilled 8-8-19
Logged By MM
Hole Diameter 8"
Ground Elevation 216'
Sampled By MM

Elevation Feet	Depth Feet	Graphic Log	Attitudes	Sample No.	Blows Per 6 Inches	Dry Density pcf	Moisture Content, %	Soil Class. (U.S.C.S.)	SOIL DESCRIPTION	Type of Tests
		N S			Bulk Driven				This Soil Description applies only to a location of the exploration at the time of sampling. Subsurface conditions may differ at other locations and may change with time. The description is a simplification of the actual conditions encountered. Transitions between soil types may be gradual.	
215	0			B-1					@Surface: 3 inches Asphalt Concrete Artificial Fill, undocumented (Afu)	
				R-1				SM	@2.5' SILTY SAND with gravel (SM), light brown, moist, fine, subangular	
210	5			R-2	27	100	10	SM	Quaternary Old Alluvial Fan (Qof) @6' SAND with gravel (SP), dense, light brown, fine, subangular	
				R-3	35			SP	@7.5' SAND with gravel (SP), dense, light brown, fine to medium, subangular	
					42					
					18					
					24					
					38					
205	10								Total Depth: 9' No groundwater encountered Backfilled with soil cuttings and tamped upon completion of drilling	
200	15									
195	20									
190	25									
	30									

SAMPLE TYPES:

- B BULK SAMPLE
- C CORE SAMPLE
- G GRAB SAMPLE
- R RING SAMPLE
- S SPLIT SPOON SAMPLE
- T TUBE SAMPLE

TYPE OF TESTS:

- 200 % FINES PASSING
- AL ATTERBERG LIMITS
- CN CONSOLIDATION
- CO COLLAPSE
- CR CORROSION
- CU UNDRAINED TRIAXIAL

- DS DIRECT SHEAR
- EI EXPANSION INDEX
- H HYDROMETER
- MD MAXIMUM DENSITY
- PP POCKET PENETROMETER
- RV R VALUE

- SA SIEVE ANALYSIS
- SE SAND EQUIVALENT
- SG SPECIFIC GRAVITY
- UC UNCONFINED COMPRESSIVE STRENGTH



Results of Well Permeameter, from USBR 7300-89 Method.



Leighton

Project:

12482
LB-4
50
JK
Cloudy
H2O
9
60

Initial estimated Depth to Water Surface (in.): 127
 Average depth of water in well, "h" (in.): 41
 approx. h/r: 9.1
 Tu (Fig. 8) (ft): 49.4
 Tu>3h?: yes, OK

Measured boring diameter: 9 in. 4.5 in. Well Radius Cross-sectional area for vol calcs (in.^2): 63.6
 Approx Depth to GW below GS: 60 ft
 Well Prep: Caved to 30', Backfilled to 15', Added Bentonite, Gravel to 14'

	ft	in.	Total (in.)
Depth to Bot of well (or top of soil over Bentonite)	14. ft	0. in.	168
Pilot Tube stickup (+ is above ground)	0. ft	10. in.	10
Depth to top of sand outside of casing from top of pilot tube			
Depth to top of float assembly from top of pilot tube	9. ft	4. in.	112
Float Assembly ID		DHVA	
Float assembly Extension length (in.)		34	

Flow Meter:

Meter ID: SN18003236
 Meter Color: Black
 Meter Unit: Gallons
 DL ID: 1
 0.05 gallons/pulse

Field Data

Calculations

Date	Time	Data from Flow Meter		Depth to WL in Boring (measured from top of pilot tube)		Water Temp (deg F)	Comments	Δt (min)	Total Elapsed Time (min.)	Depth to WL in well (in.)	h, Height of Water in Well (in.)	Δh (in.)	Avg. h	Vol Change (in.^3)			Flow (in.^3/min)	q, Flow (in.^3/hr)	V (Fig 9)	K20, Coef. Of Permeability at 20 deg C (in./hr)	Infiltration Rate [flow/surf area] (in./hr) (FS=1)	
		Reading (cu-ft or gal)	Interval Pulse Count	ft	in.									from supply	from Δh	Total						
8/8/19	10:30	593.5		10	8.5				6.3E+07	118.5	49.5											
8/8/19	10:55	595.2		10	7.4			25	6.3E+07	117.4	50.6	1.1	50	393	-70	323	13	775	0.9	0.10	0.48	
8/8/19	11:26	595.4		10	9.9			31	6.3E+07	119.9	48.1	-2.5	49	46	159	205	7	397	0.9	0.05	0.25	
8/8/19	11:53	595.4		10	11.8			27	6.3E+07	121.8	46.2	-1.9	47	0	121	121	4	268	0.921	0.04	0.18	
8/8/19	12:24	595.4		11	2.1			31	6.3E+07	124.1	43.9	-2.3	45	0	146	146	5	283	0.9	0.05	0.20	
8/8/19	12:50	595.45		11	3.2			26	6.3E+07	125.2	42.8	-1.1	43	12	70	81	3	188	0.9	0.03	0.13	
8/8/19	13:15	595.45		11	4.3			25	6.3E+07	126.3	41.7	-1.1	42	0	70	70	3	168	0.9	0.03	0.12	
8/8/19	13:45	595.45		11	5.9			30	6.3E+07	127.9	40.1	-1.6	41	0	102	102	3	203	0.9	0.04	0.15	
8/8/19	14:15	595.54		11	6.2			30	6.3E+07	128.2	39.8	-0.3	40	21	19	40	1	80	0.9	0.01	0.06	
8/8/19	14:30	595.7		11	6.1			15	6.3E+07	128.1	39.9	0.1	40	37	-6	31	2	122	0.9	0.02	0.09	

template updated: 8/14/19

Results of Well Permeameter, from USBR 7300-89 Method.



Project:

Exploration #/Location:	12482
Depth Boring drilled to (ft):	LB-5
Tested by:	JK
USCS Soil Type in test zone:	
Weather (start to finish):	Sunny
Liquid Used/pH:	
Measured boring diameter:	10 in.
Approx Depth to GW below GS:	60 ft
Well Prep:	Drilled to 30', Caved to 25', Backfilled to 21', Added Bentonite, Gravel to 20.5'

Initial estimated Depth to Water Surface (in.): 212
 Average depth of water in well, "h" (in.): 34
 approx. h/r: 6.9
 Tu (Fig. 8) (ft): 42.4
 Tu>3h?: yes, OK

5 in. Well Radius

Cross-sectional area for vol calcs (in.^2): 78.5

Depth to Bot of well (or top of soil over Bentonite)

Pilot Tube stickup (+ is above ground)

Depth to top of sand outside of casing from top of pilot tube

Depth to top of float assembly from top of pilot tube

Float Assembly ID

Float assembly Extension length (in.)

ft	in.	Total (in.)
20. ft	6. in.	246
0. ft	4. in.	4
15. ft	8. in.	188
	E	
	34	

184 Depth below GS (in.)

Flow Meter:

Meter ID: SN18003242
 Meter Color: Black
 Meter Unit: Gallons
 DL ID: 2
 0.05 gallons/pulse

Field Data

Calculations

Date	Time	Data from Flow Meter		Depth to WL in Boring (measured from top of pilot tube)		Water Temp (deg F)	Comments	Δt (min)	Total Elapsed Time (min.)	Depth to WL in well (in.)	h. Height of Water in Well (in.)	Δh (in.)	Avg. h	Vol Change (in.^3)			Flow (in^3/ min)	q. Flow (in^3/ hr)	V (Fig 9)	K20, Coef. Of Permeability at 20 deg C (in./hr)	Infiltration Rate [flow/surf area] (in./hr) (FS=1)		
		Reading (cu-ft or gal)	Interval Pulse Count	ft	in.									from supply	from Δh	Total							
8/8/19	12:03	350.4		18	0.6				6.3E+07	212.6	33.4												
8/8/19	12:26	364.2		17	11.2			23	6.3E+07	211.2	34.8	1.4	34	3188	-110	3078	134	8029	0.9	1.71	6.44		
8/8/19	12:51	375.8		17	11.6			25	6.3E+07	211.6	34.4	-0.4	35	2680	31	2711	108	6506	0.9	1.43	5.15		
8/8/19	13:16	385.4		18	1.3			25	6.3E+07	213.3	32.7	-1.7	34	2218	133	2351	94	5643	0.921	1.35	4.59		
8/8/19	13:46	398.5		18	1.4			30	6.3E+07	213.4	32.6	-0.1	33	3026	8	3034	101	6068	0.9	1.44	5.07		
8/8/19	14:16	416.8		18	1.2			30	6.3E+07	213.2	32.8	0.2	33	4227	-16	4212	140	8423	0.9	1.97	7.02		
8/8/19	14:45	437.2		17	11.5			29	6.3E+07	211.5	34.5	1.7	34	4712	-133	4579	158	9474	0.9	2.04	7.69		
8/8/19	15:00	448.6		17	10.8			15	6.3E+07	210.8	35.2	0.7	35	2633	-55	2578	172	10314	0.9	2.17	8.10		
8/8/19	15:15	459.3		17	10.7			15	6.3E+07	210.7	35.3	0.1	35	2472	-8	2464	164	9855	0.9	2.07	7.66		
8/8/19	15:30	468.9		17	11.4			15	6.3E+07	211.4	34.6	-0.7	35	2218	55	2273	152	9090	0.9	1.98	7.12		

template updated: 8/14/19

APPENDIX C
LABORATORY TEST RESULTS



Borehole	Depth	Liquid Limit	Plastic Limit	Plasticity Index	Maximum Size (mm)	%<#200 Sieve	Classification	Water Content (%)	Dry Density (pcf)	Saturation (%)	Void Ratio
LB-1	2.5							3.2	110.5		
LB-1	10.0							0.6	121.7		
LB-1	15.0							6.5	120.8		
LB-2	2.5							3.0	96.9		
LB-3	2.5							7.0	112.4		
LB-3	5.0							1.8	123.5		
LB-4	5.0							2.6	136.5		
LB-4	10.0							7.4	121.6		
LB-4	15.0							3.5	107.9		
LB-4	20.0							3.5	114.9		
LB-4	40.0							21.1	105.4		
LB-4	50.0							11.5	118.7		
LB-5	2.5							3.0	126.6		
LB-5	5.0							0.9	118.5		
LB-5	10.0							3.3	120.5		
LB-6	2.5							11.7	116.9		
LB-7	6.0							10.5	99.7		

US LAB SUMMARY 12482.01 BORING LOGS DRAFT.GPJ ROCKLOG2012.GDT 9/6/19



Summary of Laboratory Results

Project Name: WLC Orange FS1

Project Number: 12482.001

Date: 9/6/2019 2:38:21 PM

Figure No. 1



MODIFIED PROCTOR COMPACTION TEST

ASTM D 1557

Project Name: WLC/Orange FS 1 Tested By: O. Figueroa Date: 09/05/19
 Project No.: 12482.001 Input By: G. Bathala Date: 09/06/19
 Boring No.: LB-3 Depth (ft.): 0-5
 Sample No.: B-1
 Soil Identification: Olive brown silty, clayey sand with gravel (SC-SM)g

Note: Corrected dry density calculation assumes specific gravity of 2.70 and moisture content of 1.0% for oversize particles

Preparation Method:	<input checked="" type="checkbox"/>	Moist				
		Dry				
Compaction Method:	<input checked="" type="checkbox"/>	Mechanical Ram				
		Manual Ram				

Scalp Fraction (%)	
#3/4	
#3/8	16.5
#4	

Rammer Weight (lb.) = 10.0
 Height of Drop (in.) = 18.0
 Mold Volume (ft³) = 0.03320

TEST NO.	1	2	3	4	5	6
Wt. Compacted Soil + Mold (g)	3852	3945	3995	3901		
Weight of Mold (g)	1817	1817	1817	1817		
Net Weight of Soil (g)	2035	2128	2178	2084		
Wet Weight of Soil + Cont. (g)	395.3	442.6	435.5	459.9		
Dry Weight of Soil + Cont. (g)	385.1	420.8	405.4	419.4		
Weight of Container (g)	62.3	39.2	39.4	39.8		
Moisture Content (%)	3.16	5.71	8.22	10.67		
Wet Density (pcf)	135.1	141.3	144.6	138.4		
Dry Density (pcf)	131.0	133.7	133.6	125.0		

Maximum Dry Density (pcf)	134.4	Optimum Moisture Content (%)	7.1
Corrected Dry Density (pcf)	139.0	Corrected Moisture Content (%)	6.1

Procedure A
 Soil Passing No. 4 (4.75 mm) Sieve
 Mold : 4 in. (101.6 mm) diameter
 Layers : 5 (Five)
 Blows per layer : 25 (twenty-five)
 May be used if + #4 is 20% or less

Procedure B
 Soil Passing 3/8 in. (9.5 mm) Sieve
 Mold : 4 in. (101.6 mm) diameter
 Layers : 5 (Five)
 Blows per layer : 25 (twenty-five)
 Use if + #4 is >20% and +3/8 in. is 20% or less

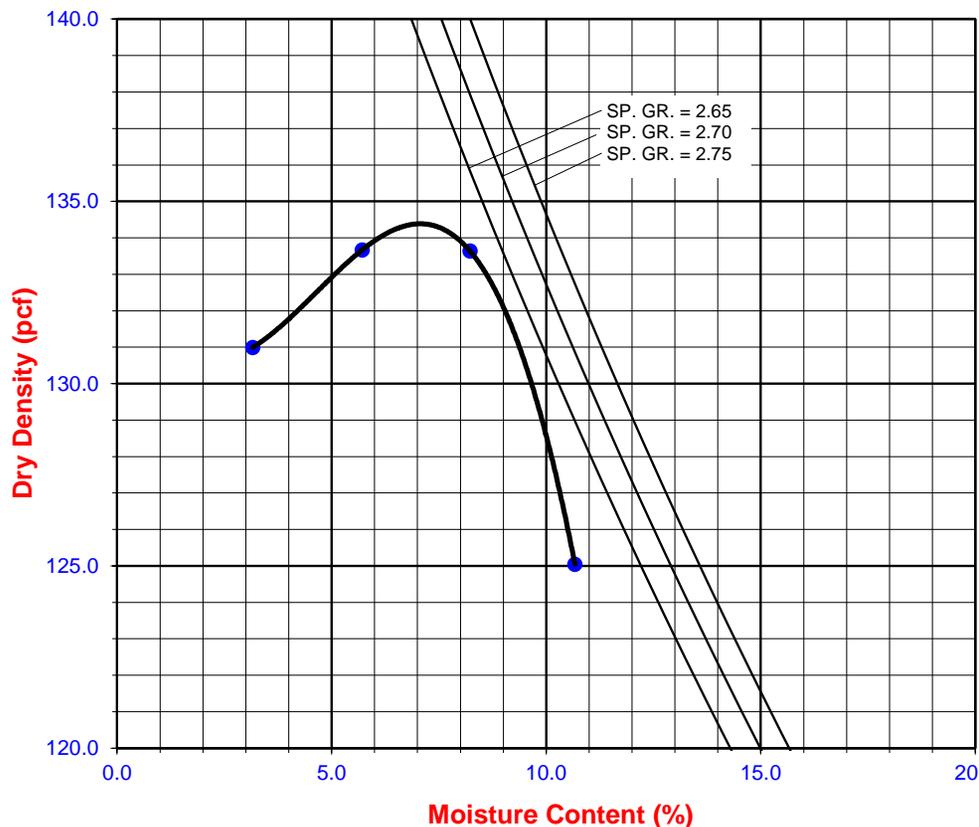
Procedure C
 Soil Passing 3/4 in. (19.0 mm) Sieve
 Mold : 6 in. (152.4 mm) diameter
 Layers : 5 (Five)
 Blows per layer : 56 (fifty-six)
 Use if +3/8 in. is >20% and +3/4 in. is <30%

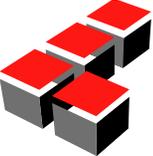
Particle-Size Distribution:

GR:SA:FI

Atterberg Limits:

LL,PL,PI



Boring No.	LB-3	LB-4	LB-4	LB-5	LB-6			
Sample No.	R-1	R-3	R-7	R-1	R-1			
Depth (ft.)	2.5	10.0	40.0	2.5	2.5			
Sample Type	Ring	Ring	Ring	Ring	Ring			
Soil Identification	Brown silty sand with gravel (SM)g	Brown clayey sand with gravel (SC)g	Brown lean clay with sand (CL)s	Brown poorly-graded sand with gravel (SP)g	Brown clayey sand (SC)			
Moisture Correction								
Wet Weight of Soil + Container (g)	0.00	0.00	0.00	0.00	0.00			
Dry Weight of Soil + Container (g)	0.00	0.00	0.00	0.00	0.00			
Weight of Container (g)	1.00	1.00	1.00	1.00	1.00			
Moisture Content (%)	0.00	0.00	0.00	0.00	0.00			
Sample Dry Weight Determination								
Weight of Sample + Container (g)	769.70	1024.80	627.10	867.90	699.50			
Weight of Container (g)	108.70	99.80	108.40	107.80	108.80			
Weight of Dry Sample (g)	661.00	925.00	518.70	760.10	590.70			
Container No.:								
After Wash								
Method (A or B)	A	A	A	A	A			
Dry Weight of Sample + Cont. (g)	584.00	740.30	205.10	834.20	442.40			
Weight of Container (g)	108.70	99.80	108.40	107.80	108.80			
Dry Weight of Sample (g)	475.30	640.50	96.70	726.40	333.60			
% Passing No. 200 Sieve	28.1	30.8	81.4	4.4	43.5			
% Retained No. 200 Sieve	71.9	69.2	18.6	95.6	56.5			
 Leighton	PERCENT PASSING No. 200 SIEVE ASTM D 1140				Project Name: <u>WLC/Orange FS 1</u>			
					Project No.: <u>12482.001</u>			
					Client Name: _____			
					Tested By: <u>S. Felter</u>		Date: <u>08/19/19</u>	



**PARTICLE-SIZE DISTRIBUTION (GRADATION)
of SOILS USING SIEVE ANALYSIS
ASTM D 6913**

Project Name: WLC/Orange FS 1

Tested By: S. Felter Date: 08/19/19

Project No.: 12482.001

Checked By: G. Bathala Date: 09/06/19

Boring No.: LB-4

Depth (feet): 15.0

Sample No.: R-4

Soil Identification: Brown well-graded gravel with silt and sand (GW-GM)s

		Moisture Content of Total Air - Dry Soil	
Container No.:	A-15	Wt. of Air-Dry Soil + Cont. (g)	0.0
Wt. of Air-Dried Soil + Cont.(g)	893.6	Wt. of Dry Soil + Cont. (g)	0.0
Wt. of Container (g)	107.2	Wt. of Container No._____ (g)	1.0
Dry Wt. of Soil (g)	786.4	Moisture Content (%)	0.0

After Wet Sieve	Container No.	A-15
	Wt. of Dry Soil + Container (g)	842.9
	Wt. of Container (g)	107.2
	Dry Wt. of Soil Retained on # 200 Sieve (g)	735.7

U. S. Sieve Size		Cumulative Weight Dry Soil Retained (g)	Percent Passing (%)
(in.)	(mm.)		
1 1/2"	37.5	0.0	100.0
1"	25.0	59.8	92.4
3/4"	19.0	112.3	85.7
1/2"	12.5	250.7	68.1
3/8"	9.5	324.1	58.8
#4	4.75	453.6	42.3
#8	2.36	548.3	30.3
#16	1.18	612.3	22.1
#30	0.600	665.1	15.4
#50	0.300	704.4	10.4
#100	0.150	723.1	8.0
#200	0.075	735.1	6.5
PAN			

GRAVEL: **58 %**

SAND: **35 %**

FINES: **7 %**

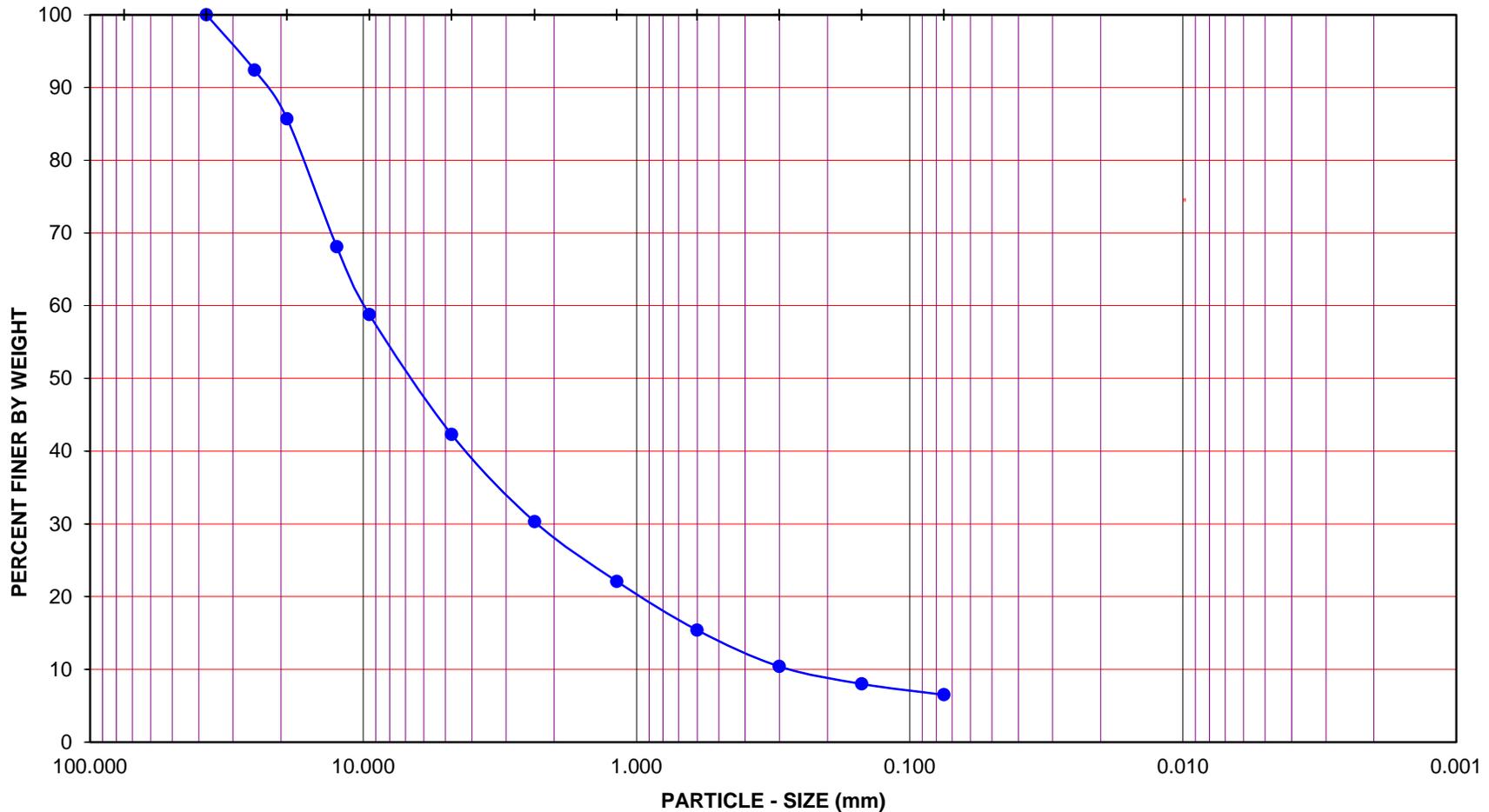
GROUP SYMBOL: **(GW-GM)s**

Cu = D60/D10 = 35.71

Cc = (D30)²/(D60*D10) = 2.06

Remarks: _____

GRAVEL				SAND						FINES		
COARSE		FINE		COARSE	MEDIUM	FINE		SILT		CLAY		
U.S. STANDARD SIEVE OPENING				U.S. STANDARD SIEVE NUMBER						HYDROMETER		
3.0"	1 1/2"	3/4"	3/8"	#4	#8	#16	#30	#50	#100	#200		



Project Name: WLC/Orange FS 1
 Project No.: 12482.001

Boring No.: LB-4 Sample No.: R-4
 Depth (feet): 15.0 Soil Type : (GW-GM)s
 Soil Identification: Brown well-graded gravel with silt and sand (GW-GM)s

GR:SA:FI : (%) **58 : 35 : 7**



**PARTICLE - SIZE
 DISTRIBUTION
 ASTM D 6913**

sep-19



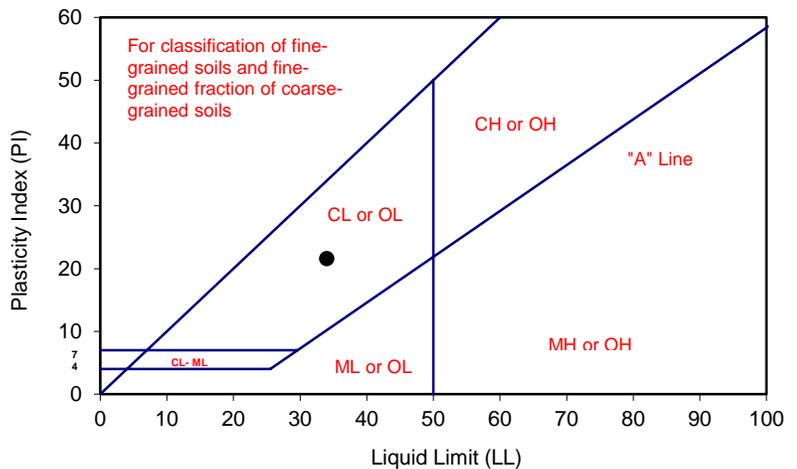
ATTERBERG LIMITS

ASTM D 4318

Project Name: <u>WLC/Orange FS 1</u>	Tested By: <u>S. Felter</u>	Date: <u>08/20/19</u>
Project No. : <u>12482.001</u>	Input By: <u>G. Bathala</u>	Date: <u>09/06/19</u>
Boring No.: <u>LB-4</u>	Checked By: <u>G. Bathala</u>	
Sample No.: <u>R-7</u>	Depth (ft.) <u>40.0</u>	
Soil Identification: <u>Brown lean clay with sand (CL)s</u>		

TEST NO.	PLASTIC LIMIT		LIQUID LIMIT			
	1	2	1	2	3	4
Number of Blows [N]			34	27	18	
Wet Wt. of Soil + Cont. (g)	10.19	10.14	20.91	20.14	21.78	
Dry Wt. of Soil + Cont. (g)	9.17	9.16	16.08	15.40	16.37	
Wt. of Container (g)	1.09	1.10	1.03	1.10	1.12	
Moisture Content (%) [Wn]	12.62	12.16	32.09	33.15	35.48	

Liquid Limit	34
Plastic Limit	12
Plasticity Index	22
Classification	CL



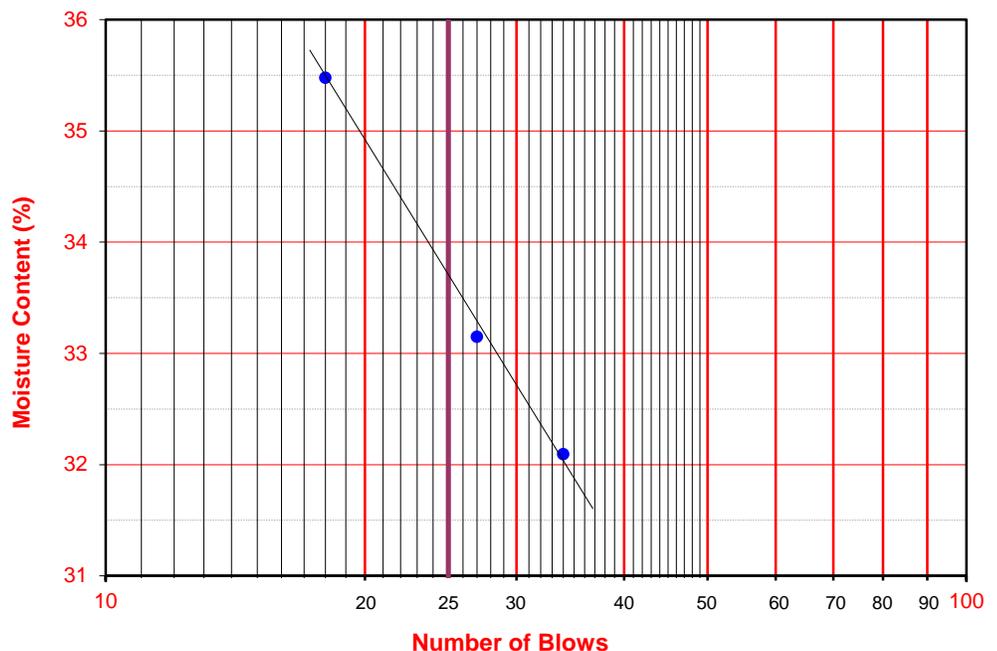
PI at "A" - Line = $0.73(LL-20)$ 10.22

One - Point Liquid Limit Calculation

$$LL = Wn(N/25)^{0.12}$$

PROCEDURES USED

- Wet Preparation Multipoint - Wet
- Dry Preparation Multipoint - Dry
- Procedure A Multipoint Test
- Procedure B One-point Test





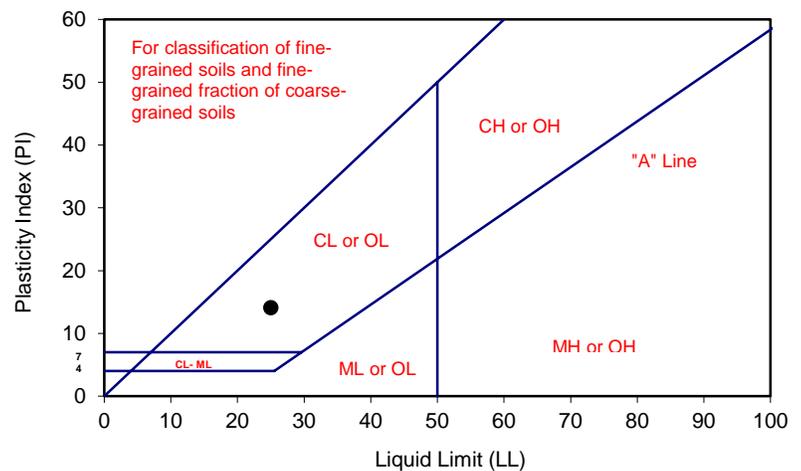
ATTERBERG LIMITS

ASTM D 4318

Project Name: WLC/Orange FS 1 Tested By: S. Felter Date: 08/20/19
 Project No.: 12482.001 Input By: G. Bathala Date: 09/06/19
 Boring No.: LB-6 Checked By: G. Bathala
 Sample No.: R-1 Depth (ft.): 2.5
 Soil Identification: Brown clayey sand (SC)

TEST NO.	PLASTIC LIMIT		LIQUID LIMIT			
	1	2	1	2	3	4
Number of Blows [N]			30	22	17	
Wet Wt. of Soil + Cont. (g)	10.14	10.15	22.28	22.14	21.95	
Dry Wt. of Soil + Cont. (g)	9.26	9.25	18.19	17.92	17.65	
Wt. of Container (g)	1.11	1.11	1.12	1.14	1.10	
Moisture Content (%) [Wn]	10.80	11.06	23.96	25.15	25.98	

Liquid Limit	25
Plastic Limit	11
Plasticity Index	14
Classification	CL



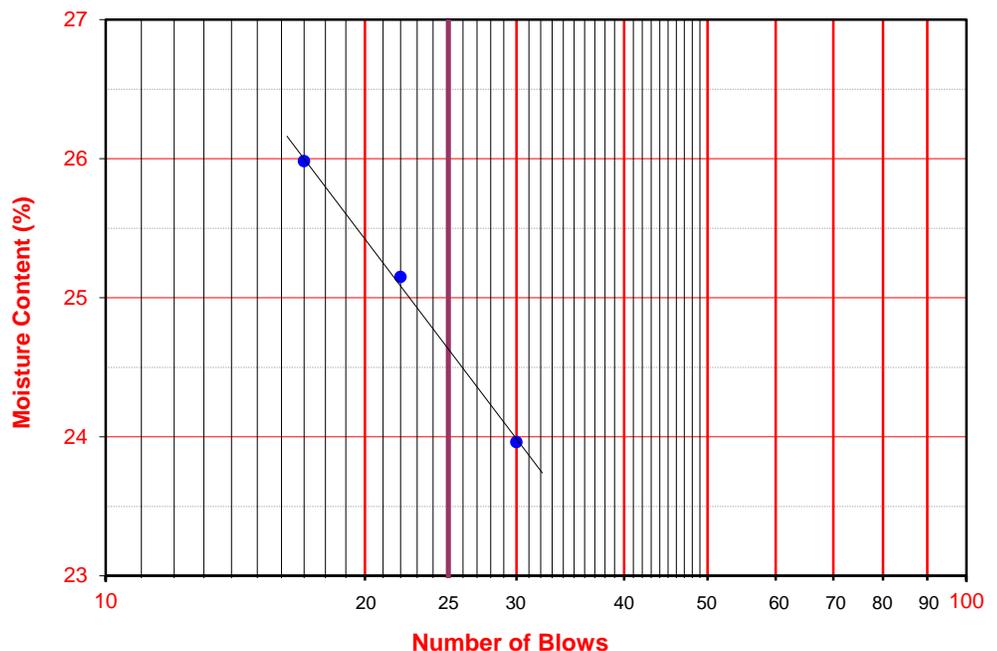
PI at "A" - Line = $0.73(LL-20)$ 3.65

One - Point Liquid Limit Calculation

$$LL = Wn(N/25)^{0.12}$$

PROCEDURES USED

- Wet Preparation Multipoint - Wet
- Dry Preparation Multipoint - Dry
- Procedure A Multipoint Test
- Procedure B One-point Test





EXPANSION INDEX of SOILS
ASTM D 4829

Project Name: WLC/Orange FS 1 Tested By: S. Felter Date: 09/05/19
 Project No.: 12482.001 Checked By: G. Bathala Date: 09/06/19
 Boring No.: LB-1 Depth (ft.): 0-5
 Sample No.: B-1
 Soil Identification: Brown poorly-graded sand with silt (SP-SM)

Dry Wt. of Soil + Cont.	(g)	1000.00
Wt. of Container No.	(g)	0.00
Dry Wt. of Soil	(g)	1000.00
Weight Soil Retained on #4 Sieve		0.00
Percent Passing # 4		100.00

MOLDED SPECIMEN	Before Test	After Test
Specimen Diameter (in.)	4.01	4.01
Specimen Height (in.)	1.0000	1.0010
Wt. Comp. Soil + Mold (g)	610.00	436.98
Wt. of Mold (g)	191.60	0.00
Specific Gravity (Assumed)	2.70	2.70
Container No.	0	0
Wet Wt. of Soil + Cont. (g)	842.70	628.58
Dry Wt. of Soil + Cont. (g)	780.30	579.04
Wt. of Container (g)	0.00	191.60
Moisture Content (%)	8.00	12.79
Wet Density (pcf)	126.2	131.7
Dry Density (pcf)	116.9	116.8
Void Ratio	0.443	0.444
Total Porosity	0.307	0.307
Pore Volume (cc)	63.5	63.7
Degree of Saturation (%) [S _{meas}]	48.8	77.8

SPECIMEN INUNDATION in distilled water for the period of 24 h or expansion rate < 0.0002 in./h

Date	Time	Pressure (psi)	Elapsed Time (min.)	Dial Readings (in.)
09/05/19	7:57	1.0	0	0.4670
09/05/19	8:07	1.0	10	0.4670
Add Distilled Water to the Specimen				
09/05/19	14:02	1.0	355	0.4680
09/06/19	6:28	1.0	1341	0.4680
09/06/19	7:44	1.0	1417	0.4680

Expansion Index (EI _{meas}) = ((Final Rdg - Initial Rdg) / Initial Thick.) x 1000	1
---	----------



**TESTS for SULFATE CONTENT
CHLORIDE CONTENT and pH of SOILS**

Project Name: WLC/Orange FS 1 Tested By : GEB/GB Date: 09/04/19
 Project No. : 12482.001 Input By: G. Bathala Date: 09/06/19

Boring No.	LB-3			
Sample No.	B-1			
Sample Depth (ft)	0-5			
Soil Identification: Olive brown (SC-SM)g				
Wet Weight of Soil + Container (g)	130.22			
Dry Weight of Soil + Container (g)	126.87			
Weight of Container (g)	39.58			
Moisture Content (%)	3.84			
Weight of Soaked Soil (g)	100.10			

SULFATE CONTENT, DOT California Test 417, Part II

Beaker No.	304			
Crucible No.	12			
Furnace Temperature (°C)	860			
Time In / Time Out	10:50/11:35			
Duration of Combustion (min)	45			
Wt. of Crucible + Residue (g)	20.7428			
Wt. of Crucible (g)	20.7384			
Wt. of Residue (g) (A)	0.0044			
PPM of Sulfate (A) x 41150	181.06			
PPM of Sulfate, Dry Weight Basis	188			

CHLORIDE CONTENT, DOT California Test 422

ml of Extract For Titration (B)	30			
ml of AgNO3 Soln. Used in Titration (C)	2.0			
PPM of Chloride (C -0.2) * 100 * 30 / B	180			
PPM of Chloride, Dry Wt. Basis	187			

pH TEST, DOT California Test 643

pH Value	7.15			
Temperature °C	20.1			



SOIL RESISTIVITY TEST

DOT CA TEST 643

Project Name: WLC/Orange FS 1

Tested By : O. Figueroa Date: 09/06/19

Project No. : 12482.001

Input By: G. Bathala Date: 09/06/19

Boring No.: LB-3

Depth (ft.) : 0-5

Sample No. : B-1

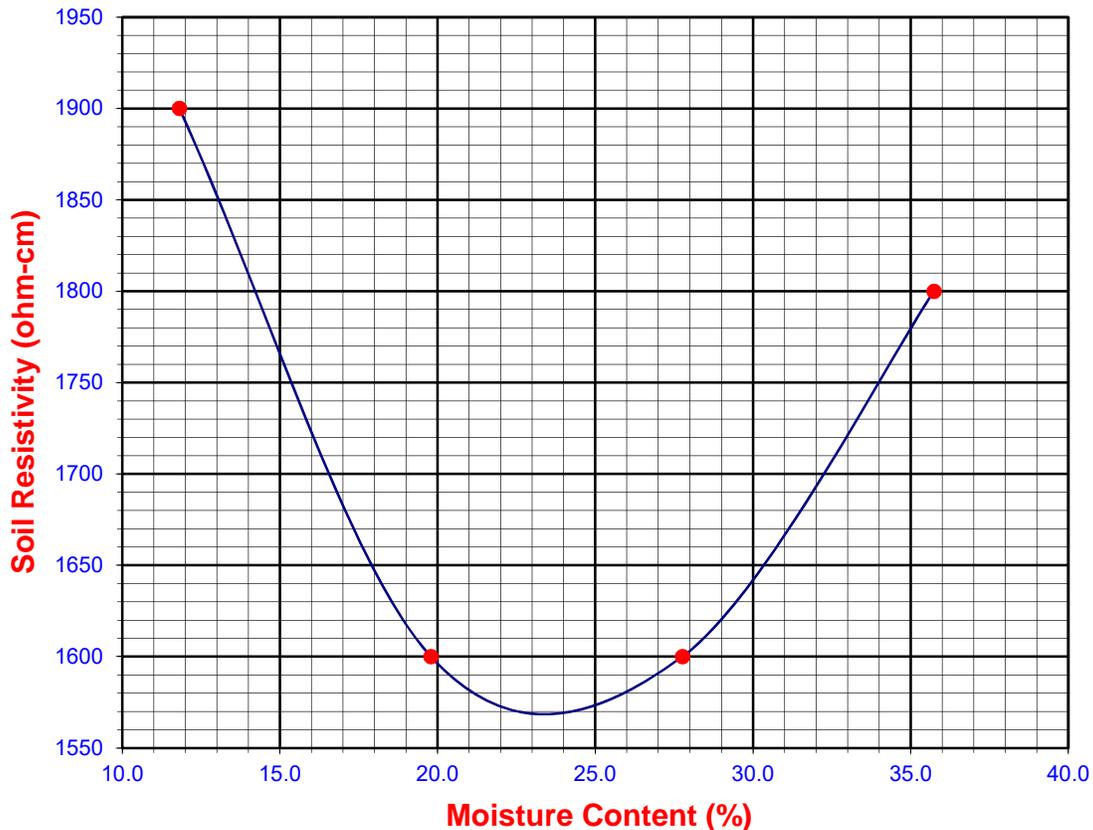
Soil Identification:* Olive brown (SC-SM)g

*California Test 643 requires soil specimens to consist only of portions of samples passing through the No. 8 US Standard Sieve before resistivity testing. Therefore, this test method may not be representative for coarser materials.

Specimen No.	Water Added (ml) (Wa)	Adjusted Moisture Content (MC)	Resistance Reading (ohm)	Soil Resistivity (ohm-cm)
1	10	11.81	1900	1900
2	20	19.79	1600	1600
3	30	27.76	1600	1600
4	40	35.74	1800	1800
5				

Moisture Content (%) (Mci)	3.84
Wet Wt. of Soil + Cont. (g)	130.22
Dry Wt. of Soil + Cont. (g)	126.87
Wt. of Container (g)	39.58
Container No.	
Initial Soil Wt. (g) (Wt)	130.20
Box Constant	1.000
$MC = (((1 + Mci/100) \times (Wa/Wt + 1)) - 1) \times 100$	

Min. Resistivity (ohm-cm)	Moisture Content (%)	Sulfate Content (ppm)	Chloride Content (ppm)	Soil pH	
				pH	Temp. (°C)
DOT CA Test 643		DOT CA Test 417 Part II		DOT CA Test 643	
1570	23.4	188	187	7.15	20.1

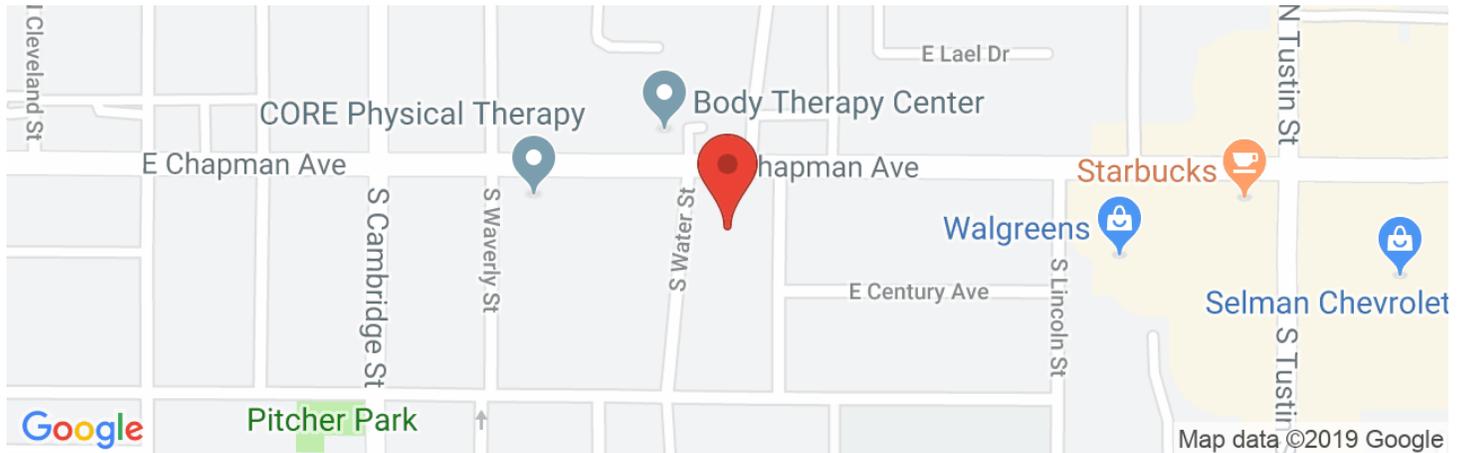


APPENDIX D
SUMMARY OF SEISMIC HAZARD ANALYSIS





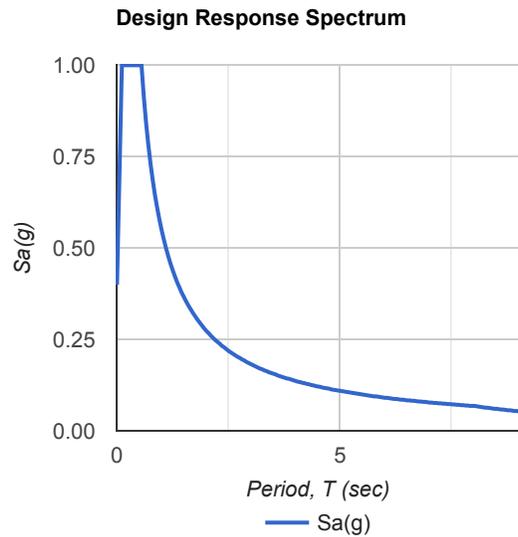
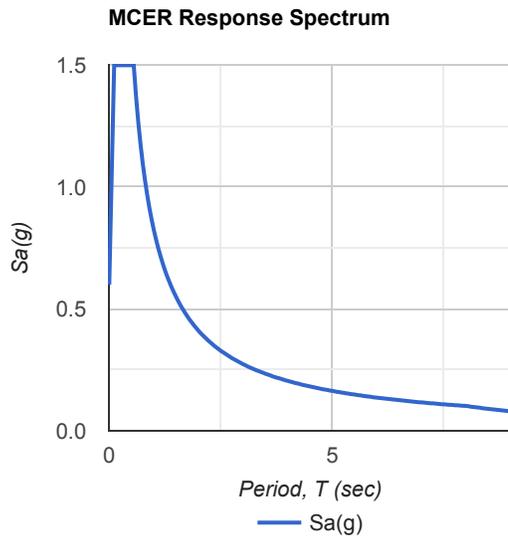
Latitude, Longitude: 33.7873345, -117.84107526



Date	8/20/2019, 11:05:16 AM
Design Code Reference Document	ASCE7-10
Risk Category	II
Site Class	D - Stiff Soil

Type	Value	Description
S_S	1.5	MCE_R ground motion. (for 0.2 second period)
S_1	0.549	MCE_R ground motion. (for 1.0s period)
S_{MS}	1.5	Site-modified spectral acceleration value
S_{M1}	0.823	Site-modified spectral acceleration value
S_{DS}	1	Numeric seismic design value at 0.2 second SA
S_{D1}	0.549	Numeric seismic design value at 1.0 second SA

Type	Value	Description
SDC	D	Seismic design category
F_a	1	Site amplification factor at 0.2 second
F_v	1.5	Site amplification factor at 1.0 second
PGA	0.515	MCE_G peak ground acceleration
F_{PGA}	1	Site amplification factor at PGA
PGA_M	0.515	Site modified peak ground acceleration
T_L	8	Long-period transition period in seconds
SsRT	1.504	Probabilistic risk-targeted ground motion. (0.2 second)
SsUH	1.443	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration
SsD	1.5	Factored deterministic acceleration value. (0.2 second)
S1RT	0.549	Probabilistic risk-targeted ground motion. (1.0 second)
S1UH	0.511	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration.
S1D	0.6	Factored deterministic acceleration value. (1.0 second)
PGAd	0.515	Factored deterministic acceleration value. (Peak Ground Acceleration)
C_{RS}	1.042	Mapped value of the risk coefficient at short periods
C_{R1}	1.073	Mapped value of the risk coefficient at a period of 1 s



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Unified Hazard Tool



Please do not use this tool to obtain ground motion parameter values for the design code reference documents covered by the [U.S. Seismic Design Maps web tools](#) (e.g., the International Building Code and the ASCE 7 or 41 Standard). The values returned by the two applications are not identical.

^ Input

Edition

Spectral Period

Latitude

Decimal degrees

Time Horizon

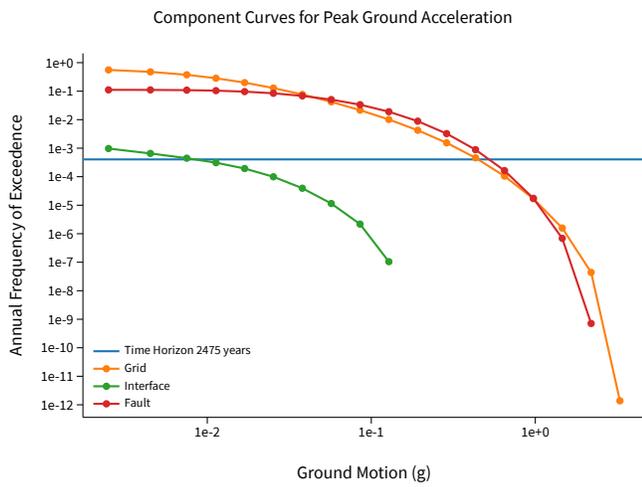
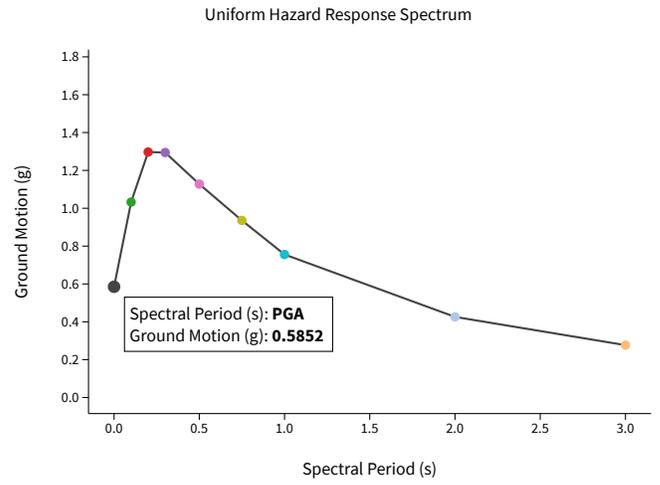
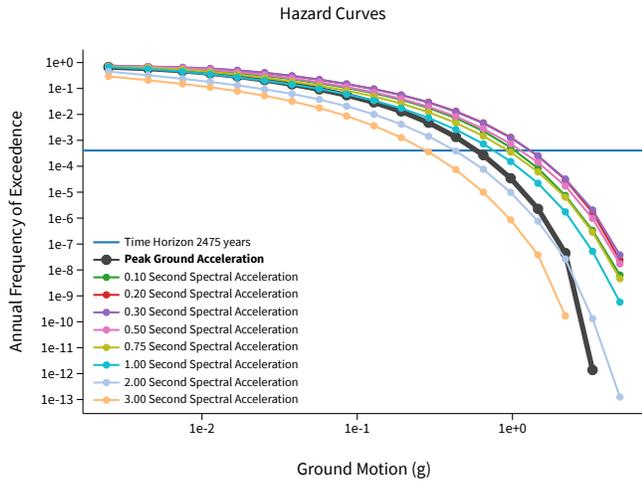
Return period in years

Longitude

Decimal degrees, negative values for western longitudes

Site Class

^ Hazard Curve

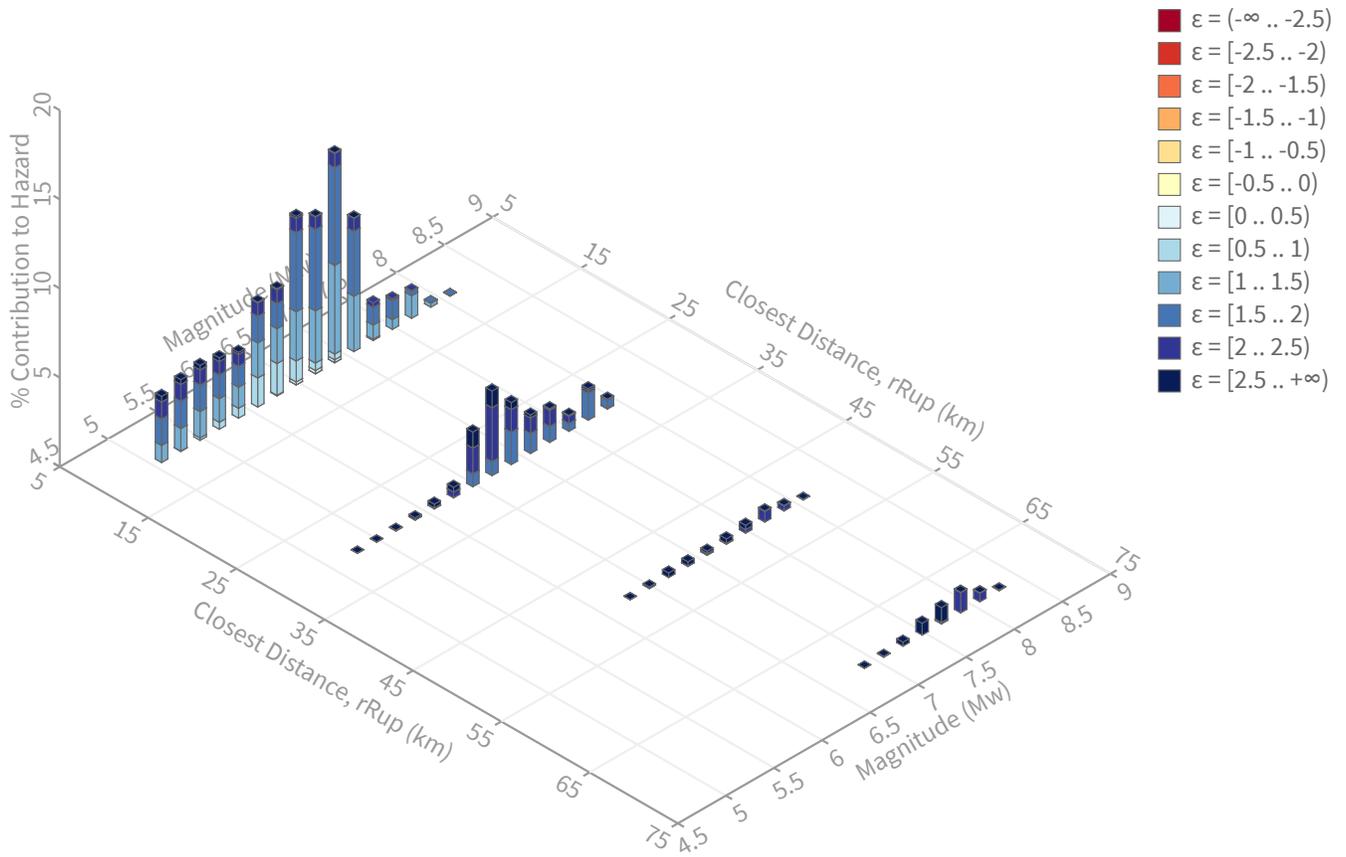


[View Raw Data](#)

^ Deaggregation

Component

Total



Summary statistics for, Deaggregation: Total

Deaggregation targets

Return period: 2475 yrs

Exceedance rate: 0.0004040404 yr⁻¹

PGA ground motion: 0.58520247 g

Recovered targets

Return period: 3014.5434 yrs

Exceedance rate: 0.0003317252 yr⁻¹

Totals

Binned: 100 %

Residual: 0 %

Trace: 0.05 %

Mean (over all sources)

m: 6.59

r: 17.19 km

ε₀: 1.72 σ

Mode (largest m-r bin)

m: 6.9

r: 12.83 km

ε₀: 1.53 σ

Contribution: 11.76 %

Mode (largest m-r-ε₀ bin)

m: 6.91

r: 14.52 km

ε₀: 1.68 σ

Contribution: 5.48 %

Discretization

r: min = 0.0, max = 1000.0, Δ = 20.0 km

m: min = 4.4, max = 9.4, Δ = 0.2

ε: min = -3.0, max = 3.0, Δ = 0.5 σ

Epsilon keys

ε₀: [-∞ .. -2.5)

ε₁: [-2.5 .. -2.0)

ε₂: [-2.0 .. -1.5)

ε₃: [-1.5 .. -1.0)

ε₄: [-1.0 .. -0.5)

ε₅: [-0.5 .. 0.0)

ε₆: [0.0 .. 0.5)

ε₇: [0.5 .. 1.0)

ε₈: [1.0 .. 1.5)

ε₉: [1.5 .. 2.0)

ε₁₀: [2.0 .. 2.5)

ε₁₁: [2.5 .. +∞]

Deaggregation Contributors

Source Set ↴ Source	Type	r	m	ϵ_0	lon	lat	az	%
bFault.ch	Fault							20.70
San Joaquin Hills		11.07	6.98	1.32	117.823°W	33.688°N	171.39	4.92
Puente Hills (Coyote Hills)		12.13	6.71	1.50	117.921°W	33.871°N	321.86	3.90
Puente Hills		16.48	7.06	1.56	117.867°W	33.927°N	351.14	1.89
Chino - alt 1		17.21	6.54	2.03	117.648°W	33.907°N	53.14	1.67
Chino - alt 2		20.12	6.70	1.97	117.629°W	33.886°N	60.81	1.43
bFault.gr	Fault							14.58
San Joaquin Hills		11.19	6.74	1.43	117.823°W	33.688°N	171.39	4.58
Puente Hills (Coyote Hills)		12.13	6.61	1.55	117.921°W	33.871°N	321.86	2.68
Puente Hills		18.62	6.81	1.84	117.867°W	33.927°N	351.14	1.11
Chino - alt 1		17.21	6.49	2.04	117.648°W	33.907°N	53.14	1.01
CAmap.21.ch.in (opt)	Grid							13.08
PointSourceFinite: -117.841, 33.828		6.75	5.76	1.28	117.841°W	33.828°N	0.00	1.08
PointSourceFinite: -117.841, 33.819		6.21	5.73	1.21	117.841°W	33.819°N	0.00	1.04
PointSourceFinite: -117.841, 33.837		7.32	5.79	1.35	117.841°W	33.837°N	0.00	1.03
CAmap.24.ch.in (opt)	Grid							13.04
PointSourceFinite: -117.841, 33.828		6.75	5.76	1.28	117.841°W	33.828°N	0.00	1.08
PointSourceFinite: -117.841, 33.819		6.21	5.73	1.21	117.841°W	33.819°N	0.00	1.04
PointSourceFinite: -117.841, 33.837		7.32	5.79	1.35	117.841°W	33.837°N	0.00	1.03
aFault_aPriori_D2.1	Fault							12.03
Elsinore : W		13.90	6.96	1.73	117.792°W	33.907°N	18.74	3.63
Elsinore : GI		23.65	6.82	2.13	117.590°W	33.829°N	78.66	2.62
Elsinore : GI+T		23.65	7.26	1.96	117.590°W	33.829°N	78.66	1.85
Elsinore : GI+T+J+CM		23.65	7.74	1.74	117.590°W	33.829°N	78.66	1.02
aFault_MoBal	Fault							11.61
Elsinore : W		13.90	6.94	1.74	117.792°W	33.907°N	18.74	5.31
Elsinore : GI		23.65	6.79	2.14	117.590°W	33.829°N	78.66	1.53
CAmap.21.gr.in (opt)	Grid							6.38
CAmap.24.gr.in (opt)	Grid							6.27
aFault_unseg	Fault							2.28
Elsinore		15.43	7.48	1.54	117.792°W	33.907°N	18.74	2.14

Determination of Site Class and Estimation of Shear Wave Velocity

Project: 12482.001

Depth (ft)	di, Layer Thick (ft)	Field Blow Counts, Ni Corrected for Cs and sampler type Blows per foot (bpf)	Average Ni (bpf)	Ni Hammer Corr:	di / Ni
		LB-4		1.3	
3	4	14	14	18	0.22
5	3.5	30	30	39	0.09
10	5	32	32	42	0.12
15	5	52	52	68	0.07
20	5	52	52	68	0.07
25	5	90	90	100	0.05
30	5	52	52	68	0.07
35	5	33	33	43	0.12
40	5	15	15	20	0.26
45	5	90	90	100	0.05
50	7.5	30	30	39	0.19
60	10	40 Assumed	40	52	0.19
70	10	40	40	52	0.19
80	15	40	40	52	0.29
100	10	40	40	52	0.19
Summation	100				2.18
Navg = Sum(di) / Sum(di / Ni) =					46

Extract of ASCE 7-10 Table 20.3-1 Site Classification (2016 CBC 1613A.3.2):

Site Class	Soil Profile Name	Avg. N upper 100'		Vs30 (ft/sec)		Vs30 (m/s)		Site Avg N	Interpolated vs30 (ft/s)
		from	to	from	to	from	to		
A	Hard Rock	-	-	5000	10000	1524	3048	46	1128
B	Rock	-	-	2500	5000	762	1524		
C	VD soil & soft rock	50.001	100	1200	2500	366	762		
D	Stiff Soil	15	50	600	1200	183	366		
E	Soft Soil	0	14.999	0	600	0	183		
F		-	-	-	-	0	0		

Site class, Table 20.3-1: **D**

Liquefaction Susceptibility Analysis: SPT Method

Based on Youd and Idriss (2001), Martin and Lew (1999).

Project: 12482
 Project No.: Proposed Fire Station 1

Leighton

General Boring Information:

Boring No.	Existing GW Depth (ft)	Design GW Depth (ft)	Design Fill Height (ft)	Ground Surface Elev (ft)
LB-1	100	100	0	211
LB-3	100	100	0	211
LB-4	100	100	0	211
LB-5	100	100	0	211

General Parameters:	
$a_{max} = 0.51g$	MCE
$M_w = 6.9$	(Idriss, 2001)
MSF eq: 1	
MSF = 1.24	
Hammer Efficiency = 83	%
$C_E = 1.38$	
$C_B = 1$	
$C_{S(SPT)} = 1.2$	
$C_{S(ring)} = 1$	
Rod Stickup (feet) = 3	
Ring sample correction = 0.65	

Summary of Liquefaction Susceptibility Analysis: SPT Method

Liquefaction Method: Youd and Idriss (2001), Seismic Settlement Method: Tokimatsu and Seed (1987) and Martin and Lew (1999).

Project: 12482

Project No.: Proposed Fire Station 1

Leighton

Boring No.	Approx. Layer Depth (ft)	SPT Depth (ft)	Approx Layer Thickness (ft)	Plasticity ("n"=non susc. to liq.)	Estimated Fines Cont (%)	γ_t (pcf)	N_m or B (blows/ft)	Sampler Type (enter 2 if mod CA Ring)	C_s	N_m (corrected for C_s and ring->SPT) (blows/ft)	Exist σ_{vo}' (psf)	$(N_1)_{60}$	$(N_1)_{60CS}$	CRR _{7.5}	Design σ_{vo}' (psf)	CSR _{7.5}	CSR _M	Liquefaction Factor of Safety	$(N_1)_{60CS}$ (for Settlement) (blows/ft)	Dry Sand Strain (%) (Tok/ Seed 87)	Sat Sand Strain (%) (Tok/ Seed 87)	Seismic Sett. of Layer (in.)	Cummulative Seismic Settlement (in.)
LB-1	0 to 4	3	4		30	115	31	2	1	20.2	345	35.5	45.7	>Range	345	0.33	0.27	NonLiq	45.7	0.01		0.00	0.0
LB-1	4 to 8	5	4		30	125	43	2	1	28.0	585	49.3	61.6	>Range	585	0.33	0.26	NonLiq	61.6	0.01		0.00	0.0
LB-1	8 to 13	10	5		10	125	80	2	1	52.0	1210	80.3	82.9	>Range	1210	0.32	0.26	NonLiq	82.9	0.01		0.00	0.0
LB-1	13 to 18	15	5		10	125	80	2	1	52.0	1835	65.2	67.5	>Range	1835	0.32	0.26	NonLiq	67.5	0.01		0.01	0.0
LB-1	18 to 22	20	5		10	125	80	1	1.2	96.0	2460	116.2	119.6	>Range	2460	0.32	0.26	NonLiq	119.6	0.01		0.00	0.0
LB-3	0 to 4	3	4		28	115	12	2	1	7.8	345	13.8	20.2	0.218	345	0.33	0.27	NonLiq	20.2	0.05		0.02	0.1
LB-3	4 to 7	5	3		28	125	26	2	1	16.9	585	29.8	38.5	>Range	585	0.33	0.26	NonLiq	38.5	0.03		0.01	0.0
LB-3	7 to 9	8	3		5	125	33	2	1	21.5	960	35.0	35.0	>Range	960	0.33	0.26	NonLiq	35.0	0.04		0.01	0.0
LB-3	9 to 13	10	4		5	125	50	2	1	32.5	1210	50.2	50.2	>Range	1210	0.32	0.26	NonLiq	50.2	0.01		0.00	0.0
LB-3	13 to 18	15	5		10	120	80	2	1	52.0	1823	65.4	67.7	>Range	1822.5	0.32	0.26	NonLiq	67.7	0.01		0.01	0.0
LB-3	18 to 22	20	5		10	120	80	1	1.2	96.0	2423	117.1	120.5	>Range	2422.5	0.32	0.26	NonLiq	120.5	0.01		0.00	0.0
LB-4	0 to 4	3	4		30	120	21	2	1	13.7	360	24.1	32.5	>Range	360	0.33	0.27	NonLiq	32.5	0.02		0.01	0.2
LB-4	4 to 8	5	4		10	130	47	2	1	30.6	610	53.9	55.9	>Range	610	0.33	0.26	NonLiq	55.9	0.01		0.00	0.2
LB-4	8 to 13	10	5		31	125	50	2	1	32.5	1248	49.4	62.2	>Range	1247.5	0.32	0.26	NonLiq	62.2	0.01		0.01	0.2
LB-4	13 to 18	15	5		7	115	80	2	1	52.0	1848	65.0	65.7	>Range	1847.5	0.32	0.26	NonLiq	65.7	0.01		0.01	0.2
LB-4	18 to 23	20	5		7	115	80	2	1	52.0	2423	63.4	64.1	>Range	2422.5	0.32	0.26	NonLiq	64.1	0.01		0.01	0.2
LB-4	23 to 28	25	5		7	120	80	1	1.2	96.0	3010	105.1	106.1	>Range	3010	0.31	0.25	NonLiq	106.1	0.01		0.01	0.2
LB-4	28 to 33	30	5		7	120	80	2	1	52.0	3610	54.7	55.3	>Range	3610	0.31	0.25	NonLiq	55.3	0.01		0.01	0.1
LB-4	33 to 38	35	5		80	125	28	1	1.2	33.6	4223	32.7	44.2	>Range	4222.5	0.29	0.24	NonLiq	44.2	0.02		0.01	0.1
LB-4	38 to 43	40	5		80	125	24	2	1	15.6	4848	14.2	22.0	0.242	4847.5	0.28	0.23	NonLiq	22.0	0.15		0.09	0.1
LB-4	43 to 48	45	5		10	125	80	1	1.2	96.0	5473	82.0	84.7	>Range	5472.5	0.27	0.22	NonLiq	84.7	0.01		0.01	0.0
LB-4	48 to 52	50	5		80	130	47	2	1	30.6	6110	24.7	34.6	>Range	6110	0.25	0.21	NonLiq	34.6	0.06		0.03	0.0
LB-5	0 to 4	3	4		5	125	59	2	1	38.4	375	67.6	67.6	>Range	375	0.33	0.27	NonLiq	67.6	0.00		0.00	0.0
LB-5	4 to 8	5	4		5	120	80	2	1	52.0	620	91.7	91.7	>Range	620	0.33	0.26	NonLiq	91.7	0.00		0.00	0.0
LB-5	8 to 13	10	5		5	120	80	2	1	52.0	1220	80.0	80.0	>Range	1220	0.32	0.26	NonLiq	80.0	0.01		0.01	0.0
LB-5	13 to 18	15	5		8	125	80	2	1	52.0	1833	65.3	66.4	>Range	1832.5	0.32	0.26	NonLiq	66.4	0.01		0.01	0.0
LB-5	18 to 22	20	5		8	125	80	1	1.2	96.0	2458	116.3	118.1	>Range	2457.5	0.32	0.26	NonLiq	118.1	0.01		0.00	0.0

EQ Search WLC Orange FS1

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*   E Q S E A R C H           *  
*                               *  
*   Versi on 3.00             *  
*                               *  
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ESTIMATION OF
PEAK ACCELERATION FROM
CALIFORNIA EARTHQUAKE CATALOGS

JOB NUMBER: 12482.001

DATE: 08-21-2019

JOB NAME: WLC Orange FS1

EARTHQUAKE-CATALOG-FILE NAME: ALLQUAKE.DAT

MAGNITUDE RANGE:

MINIMUM MAGNITUDE: 5.00
MAXIMUM MAGNITUDE: 9.00

SITE COORDINATES:

SITE LATITUDE: 33.7873
SITE LONGITUDE: 117.8411

SEARCH DATES:

START DATE: 1800
END DATE: 1999

SEARCH RADIUS:

60.0 mi
96.6 km

ATTENUATION RELATION: 20) Sadigh et al. (1997) Horiz. - Soil

UNCERTAINTY (M=Median, S=Sigma): M Number of Sigmas: 0.0

ASSUMED SOURCE TYPE: DS [SS=Strike-slip, DS=Reverse-slip, BT=Blind-thrust]

SCOND: 0 Depth Source: A

Basement Depth: 5.00 km Campbell SSR: Campbell SHR:

COMPUTE PEAK HORIZONTAL ACCELERATION

MINIMUM DEPTH VALUE (km): 0.0

EQ Search WLC Orange FS1

EARTHQUAKE SEARCH RESULTS

Page 1

FILE CODE	LAT. NORTH	LONG. WEST	DATE	TIME (UTC)	DEPTH (km)	QUAKE MAG.	SITE ACC. g	SITE MM INT.	APPROX. DI STANCE mi [km]
				H M Sec					
DMG	33. 6170	117. 9670	03/11/1933	154 7. 8	0. 0	6. 30	0. 160	V I I	13. 8(22. 2)
MGI	33. 8000	117. 6000	04/22/1918	2115 0. 0	0. 0	5. 00	0. 057	VI	13. 9(22. 3)
DMG	33. 6830	118. 0500	03/11/1933	658 3. 0	0. 0	5. 50	0. 084	V I	14. 0(22. 5)
DMG	33. 7500	118. 0830	03/11/1933	323 0. 0	0. 0	5. 00	0. 055	VI	14. 1(22. 7)
DMG	33. 7500	118. 0830	03/11/1933	230 0. 0	0. 0	5. 10	0. 060	VI	14. 1(22. 7)
DMG	33. 7500	118. 0830	03/11/1933	910 0. 0	0. 0	5. 10	0. 060	VI	14. 1(22. 7)
DMG	33. 7500	118. 0830	03/13/1933	131828. 0	0. 0	5. 30	0. 071	VI	14. 1(22. 7)
DMG	33. 7500	118. 0830	03/11/1933	2 9 0. 0	0. 0	5. 00	0. 055	VI	14. 1(22. 7)
DMG	33. 7000	118. 0670	03/11/1933	85457. 0	0. 0	5. 10	0. 059	VI	14. 3(23. 0)
DMG	33. 7000	118. 0670	03/11/1933	51022. 0	0. 0	5. 10	0. 059	VI	14. 3(23. 0)
DMG	33. 6170	118. 0170	03/14/1933	19 150. 0	0. 0	5. 10	0. 054	VI	15. 5(24. 9)
DMG	33. 7830	118. 1330	10/02/1933	91017. 6	0. 0	5. 40	0. 063	VI	16. 7(27. 0)
DMG	33. 5750	117. 9830	03/11/1933	518 4. 0	0. 0	5. 20	0. 054	VI	16. 8(27. 0)
MGI	34. 0000	118. 0000	12/25/1903	1745 0. 0	0. 0	5. 00	0. 044	VI	17. 3(27. 8)
DMG	33. 6990	117. 5110	05/31/1938	83455. 4	10. 0	5. 50	0. 056	VI	19. 9(32. 0)
PAS	34. 0610	118. 0790	10/01/1987	144220. 0	9. 5	5. 90	0. 065	VI	23. 3(37. 5)
DMG	33. 7830	118. 2500	11/14/1941	84136. 3	0. 0	5. 40	0. 042	VI	23. 5(37. 8)
MGI	34. 0000	117. 5000	12/16/1858	10 0 0. 0	0. 0	7. 00	0. 141	V I I I	24. 4(39. 3)
PAS	34. 0730	118. 0980	10/04/1987	105938. 2	8. 2	5. 30	0. 036	V	24. 6(39. 6)
DMG	33. 8500	118. 2670	03/11/1933	1425 0. 0	0. 0	5. 00	0. 027	V	24. 8(39. 9)
GSP	34. 1400	117. 7000	02/28/1990	234336. 6	5. 0	5. 20	0. 031	V	25. 7(41. 3)
DMG	33. 7000	117. 4000	05/13/1910	620 0. 0	0. 0	5. 00	0. 026	V	26. 0(41. 9)
DMG	33. 7000	117. 4000	05/15/1910	1547 0. 0	0. 0	6. 00	0. 062	VI	26. 0(41. 9)
DMG	33. 7000	117. 4000	04/11/1910	757 0. 0	0. 0	5. 00	0. 026	V	26. 0(41. 9)
MGI	34. 1000	118. 1000	07/11/1855	415 0. 0	0. 0	6. 30	0. 079	V I I	26. 2(42. 1)
T-A	34. 0000	118. 2500	01/10/1856	0 0 0. 0	0. 0	5. 00	0. 024	I V	27. 7(44. 5)
T-A	34. 0000	118. 2500	03/26/1860	0 0 0. 0	0. 0	5. 00	0. 024	I V	27. 7(44. 5)
T-A	34. 0000	118. 2500	09/23/1827	0 0 0. 0	0. 0	5. 00	0. 024	I V	27. 7(44. 5)
DMG	34. 2000	117. 9000	08/28/1889	215 0. 0	0. 0	5. 50	0. 035	V	28. 7(46. 2)
MGI	34. 0000	118. 3000	09/03/1905	540 0. 0	0. 0	5. 30	0. 028	V	30. 1(48. 5)
MGI	34. 0800	118. 2600	07/16/1920	18 8 0. 0	0. 0	5. 00	0. 020	I V	31. 4(50. 5)
GSP	34. 2620	118. 0020	06/28/1991	144354. 5	11. 0	5. 40	0. 025	V	34. 0(54. 8)
DMG	34. 0000	117. 2500	07/23/1923	73026. 0	0. 0	6. 25	0. 049	VI	36. 9(59. 4)
DMG	34. 2700	117. 5400	09/12/1970	143053. 0	8. 0	5. 40	0. 022	I V	37. 5(60. 4)
DMG	33. 9000	117. 2000	12/19/1880	0 0 0. 0	0. 0	6. 00	0. 038	V	37. 6(60. 5)
MGI	34. 1000	117. 3000	07/15/1905	2041 0. 0	0. 0	5. 30	0. 020	I V	37. 8(60. 8)
DMG	34. 3000	117. 6000	07/30/1894	512 0. 0	0. 0	6. 00	0. 038	V	38. 0(61. 1)
DMG	34. 2000	117. 4000	07/22/1899	046 0. 0	0. 0	5. 50	0. 024	I V	38. 1(61. 3)
DMG	34. 3000	117. 5000	07/22/1899	2032 0. 0	0. 0	6. 50	0. 054	VI	40. 4(65. 0)
MGI	34. 0000	118. 5000	11/19/1918	2018 0. 0	0. 0	5. 00	0. 014	I V	40. 5(65. 2)
DMG	34. 0000	118. 5000	08/04/1927	1224 0. 0	0. 0	5. 00	0. 014	I V	40. 5(65. 2)
DMG	34. 3700	117. 6500	12/08/1812	15 0 0. 0	0. 0	7. 00	0. 076	V I I	41. 7(67. 1)
PAS	33. 9190	118. 6270	01/19/1989	65328. 8	11. 9	5. 00	0. 011	I I I	46. 0(74. 0)

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EQ Search WLC Orange FS1

DMG	33. 9500	118. 6320	08/31/1930	04036. 0	0. 0	5. 20	0. 013	III	46. 7(75. 2)
GSP	34. 2310	118. 4750	03/20/1994	212012. 3	13. 0	5. 30	0. 014	IV	47. 5(76. 4)
DMG	33. 8000	117. 0000	12/25/1899	1225 0. 0	0. 0	6. 40	0. 039	V	48. 3(77. 7)
DMG	33. 7500	117. 0000	04/21/1918	223225. 0	0. 0	6. 80	0. 054	VI	48. 3(77. 8)
DMG	33. 7500	117. 0000	06/06/1918	2232 0. 0	0. 0	5. 00	0. 011	III	48. 3(77. 8)
PAS	33. 9440	118. 6810	01/01/1979	231438. 9	11. 3	5. 00	0. 010	III	49. 3(79. 4)
GSP	34. 2130	118. 5370	01/17/1994	123055. 4	18. 0	6. 70	0. 048	VI	49. 5(79. 7)
DMG	34. 3080	118. 4540	02/09/1971	144346. 7	6. 2	5. 20	0. 012	III	50. 2(80. 8)
DMG	34. 2000	117. 1000	09/20/1907	154 0. 0	0. 0	6. 00	0. 025	V	51. 1(82. 2)
DMG	33. 7100	116. 9250	09/23/1963	144152. 6	16. 5	5. 00	0. 009	III	52. 9(85. 1)

EARTHQUAKE SEARCH RESULTS

Page 2

FILE CODE	LAT. NORTH	LONG. WEST	DATE	TIME (UTC) H M Sec	DEPTH (km)	QUAKE MAG.	SITE ACC. g	SITE MM INT.	APPROX. DI STANCE mi [km]
DMG	34. 4110	118. 4010	02/09/1971	141028. 0	8. 0	5. 30	0. 012	III	53. 7(86. 3)
DMG	34. 4110	118. 4010	02/09/1971	14 244. 0	8. 0	5. 80	0. 019	IV	53. 7(86. 3)
DMG	34. 4110	118. 4010	02/09/1971	14 1 8. 0	8. 0	5. 80	0. 019	IV	53. 7(86. 3)
DMG	34. 4110	118. 4010	02/09/1971	14 041. 8	8. 4	6. 40	0. 033	V	53. 7(86. 3)
DMG	34. 5190	118. 1980	08/23/1952	10 9 7. 1	13. 1	5. 00	0. 009	III	54. 5(87. 7)
GSB	34. 3010	118. 5650	01/17/1994	204602. 4	9. 0	5. 20	0. 011	III	54. 5(87. 7)
GSP	34. 3050	118. 5790	01/29/1994	112036. 0	1. 0	5. 10	0. 010	III	55. 3(89. 0)
DMG	34. 3000	118. 6000	04/04/1893	1940 0. 0	0. 0	6. 00	0. 022	IV	56. 0(90. 1)
PAS	32. 9710	117. 8700	07/13/1986	1347 8. 2	6. 0	5. 30	0. 011	III	56. 4(90. 7)
DMG	33. 9500	116. 8500	09/28/1946	719 9. 0	0. 0	5. 00	0. 008	III	57. 9(93. 2)
DMG	34. 1800	116. 9200	01/16/1930	034 3. 6	0. 0	5. 10	0. 009	III	59. 3(95. 4)
DMG	34. 1800	116. 9200	01/16/1930	02433. 9	0. 0	5. 20	0. 009	III	59. 3(95. 4)
DMG	34. 2670	116. 9670	08/29/1943	34513. 0	0. 0	5. 50	0. 012	III	60. 0(96. 5)

-END OF SEARCH- 66 EARTHQUAKES FOUND WITHIN THE SPECIFIED SEARCH AREA.

TIME PERIOD OF SEARCH: 1800 TO 1999

LENGTH OF SEARCH TIME: 200 years

THE EARTHQUAKE CLOSEST TO THE SITE IS ABOUT 13.8 MILES (22.2 km) AWAY.

LARGEST EARTHQUAKE MAGNITUDE FOUND IN THE SEARCH RADIUS: 7.0

LARGEST EARTHQUAKE SITE ACCELERATION FROM THIS SEARCH: 0.160 g

COEFFICIENTS FOR GUTENBERG & RICHTER RECURRENCE RELATION:

a-value= 1.043
b-value= 0.349
beta-value= 0.803

TABLE OF MAGNITUDES AND EXCEEDANCES:

Earthquake Magnitude	Number of Times Exceeded	Cumulative No. / Year
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EQ Search WLC Orange FS1

4.0	66	0.33166
4.5	66	0.33166
5.0	66	0.33166
5.5	23	0.11558
6.0	15	0.07538
6.5	5	0.02513
7.0	2	0.01005

EQ Fault

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*   E Q F A U L T             *  
*                               *  
*   Versi on 3.00             *  
*                               *  
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DETERMINISTIC ESTIMATION OF
PEAK ACCELERATION FROM DIGITIZED FAULTS

JOB NUMBER: 12482.001

DATE: 08-20-2019

JOB NAME: WLC Orange FS1

CALCULATION NAME: Test Run Analysis

FAULT-DATA-FILE NAME: CDMGFLTE.DAT

SITE COORDINATES:

SITE LATITUDE: 33.7873
SITE LONGITUDE: 117.8411

SEARCH RADIUS: 60 mi

ATTENUATION RELATION: 20) Sadi gh et al. (1997) Horiz. - Soil
UNCERTAINTY (M=Medi an, S=Si gma): M Number of Si gmas: 0.0
DI STANCE MEASURE: cl odi s
SCOND: 0
Basement Depth: 5.00 km Campbel l SSR: Campbel l SHR:
COMPUTE PEAK HORI ZONTAL ACCELERATION

FAULT-DATA FILE USED: CDMGFLTE.DAT

MINIMUM DEPTH VALUE (km): 0.0

EQFAULT SUMMARY

DETERMINISTIC SITE PARAMETERS

Page 1

ABBREVIATED FAULT NAME	APPROXIMATE DISTANCE mi (km)	ESTIMATED MAX. EARTHQUAKE EVENT		
		MAXIMUM EARTHQUAKE MAG. (Mw)	PEAK SITE ACCEL. g	EST. SITE INTENSITY MOD. MERC.
ELYSIAN PARK THRUST	8.6(13.9)	6.7	0.303	IX
WHITTIER	8.8(14.1)	6.8	0.243	IX
COMPTON THRUST	9.9(15.9)	6.8	0.287	IX
NEWPORT-INGLEWOOD (L. A. Basin)	12.2(19.6)	6.9	0.199	VIII
ELSI NORE-GLEN IVY	12.6(20.3)	6.8	0.184	VIII
CHINO-CENTRAL AVE. (Elsinore)	13.0(20.9)	6.7	0.220	IX
NEWPORT-INGLEWOOD (Offshore)	14.2(22.9)	6.9	0.175	VIII
SAN JOSE	17.5(28.2)	6.5	0.147	VIII
PALOS VERDES	22.2(35.8)	7.1	0.129	VIII
SIERRA MADRE	23.9(38.4)	7.0	0.145	VIII
CUCAMONGA	24.2(39.0)	7.0	0.142	VIII
RAYMOND	27.7(44.5)	6.5	0.088	VII
CLAMSHELL-SAWPIT	28.5(45.8)	6.5	0.084	VII
VERDUGO	29.8(47.9)	6.7	0.092	VII
ELSI NORE-TEMECULA	30.0(48.3)	6.8	0.076	VII
HOLLYWOOD	32.0(51.5)	6.4	0.067	VI
SAN JACINTO-SAN BERNARDINO	35.6(57.3)	6.7	0.058	VI
CORONADO BANK	36.2(58.2)	7.4	0.093	VII
SAN JACINTO-SAN JACINTO VALLEY	38.2(61.4)	6.9	0.061	VI
SANTA MONICA	38.4(61.8)	6.6	0.062	VI
SAN ANDREAS - San Bernardino	40.1(64.5)	7.3	0.077	VII
SAN ANDREAS - Southern	40.1(64.5)	7.4	0.082	VII
SAN ANDREAS - 1857 Rupture	40.3(64.9)	7.8	0.106	VII
SAN ANDREAS - Mojave	40.3(64.9)	7.1	0.066	VI
CLEGHORN	42.2(67.9)	6.5	0.040	V
SIERRA MADRE (San Fernando)	42.8(68.8)	6.7	0.058	VI
MALIBU COAST	43.1(69.4)	6.7	0.058	VI
SAN GABRIEL	44.5(71.6)	7.0	0.054	VI
NORTH RIDGE (E. Oak Ridge)	46.2(74.4)	6.9	0.061	VI
NORTH FRONTAL FAULT ZONE (West)	48.2(77.6)	7.0	0.063	VI
ANACAPA-DUME	50.9(81.9)	7.3	0.074	VII
ROSE CANYON	51.3(82.6)	6.9	0.042	VI
SANTA SUSANA	52.8(84.9)	6.6	0.040	V
SAN JACINTO-ANZA	53.2(85.6)	7.2	0.050	VI
ELSI NORE-JULIAN	55.4(89.1)	7.1	0.044	VI
HOLSER	58.6(94.3)	6.5	0.032	V

EQ Fault

-END OF SEARCH- 36 FAULTS FOUND WITHIN THE SPECIFIED SEARCH RADIUS.

THE ELYSIAN PARK THRUST FAULT IS CLOSEST TO THE SITE.
IT IS ABOUT 8.6 MILES (13.9 km) AWAY.

LARGEST MAXIMUM-EARTHQUAKE SITE ACCELERATION: 0.3030 g

APPENDIX E
GENERAL EARTHWORK AND GRADING SPECIFICATIONS



GENERAL EARTHWORK AND GRADING SPECIFICATIONS FOR ROUGH GRADING

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1.0 General

- 1.1 Intent: These General Earthwork and Grading Specifications are for the grading and earthwork shown on the approved grading plan(s) and/or indicated in the geotechnical report(s). These Specifications are a part of the recommendations contained in the geotechnical report(s). In case of conflict, the specific recommendations in the geotechnical report shall supersede these more general Specifications. Observations of the earthwork by the project Geotechnical Consultant during the course of grading may result in new or revised recommendations that could supersede these specifications or the recommendations in the geotechnical report(s).
- 1.2 The Geotechnical Consultant of Record: Prior to commencement of work, the owner shall employ the Geotechnical Consultant of Record (Geotechnical Consultant). The Geotechnical Consultants shall be responsible for reviewing the approved geotechnical report(s) and accepting the adequacy of the preliminary geotechnical findings, conclusions, and recommendations prior to the commencement of the grading.

Prior to commencement of grading, the Geotechnical Consultant shall review the "work plan" prepared by the Earthwork Contractor (Contractor) and schedule sufficient personnel to perform the appropriate level of observation, mapping, and compaction testing.

During the grading and earthwork operations, the Geotechnical Consultant shall observe, map, and document the subsurface exposures to verify the geotechnical design assumptions. If the observed conditions are found to be significantly different than the interpreted assumptions during the design phase, the Geotechnical Consultant shall inform the owner, recommend appropriate changes in design to accommodate the observed conditions, and notify the review agency where required. Subsurface areas to be geotechnically observed, mapped, elevations recorded, and/or tested include natural ground after it has been cleared for receiving fill but before fill is placed, bottoms of all "remedial removal" areas, all key bottoms, and benches made on sloping ground to receive fill.

The Geotechnical Consultant shall observe the moisture-conditioning and processing of the subgrade and fill materials and perform relative compaction testing of fill to determine the attained level of compaction. The Geotechnical Consultant shall provide the test results to the owner and the Contractor on a routine and frequent basis.

- 1.3 The Earthwork Contractor: The Earthwork Contractor (Contractor) shall be qualified, experienced, and knowledgeable in earthwork logistics, preparation and processing of ground to receive fill, moisture-conditioning and processing of fill, and compacting fill. The Contractor shall review and accept the plans, geotechnical report(s), and these Specifications prior to commencement of grading. The

Contractor shall be solely responsible for performing the grading in accordance with the plans and specifications.

The Contractor shall prepare and submit to the owner and the Geotechnical Consultant a work plan that indicates the sequence of earthwork grading, the number of "spreads" of work and the estimated quantities of daily earthwork contemplated for the site prior to commencement of grading. The Contractor shall inform the owner and the Geotechnical Consultant of changes in work schedules and updates to the work plan at least 24 hours in advance of such changes so that appropriate observations and tests can be planned and accomplished. The Contractor shall not assume that the Geotechnical Consultant is aware of all grading operations.

The Contractor shall have the sole responsibility to provide adequate equipment and methods to accomplish the earthwork in accordance with the applicable grading codes and agency ordinances, these Specifications, and the recommendations in the approved geotechnical report(s) and grading plan(s). If, in the opinion of the Geotechnical Consultant, unsatisfactory conditions, such as unsuitable soil, improper moisture condition, inadequate compaction, insufficient buttress key size, adverse weather, etc., are resulting in a quality of work less than required in these specifications, the Geotechnical Consultant shall reject the work and may recommend to the owner that construction be stopped until the conditions are rectified.

2.0 Preparation of Areas to be Filled

- 2.1 Clearing and Grubbing: Vegetation, such as brush, grass, roots, and other deleterious material shall be sufficiently removed and properly disposed of in a method acceptable to the owner, governing agencies, and the Geotechnical Consultant.

The Geotechnical Consultant shall evaluate the extent of these removals depending on specific site conditions. Earth fill material shall not contain more than 1 percent of organic materials (by volume). No fill lift shall contain more than 5 percent of organic matter. Nesting of the organic materials shall not be allowed.

If potentially hazardous materials are encountered, the Contractor shall stop work in the affected area, and a hazardous material specialist shall be informed immediately for proper evaluation and handling of these materials prior to continuing to work in that area.

As presently defined by the State of California, most refined petroleum products (gasoline, diesel fuel, motor oil, grease, coolant, etc.) have chemical constituents that are considered to be hazardous waste. As such, the indiscriminate dumping or spillage of these fluids onto the ground may constitute a misdemeanor, punishable by fines and/or imprisonment, and shall not be allowed.

- 2.2 Processing: Existing ground that has been declared satisfactory for support of fill by the Geotechnical Consultant shall be scarified to a minimum depth of 6 inches. Existing ground that is not satisfactory shall be overexcavated as specified in the following section. Scarification shall continue until soils are broken down and free of large clay lumps or clods and the working surface is reasonably uniform, flat, and free of uneven features that would inhibit uniform compaction.
- 2.3 Overexcavation: In addition to removals and overexcavations recommended in the approved geotechnical report(s) and the grading plan, soft, loose, dry, saturated, spongy, organic-rich, highly fractured or otherwise unsuitable ground shall be overexcavated to competent ground as evaluated by the Geotechnical Consultant during grading.
- 2.4 Benching: Where fills are to be placed on ground with slopes steeper than 5:1 (horizontal to vertical units), the ground shall be stepped or benched. Please see the Standard Details for a graphic illustration. The lowest bench or key shall be a minimum of 15 feet wide and at least 2 feet deep, into competent material as evaluated by the Geotechnical Consultant. Other benches shall be excavated a minimum height of 4 feet into competent material or as otherwise recommended by the Geotechnical Consultant. Fill placed on ground sloping flatter than 5:1 shall also be benched or otherwise overexcavated to provide a flat subgrade for the fill.
- 2.5 Evaluation/Acceptance of Fill Areas: All areas to receive fill, including removal and processed areas, key bottoms, and benches, shall be observed, mapped, elevations recorded, and/or tested prior to being accepted by the Geotechnical Consultant as suitable to receive fill. The Contractor shall obtain a written acceptance from the Geotechnical Consultant prior to fill placement. A licensed surveyor shall provide the survey control for determining elevations of processed areas, keys, and benches.

3.0 Fill Material

- 3.1 General: Material to be used as fill shall be essentially free of organic matter and other deleterious substances evaluated and accepted by the Geotechnical Consultant prior to placement. Soils of poor quality, such as those with unacceptable gradation, high expansion potential, or low strength shall be placed in areas acceptable to the Geotechnical Consultant or mixed with other soils to achieve satisfactory fill material.
- 3.2 Oversize: Oversize material defined as rock, or other irreducible material with a maximum dimension greater than 8 inches, shall not be buried or placed in fill unless location, materials, and placement methods are specifically accepted by the Geotechnical Consultant. Placement operations shall be such that nesting of oversized material does not occur and such that oversize material is completely surrounded by compacted or densified fill. Oversize material shall not be placed within 10 vertical feet of finish grade or within 2 feet of future utilities or underground construction.
- 3.3 Import: If importing of fill material is required for grading, proposed import material shall meet the requirements of Section 3.1. The potential import source shall be given to the Geotechnical Consultant at least 48 hours (2 working days) before importing begins so that its suitability can be determined and appropriate tests performed.

4.0 Fill Placement and Compaction

- 4.1 Fill Layers: Approved fill material shall be placed in areas prepared to receive fill (per Section 3.0) in near-horizontal layers not exceeding 8 inches in loose thickness. The Geotechnical Consultant may accept thicker layers if testing indicates the grading procedures can adequately compact the thicker layers. Each layer shall be spread evenly and mixed thoroughly to attain relative uniformity of material and moisture throughout.
- 4.2 Fill Moisture Conditioning: Fill soils shall be watered, dried back, blended, and/or mixed, as necessary to attain a relatively uniform moisture content at or slightly over optimum. Maximum density and optimum soil moisture content tests shall be performed in accordance with the American Society of Testing and Materials (ASTM Test Method D1557-91).

- 4.3 Compaction of Fill: After each layer has been moisture-conditioned, mixed, and evenly spread, it shall be uniformly compacted to not less than 90 percent of maximum dry density (ASTM Test Method D1557-91). Compaction equipment shall be adequately sized and be either specifically designed for soil compaction or of proven reliability to efficiently achieve the specified level of compaction with uniformity.
- 4.4 Compaction of Fill Slopes: In addition to normal compaction procedures specified above, compaction of slopes shall be accomplished by backrolling of slopes with sheepsfoot rollers at increments of 3 to 4 feet in fill elevation, or by other methods producing satisfactory results acceptable to the Geotechnical Consultant. Upon completion of grading, relative compaction of the fill, out to the slope face, shall be at least 90 percent of maximum density per ASTM Test Method D1557-91.
- 4.5 Compaction Testing: Field tests for moisture content and relative compaction of the fill soils shall be performed by the Geotechnical Consultant. Location and frequency of tests shall be at the Consultant's discretion based on field conditions encountered. Compaction test locations will not necessarily be selected on a random basis. Test locations shall be selected to verify adequacy of compaction levels in areas that are judged to be prone to inadequate compaction (such as close to slope faces and at the fill/bedrock benches).
- 4.6 Frequency of Compaction Testing: Tests shall be taken at intervals not exceeding 2 feet in vertical rise and/or 1,000 cubic yards of compacted fill soils embankment. In addition, as a guideline, at least one test shall be taken on slope faces for each 5,000 square feet of slope face and/or each 10 feet of vertical height of slope. The Contractor shall assure that fill construction is such that the testing schedule can be accomplished by the Geotechnical Consultant. The Contractor shall stop or slow down the earthwork construction if these minimum standards are not met.
- 4.7 Compaction Test Locations: The Geotechnical Consultant shall document the approximate elevation and horizontal coordinates of each test location. The Contractor shall coordinate with the project surveyor to assure that sufficient grade stakes are established so that the Geotechnical Consultant can determine the test locations with sufficient accuracy. At a minimum, two grade stakes within a horizontal distance of 100 feet and vertically less than 5 feet apart from potential test locations shall be provided.

5.0 Subdrain Installation

Subdrain systems shall be installed in accordance with the approved geotechnical report(s), the grading plan, and the Standard Details. The Geotechnical Consultant may recommend additional subdrains and/or changes in subdrain extent, location, grade, or material depending on conditions encountered during grading. All subdrains shall be surveyed by a land surveyor/civil engineer for line and grade after installation and prior to burial. Sufficient time should be allowed by the Contractor for these surveys.

6.0 Excavation

Excavations, as well as over-excavation for remedial purposes, shall be evaluated by the Geotechnical Consultant during grading. Remedial removal depths shown on geotechnical plans are estimates only. The actual extent of removal shall be determined by the Geotechnical Consultant based on the field evaluation of exposed conditions during grading. Where fill-over-cut slopes are to be graded, the cut portion of the slope shall be made, evaluated, and accepted by the Geotechnical Consultant prior to placement of materials for construction of the fill portion of the slope, unless otherwise recommended by the Geotechnical Consultant.

7.0 Trench Backfills

7.1 Safety: The Contractor shall follow all OSHA and Cal/OSHA requirements for safety of trench excavations.

7.2 Bedding and Backfill: All bedding and backfill of utility trenches shall be done in accordance with the applicable provisions of Standard Specifications of Public Works Construction. Bedding material shall have a Sand Equivalent greater than 30 (SE>30). The bedding shall be placed to 1 foot over the top of the conduit and densified by jetting. Backfill shall be placed and densified to a minimum of 90 percent of maximum from 1 foot above the top of the conduit to the surface.

The Geotechnical Consultant shall test the trench backfill for relative compaction. At least one test should be made for every 300 feet of trench and 2 feet of fill.

7.3 Lift Thickness: Lift thickness of trench backfill shall not exceed those allowed in the Standard Specifications of Public Works Construction unless the Contractor can demonstrate to the Geotechnical Consultant that the fill lift can be compacted to the minimum relative compaction by his alternative equipment and method.

7.4 Observation and Testing: The jetting of the bedding around the conduits shall be observed by the Geotechnical Consultant.

Noise Impact Analysis

FIRE STATION 1 - HEADQUARTERS PROJECT

City of Orange

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ACRONYMS AND ABBREVIATIONS

ANSI	American National Standards Institute
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
City	City of Orange
cmu	Concrete masonry unit
CNEL	Community Noise Equivalent Level
dB	Decibel
dBA	A-weighted decibels
DOT	Department of Transportation
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
EPA	Environmental Protection Agency
Hz	Hertz
Ldn	Day-night average noise level
Leq	Equivalent sound level
Lmax	Maximum noise level
ONAC	Federal Office of Noise Abatement and Control
OSB	Oriented Strand Board
OSHA	Occupational Safety and Health Administration
PPV	Peak particle velocity
RMS	Root mean square
SEL	Single Event Level or Sound Exposure Level
STC	Sound Transmission Class
UMTA	Federal Urban Mass Transit Administration
VdB	Vibration velocity level in decibels

1.0 INTRODUCTION

1.1 Purpose of Analysis and Study Objectives

This Noise Impact Analysis has been prepared to determine the noise and vibration impacts associated with the proposed Fire Station No. 1 & Headquarters project (proposed project). The following is provided in this report:

- A description of the study area and the proposed project;
- Information regarding the fundamentals of noise;
- Information regarding the fundamentals of vibration;
- A description of the local noise guidelines and standards;
- An evaluation of the current noise environment;
- An analysis of the potential short-term construction-related noise impacts from the proposed project; and,
- An analysis of long-term operations-related noise impacts from the proposed project.

1.2 Site Location and Study Area

The project consist of two locations that are both in the City of Orange (City) that include: (1) The proposed Fire Station No. 1 and Headquarters (Fire Station site); and (2) The proposed Parking site for the Fire Department. The proposed Fire Station site is approximately 1.52 acres in area and is located at 105 Water Street. The Fire Station site is currently vacant and is bounded by Chapman Avenue and commercial uses to the north, Jameson Street and commercial and residential uses to the east, the City of Orange Department of Water to the south and Water Street and commercial uses to the west.

The proposed Parking site is approximately 1.23 acres in area and is currently utilized as a parking lot. The Parking site is bounded by commercial uses to the north, Water Street and the City of Orange Water Department to the east, Almond Avenue and residential uses to the south, and parking lot and residential uses to the west. The project study area is shown in Figure 1.

Sensitive Receptors in Project Vicinity

The nearest sensitive receptors to the Fire Station site are homes located on the east side of Jameson Street, which are as near as 60 feet east of the Fire Station site. The nearest sensitive receptors to the Parking site are homes located as near as 30 feet west of the Parking site. The nearest school is Palmyra Elementary School, which is located as near as 460 feet southeast of the Fire Station site and as near as 540 feet east of the Parking site.

1.3 Proposed Project Description

The proposed project is expected to break ground in January 2021 and be completed by July 2022. The proposed project would consist of development of a 16,574 square foot fire station structure with an attached 11,353 square foot headquarters structure, a 250 kilowatt (kW) backup diesel generator, and 21 staff parking spaces and 5 visitor parking spaces on the Fire Station site. In addition, an approximately 3,780 square foot reserve apparatus building that is currently located on the south side of the Fire Station

site will be retrofitted as part of the project. The proposed project would also include development of a parking lot that would include 54 staff parking spaces located behind a security gate that is located on the west side of Water Street. The proposed site plan is shown in Figure 2.

1.4 Executive Summary

Standard Noise Regulatory Conditions

The proposed project will be required to comply with the following regulatory conditions from the City of Orange and State of California.

City of Orange Noise Regulations

The following lists the noise and vibration regulations from the Municipal Code that are applicable, but not limited to the proposed project.

- Section 8.24.040 Exterior Noise
- Section 8.24.050(E) Construction Noise Exemptions

State of California Noise Regulations

The following lists the State of California noise regulations that are applicable, but not limited to the proposed project.

- California Vehicle Code Section 2700-27207 – On Road Vehicle Noise Limits
- California Vehicle Code Section 38365-38350 – Off-Road Vehicle Noise Limits

Summary of Analysis Results

The following is a summary of the proposed project's impacts with regard to the State CEQA Guidelines noise checklist questions.

Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than significant impact.

Generation of excessive groundborne vibration or groundborne noise levels?

Less than significant impact.

For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No impact.

1.5 Project Design Features Incorporated into the Proposed Project

This analysis was based on implementation of the following project design features that are depicted on the plans for the project.

Project Design Feature 1:

The project applicant shall construct a minimum 7.7-foot high concrete masonry unit wall that is depicted on the proposed site plan and is located on the east side of the proposed staff parking lot that is located on the southeast corner of the Fire Station Site. Any doors installed in the wall shall be solid doors with self-closing hinges.

Project Design Feature 2:

The project applicant shall install a sound enclosure on the proposed emergency generator that is depicted on the proposed site plan. The sound enclosure shall be no less effective than a Level 1 Sound Enclosure provided by Generac.

1.6 Mitigation Measures for the Proposed Project

This analysis found that through adherence to the noise and vibration regulations detailed in Section 1.4 above as well as Project Design Features 1 and 2 that are detailed in Section 1.5, all noise and vibration impacts would be reduced to less than significant levels.



Figure 1
Project Location Map

2.0 NOISE FUNDAMENTALS

Noise is defined as unwanted sound. Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm or when it has adverse effects on health. Sound is produced by the vibration of sound pressure waves in the air. Sound pressure levels are used to measure the intensity of sound and are described in terms of decibels. The decibel (dB) is a logarithmic unit which expresses the ratio of the sound pressure level being measured to a standard reference level. A-weighted decibels (dBA) approximate the subjective response of the human ear to a broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies which are audible to the human ear.

2.1 Noise Descriptors

Noise Equivalent sound levels are not measured directly, but are calculated from sound pressure levels typically measured in A-weighted decibels (dBA). The equivalent sound level (Leq) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period. The peak traffic hour Leq is the noise metric used by California Department of Transportation (Caltrans) for all traffic noise impact analyses.

The Day-Night Average Level (Ldn) is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time of day corrections require the addition of ten decibels to sound levels at night between 10 p.m. and 7 a.m. While the Community Noise Equivalent Level (CNEL) is similar to the Ldn, except that it has another addition of 4.77 decibels to sound levels during the evening hours between 7 p.m. and 10 p.m. These additions are made to the sound levels at these time periods because during the evening and nighttime hours, when compared to daytime hours, there is a decrease in the ambient noise levels, which creates an increased sensitivity to sounds. For this reason the sound appears louder in the evening and nighttime hours and is weighted accordingly. The City of Orange relies on the CNEL noise standard to assess transportation-related impacts on noise sensitive land uses.

2.2 Tone Noise

A pure tone noise is a noise produced at a single frequency and laboratory tests have shown that humans are more perceptible to changes in noise levels of a pure tone. For a noise source to contain a “pure tone,” there must be a significantly higher A-weighted sound energy in a given frequency band than in the neighboring bands, thereby causing the noise source to “stand out” against other noise sources. A pure tone occurs if the sound pressure level in the one-third octave band with the tone exceeds the average of the sound pressure levels of the two contiguous one-third octave bands by:

- 5 dB for center frequencies of 500 hertz (Hz) and above
- 8 dB for center frequencies between 160 and 400 Hz
- 15 dB for center frequencies of 125 Hz or less

2.3 Noise Propagation

From the noise source to the receiver, noise changes both in level and frequency spectrum. The most obvious is the decrease in noise as the distance from the source increases. The manner in which noise reduces with distance depends on whether the source is a point or line source as well as ground absorption, atmospheric effects and refraction, and shielding by natural and manmade features. Sound from point sources, such as air conditioning condensers, radiate uniformly outward as it travels away from

the source in a spherical pattern. The noise drop-off rate associated with this geometric spreading is 6 dBA per each doubling of the distance (dBA/DD). Transportation noise sources such as roadways are typically analyzed as line sources, since at any given moment the receiver may be impacted by noise from multiple vehicles at various locations along the roadway. Because of the geometry of a line source, the noise drop-off rate associated with the geometric spreading of a line source is 3 dBA/DD.

2.4 Ground Absorption

The sound drop-off rate is highly dependent on the conditions of the land between the noise source and receiver. To account for this ground-effect attenuation (absorption), two types of site conditions are commonly used in traffic noise models, soft-site and hard-site conditions. Soft-site conditions account for the sound propagation loss over natural surfaces such as normal earth and ground vegetation. For point sources, a drop-off rate of 7.5 dBA/DD is typically observed over soft ground with landscaping, as compared with a 6.0 dBA/DD drop-off rate over hard ground such as asphalt, concrete, stone and very hard packed earth. For line sources a 4.5 dBA/DD is typically observed for soft-site conditions compared to the 3.0 dBA/DD drop-off rate for hard-site conditions. Caltrans research has shown that the use of soft-site conditions is more appropriate for the application of the Federal Highway Administration (FHWA) traffic noise prediction model used in this analysis.

3.0 GROUND-BORNE VIBRATION FUNDAMENTALS

Ground-borne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. The effects of ground-borne vibrations typically only cause a nuisance to people, but at extreme vibration levels damage to buildings may occur. Although ground-borne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. Ground-borne noise is an effect of ground-borne vibration and only exists indoors, since it is produced from noise radiated from the motion of the walls and floors of a room and may also consist of the rattling of windows or dishes on shelves.

3.1 Vibration Descriptors

There are several different methods that are used to quantify vibration amplitude such as the maximum instantaneous peak in the vibrations velocity, which is known as the peak particle velocity (PPV) or the root mean square (rms) amplitude of the vibration velocity. Due to the typically small amplitudes of vibrations, vibration velocity is often expressed in decibels and is denoted as (L_v) and is based on the rms velocity amplitude. A commonly used abbreviation is “VdB”, which in this text, is when L_v is based on the reference quantity of 1 micro inch per second.

3.2 Vibration Perception

Typically, developed areas are continuously affected by vibration velocities of 50 VdB or lower. These continuous vibrations are not noticeable to humans whose threshold of perception is around 65 VdB. Off-site sources that may produce perceptible vibrations are usually caused by construction equipment, steel-wheeled trains, and traffic on rough roads, while smooth roads rarely produce perceptible ground-borne noise or vibration.

3.3 Vibration Propagation

The propagation of ground-borne vibration is not as simple to model as airborne noise. This is due to the fact that noise in the air travels through a relatively uniform median, while ground-borne vibrations travel through the earth which may contain significant geological differences. There are three main types of vibration propagation; surface, compression, and shear waves. Surface waves, or Rayleigh waves, travel along the ground’s surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water. P-waves, or compression waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a “push-pull” fashion). P-waves are analogous to airborne sound waves. S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse or “side-to-side and perpendicular to the direction of propagation.”

As vibration waves propagate from a source, the vibration energy decreases in a logarithmic nature and the vibration levels typically decrease by 6 VdB per doubling of the distance from the vibration source. As stated above, this drop-off rate can vary greatly depending on the soil but has been shown to be effective enough for screening purposes, in order to identify potential vibration impacts that may need to be studied through actual field tests.

4.0 REGULATORY SETTING

The project site is located in the City of Orange. Noise regulations are addressed through the efforts of various federal, state, and local government agencies. The agencies responsible for regulating noise are discussed below.

4.1 Federal Regulations

The adverse impact of noise was officially recognized by the federal government in the Noise Control Act of 1972, which serves three purposes:

- Promulgating noise emission standards for interstate commerce
- Assisting state and local abatement efforts
- Promoting noise education and research

The Federal Office of Noise Abatement and Control (ONAC) was initially tasked with implementing the Noise Control Act. However, the ONAC has since been eliminated, leaving the development of federal noise policies and programs to other federal agencies and interagency committees. For example, the Occupational Safety and Health Administration (OSHA) agency prohibits exposure of workers to excessive sound levels. The Department of Transportation (DOT) assumed a significant role in noise control through its various operating agencies. The Federal Aviation Administration (FAA) regulates noise of aircraft and airports. Surface transportation system noise is regulated by a host of agencies, including the Federal Transit Administration (FTA). Transit noise is regulated by the federal Urban Mass Transit Administration (UMTA), while freeways that are part of the interstate highway system are regulated by the Federal Highway Administration (FHWA). Finally, the federal government actively advocates that local jurisdictions use their land use regulatory authority to arrange new development in such a way that “noise sensitive” uses are either prohibited from being sited adjacent to a highway or, alternately that the developments are planned and constructed in such a manner that potential noise impacts are minimized.

Although the proposed project is not under the jurisdiction of the FTA, the FTA is the only agency that provides specific guidance for construction noise. The FTA recommends developing construction noise criteria on a project-specific basis that utilizes local noise ordinances if possible. However, local noise ordinances usually relates to nuisance and hours of allowed activity and sometimes specify limits in terms of maximum levels, but are generally not practical for assessing the noise impacts of a construction project. Project construction noise criteria should take into account the existing noise environment, the absolute noise levels during construction activities, the duration of the construction, and the adjacent land uses. The FTA standards are based on extensive studies by the FTA and other governmental agencies on the human effects and reaction to noise and a summary of the FTA findings for a general construction noise assessment are provided below in Table A.

Table A – FTA General Assessment Construction Noise Criteria

Land Use	Day (dBA Leq _(1-hour))	Night (dBA Leq _(1-hour))
Residential	90	80
Commercial	100	100
Industrial	100	100

Source: Federal Transit Administration, 2018.

Since the federal government has preempted the setting of standards for noise levels that can be emitted by the transportation sources, the City is restricted to regulating the noise generated by the transportation system through nuisance abatement ordinances and land use planning.

4.2 State Regulations

Noise Standards

California Department of Health Services Office of Noise Control

Established in 1973, the California Department of Health Services Office of Noise Control (ONC) was instrumental in developing regularity tools to control and abate noise for use by local agencies. One significant model is the “Land Use Compatibility for Community Noise Environments Matrix,” which allows the local jurisdiction to clearly delineate compatibility of sensitive uses with various incremental levels of noise.

California Noise Insulation Standards

Title 24, Chapter 1, Article 4 of the California Administrative Code (California Noise Insulation Standards) requires noise insulation in new hotels, motels, apartment houses, and dwellings (other than single-family detached housing) that provides an annual average noise level of no more than 45 dBA CNEL. When such structures are located within a 60-dBA CNEL (or greater) noise contour, an acoustical analysis is required to ensure that interior levels do not exceed the 45-dBA CNEL annual threshold. In addition, Title 21, Chapter 6, Article 1 of the California Administrative Code requires that all habitable rooms, hospitals, convalescent homes, and places of worship shall have an interior CNEL of 45 dB or less due to aircraft noise.

Government Code Section 65302

Government Code Section 65302 mandates that the legislative body of each county and city in California adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines published by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable.

California Vehicle Code Section 27200-27207 – On-Road Vehicle Noise

California Vehicle Code Section 27200-27207 provides noise limits for vehicles operated in California. For vehicles over 10,000 pounds noise is limited to 88 dB for vehicles manufactured before 1973, 86 dB for vehicles manufactured before 1975, 83 dB for vehicles manufactured before 1988, and 80 dB for vehicles manufactured after 1987. All measurements are based at 50 feet from the vehicle.

California Vehicle Section 38365-38380 – Off-Road Vehicle Noise

California Vehicle Code Section 38365-38380 provides noise limits for off-highway motor vehicles operated in California. 92 dBA for vehicles manufactured before 1973, 88 dBA for vehicles manufactured before 1975, 86 dBA for vehicles manufactured before 1986, and 82 dBA for vehicles manufactured after December 31, 1985. All measurements are based at 50 feet from the vehicle.

Vibration Standards

Title 14 of the California Administrative Code Section 15000 requires that all state and local agencies implement the California Environmental Quality Act (CEQA) Guidelines, which requires the analysis of exposure of persons to excessive groundborne vibration. However, no statute has been adopted by the state that quantifies the level at which excessive groundborne vibration occurs.

Caltrans issued the *Transportation- and Construction-Induced Vibration Guidance Manual* in 2004. The manual provides practical guidance to Caltrans engineers, planners, and consultants who must address vibration issues associated with the construction, operation, and maintenance of Caltrans projects. However, this manual is also used as a reference point by many lead agencies and CEQA practitioners throughout California, as it provides numeric thresholds for vibration impacts. Thresholds are established for continuous (construction-related) and transient (transportation-related) sources of vibration, which found that the human response becomes distinctly perceptible at 0.25 inch per second PPV for transient sources and 0.04 inch per second PPV for continuous sources.

4.3 Local Regulations

The City of Orange General Plan and Municipal Code establishes the following applicable policies related to noise and vibration.

City of Orange General Plan

The City of Orange has developed its own land use compatibility standards based on recommended parameters from the California Governor’s Office of Planning and Research that rate compatibility. Using the State’s land use compatibility guidelines, the City has established interior and exterior noise standards. The City’s compatibility standards provide only for normally acceptable conditions based on State recommendations and City land use designations. The City’s Land Use Compatibility standards are presented in Table B.

Table B – City of Orange Maximum Allowable Noise Exposure – Transportation Sources

Land Use Designations	Land Use Uses	CNEL (dBA)	
		Interior ^{1,3}	Exterior ²
Estate Low Density Residential	Single-family, duplex, and multiple-family	45	65
Low Density Residential			
Low Medium Density Residential	Mobile home park	N/A	65
Medium Density Residential	Single-family	45	65
Neighborhood	Mobile home park	N/A	65
Mixed-Use	Multiple-family, mixed use	45	65 ^{4,5}
Neighborhood Office Professional	Transient lodging-motels, hotels	45	65
Old Towne Mixed-use	Sports arenas, outdoor spectator sports	N/A	N/A
General Commercial	Auditoriums, concert halls, amphitheaters	45	N/A
Yorba Commercial Overlay			
Urban Mixed-use	Office buildings, business, commercial and professional	50	N/A
Urban Office Professional			
Light Industrial	Manufacturing, utilities, agriculture	N/A	N/A
Industrial			
Public Facilities and Institutions	Schools, nursing homes, day care facilities, hospitals, convalescent facilities, dormitories	45	65

Table B – City of Orange Maximum Allowable Noise Exposure – Transportation Sources

Land Use Designations	Land Use	CNEL (dBA)	
	Uses	Interior ^{1,3}	Exterior ²
	Government Facilities-offices, fire stations, community buildings	45	N/A
	Places of Worship, Churches	45	N/A
	Libraries	45	N/A
	Utilities	N/A	N/A
	Cemeteries	N/A	N/A
Recreation Commercial Open Space	Playgrounds, neighborhood parks	N/A	70
Open Space-Park			
Open Space-Ridgeline Resource Area	Golf courses, riding stables, water recreation, cemeteries	N/A	N/A

Notes:

- (1) Interior habitable environment excludes bathrooms, closets and corridors.
- (2) Exterior noise level standard to be applied at outdoor activity areas; such as private yards, private patio or balcony of a multi-family residence. Where the location of an outdoor activity area is unknown or not applicable, the noise standard shall be applied inside the property line of the receiving land use.
- (3) Interior noise standards shall be satisfied with windows in the closed position. Mechanical ventilation shall be provided per Uniform Building Code (UBC) requirements.
- (4) Within the Urban Mixed-Use, Neighborhood Mixed-Use, Old Towne Mixed-Use, and Medium Density Residential land use designations, exterior space standards apply only to common outdoor recreational areas.
- (5) Within Urban Mixed-Use and Medium Density Residential land use designations, exterior noise levels on private patios or balconies located within 250 feet of freeways (I-5, SR-57, SR-55, SR-22, or SR-241) and Smart Streets and Principal Arterial identified in the Circulation & Mobility Element that exceed 70 dB should provide additional common open space.

N/A=Not Applicable to specified land use category or designation.

Source: City of Orange General Plan Table N-3.

The City’s maximum allowable noise exposure levels from stationary sources are defined in Table N-4 of the General Plan and reprinted below in Table C.

Table C – City of Orange Maximum Allowable Noise Exposure – Stationary Sources

Noise Level Descriptor	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly Equivalent Level (Leq), dBA	55	45
Maximum Level (Lmax), dBA	70	65

Notes:

- (1) These standards apply to new or existing noise sensitive land uses affected by new or existing non-transportation noise sources, as determined at the outdoor activity area of the receiving land use. However, these noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g. caretaker dwellings).
- (2) Each of the noise levels specified above should be lowered by five dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. Such noises are generally considered by residents to be particularly annoying and are a primary source of noise complaints. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g. caretaker dwellings).
- (3) No standards have been included for interior noise levels. Standards construction practices that comply with exterior noise levels identified in this table generally result in acceptable interior noise levels.
- (4) The City may impose noise level standards which are more or less restrictive than those specified above based upon determination of existing low or high ambient noise levels. If the existing ambient noise level exceeds the standards listed in Table N-4, then the noise level standards shall be increased at 3 dB increments to encompass the ambient noise environment. Noise level standards incorporating adjustments for existing ambient noise levels shall not exceed a maximum of 70 dB Leq.

Source: City of Orange General Plan Table N-4.

For City analysis of noise impacts and determining appropriate mitigation under the California Environmental Quality Act (CEQA), in addition to the maximum allowable noise level standards outlined in Tables N-3 (Table B above) and N-4 (Table C above) from the General Plan, an increase in ambient noise levels is assumed to be a significant noise impact if a project causes ambient noise levels to exceed the following:

- Where the existing ambient noise level is less than 60 dBA, a project related permanent increase in ambient noise levels of 5 dBA CNEL or greater.
- Where the existing ambient noise level is greater than 65 dBA, a project related permanent increase in ambient noise levels of 3 dBA CNEL or greater.

In addition to the standards provided above, the City of Orange General Plan includes the following goals and policies that are applicable to the proposed project

Goals and Policies

GOAL 2.0: Minimize vehicular traffic noise in residential areas and near noise-sensitive land uses.

Policy 2.2: Encourage coordinated site planning and traffic control measures that minimize traffic noise in noise-sensitive land use areas.

GOAL 7.0: Minimize construction, maintenance vehicle, and nuisance noise in residential areas and near noise-sensitive land uses.

Policy 7.2: Require developers and contractors to employ noise minimizing techniques during construction and maintenance operations.

Policy 7.3: Limit the hours of construction and maintenance operations located adjacent to noise-sensitive land uses.

Policy 7.4: Encourage limitations on the hours of operations and deliveries for commercial, mixed-use, and industrial uses abutting residential zones.

City of Orange Municipal Code

The City of Orange Municipal Code establishes the following applicable standards related to noise.

Section 8.24.020 Definitions.

The following words, phrases and terms as used in this chapter shall have the meaning as indicated below:

A. "Ambient noise level" means the all-encompassing noise level associated with a given environment, being a composite of sounds from all sources, excluding the alleged offensive noise at the location and approximate time at which a comparison with the alleged offensive noise is to be made.

B. "Adjusted ambient noise level" means the measured ambient noise level plus 3 dB (A). Three (3) dB (A) is the industry-accepted threshold of human perceptibility for a change in noise environment.

Section 8.24.040 Exterior Noise Standards.

A. The following noise standards [Table D] for fixed noise sources, unless otherwise specifically indicated, shall apply to all residential property:

Table D – City of Orange Municipal Code Exterior Noise Standards

Standard	Noise Level	Time Period
Hourly Average (L_{eq})	55 dB (A)	7:00 a.m. – 10:00 p.m.
	50 dB (A)	10:00 p.m. – 7:00 a.m.
Maximum Level	70 dB (A)	7:00 a.m. – 10:00 p.m.
	65 dB (A)	10:00 p.m. – 7:00 a.m.

Source: City of Orange Municipal Code Section 8.24.040.

B. It is unlawful for any person at any location within the City to create any noise, or to allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which causes the noise level when measured on any other residential property to exceed the noise standards identified in Table 8.24.040. For multi-family residential or mixed use developments located within the City’s Urban Mixed Use, Neighborhood Mixed Use, Old Towne Mixed Use or Medium Density Residential General Plan land use districts, exterior noise standards shall apply to common recreation areas only and shall not apply to private exterior space (such as a private yard, patio, or balcony)

C. In the event the ambient noise level exceeds the noise standards identified in Table 8.24.040 of this section, the “adjusted ambient noise level” shall be applied as the noise standard. In cases where the noise standard is adjusted due to a high ambient noise level, the noise standard shall not exceed the “adjusted ambient noise level”, or 70 dB (A), whichever is less. In cases where the ambient noise level is already greater than 70 dB (A), the ambient noise level shall be applied as the noise standard.

D. Each of the noise limits specified in Table 8.240.040 shall be reduced by five dB(A) for impact or simple tone noises, recurring impulsive noises, or for noises consisting of speech or music. (Ord. No. 1-4 § I, 8-12-14)

8.24.050 Exemptions from Chapter Provisions.

The following activities shall be exempted from the provisions of this chapter:

E. Noise sources associated with construction, repair, remodeling, or grading of any real property, provided said activities take place between the hours of 7:00 a.m. and 8:00 p.m. on any day except for Sunday or a Federal holiday, or between the hours of 9:00 a.m. and 8:00 p.m. on Sunday or a Federal holiday. Noise generated outside of the hours specified are subject to the noise standards identified in Table 8.24.040;

I. Noise sources associated with the maintenance of real property, provided such activities take place between the hours of 7:00 A.M. and 8:00 P.M. on any day except Sunday or a Federal holiday, or between the hours of 9:00 A.M. and 8:00 P.M. on Sunday or a Federal holiday;

L. Mobile noise sources including but not limited to operational noise from trains, or automobiles or trucks traveling on roadways. Transportation noise as related to noise/land use compatibility is subject to the City's General Plan Noise Element;

M. Any activity to the extent regulation thereof has been preempted by State or Federal Law. (Ord. No. 1-4 § I, 8-12-14)

8.24.060 Special Provisions for Schools, Hospitals and Churches.

It is unlawful for any person to create any noise which causes the noise level at any school, hospital, or church, while the same is in use, to exceed the noise limits as specified in Section 8.24.040, or which noise level unreasonably interferes with the use of such institutions. (Ord. No. 1-4 § I, 8-12-14)

5.0 EXISTING NOISE CONDITIONS

To determine the existing noise levels, noise measurements have been taken in the vicinity of the project site. The field survey noted that noise within the proposed project area is generally characterized by vehicle traffic on Chapman Avenue, which is located adjacent to the north side of the Fire Station site. The following describes the measurement procedures, measurement locations, noise measurement results, and the modeling of the existing noise environment.

5.1 Noise Measurement Equipment

The noise measurements were taken using three Larson Davis Model LXT1 Type 1 sound level meters programmed in “slow” mode to record the sound pressure level at 1-second intervals for 24 hours in “A” weighted form. In addition, the L_{eq} averaged over the entire measuring time and L_{max} were recorded with both sound level meters. The sound level meters and microphones were mounted on trees and fences, approximately five to six feet above the ground and were equipped with windscreens during all measurements. The noise meters were calibrated before and after the monitoring using a Larson Davis Cal200 calibrator. All noise level measurement equipment meets American National Standards Institute specifications for sound level meters (S1.4-1983 identified in Chapter 19.68.020.AA).

Noise Measurement Location

The noise monitoring locations were selected in order to obtain noise measurements of the current noise levels in the vicinity of the nearby homes. The noise measurement sites were selected to provide a representative sampling of the existing noise levels in the project vicinity. Descriptions of the noise monitoring sites are provided below in Table E and are shown in Figure 3. Appendix A includes a photo index of the study area and noise level measurement locations.

Noise Measurement Timing and Climate

The noise measurements were recorded between 12:18 p.m. on Wednesday, April 1, 2020 and 12:35 p.m. on Thursday, April 2, 2020. When the noise measurements were started the sky was clear, the temperature was 72 degrees Fahrenheit, the humidity was 49 percent, barometric pressure was 29.58 inches of mercury, and the wind was blowing around seven miles per hour. Overnight, the sky was partly cloudy and the temperature dropped to 58 degrees Fahrenheit. At the conclusion of the noise measurements, the sky was cloudy, the temperature was 69 degrees Fahrenheit, the humidity was 53 percent, barometric pressure was 29.69 inches of mercury, and the wind was blowing around six miles per hour.

5.2 Noise Measurement Results

The results of the noise level measurements are presented in Table E. The measured sound pressure levels in dBA have been used to calculate the minimum and maximum L_{eq} averaged over 1-hour intervals. Table E also shows the L_{eq} , L_{max} , and CNEL, based on the entire measurement time. The noise monitoring data printouts are included in Appendix B. Figure 4 shows a graph of the 24-hour noise measurements.

Table E – Existing (Ambient) Noise Level Measurements

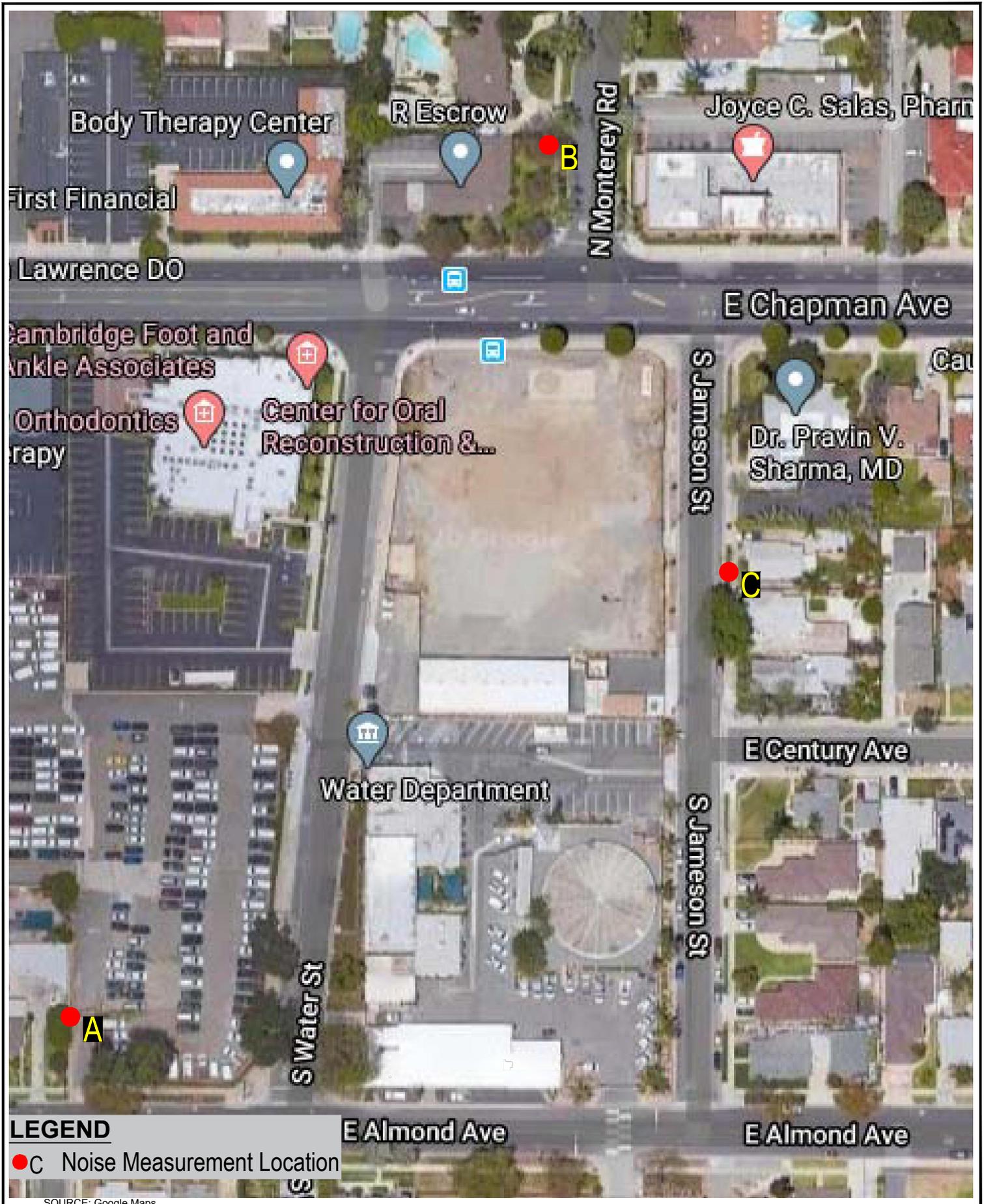
Site No.	Site Description	Average (dBA L _{eq})		1-hr Average (dBA L _{eq} /Time)		Average (dBA CNEL)
		Daytime ¹	Nighttime ²	Minimum	Maximum	
A	Located approximately 100 feet south of the southwest corner of the Parking site, on a parking lot gate that is located approximately 90 feet north of Almond Ave Centerline.	54.8	47.0	38.5 12:58 a.m.	61.5 11:16 a.m.	56.3
B	Located approximately 160 feet north of the Fire Station site on a tree that is located approximately 35 feet west of Monterey Road centerline.	64.2	53.2	46.6 10:56 p.m.	68.8 1:48 a.m.	64.0
C	Located approximately 50 feet east of the Fire Station site on a sign in front of the home at 129 Jameson Street	56.8	47.2	40.1 1:13 a.m.	60.1 9:40 a.m.	60.1

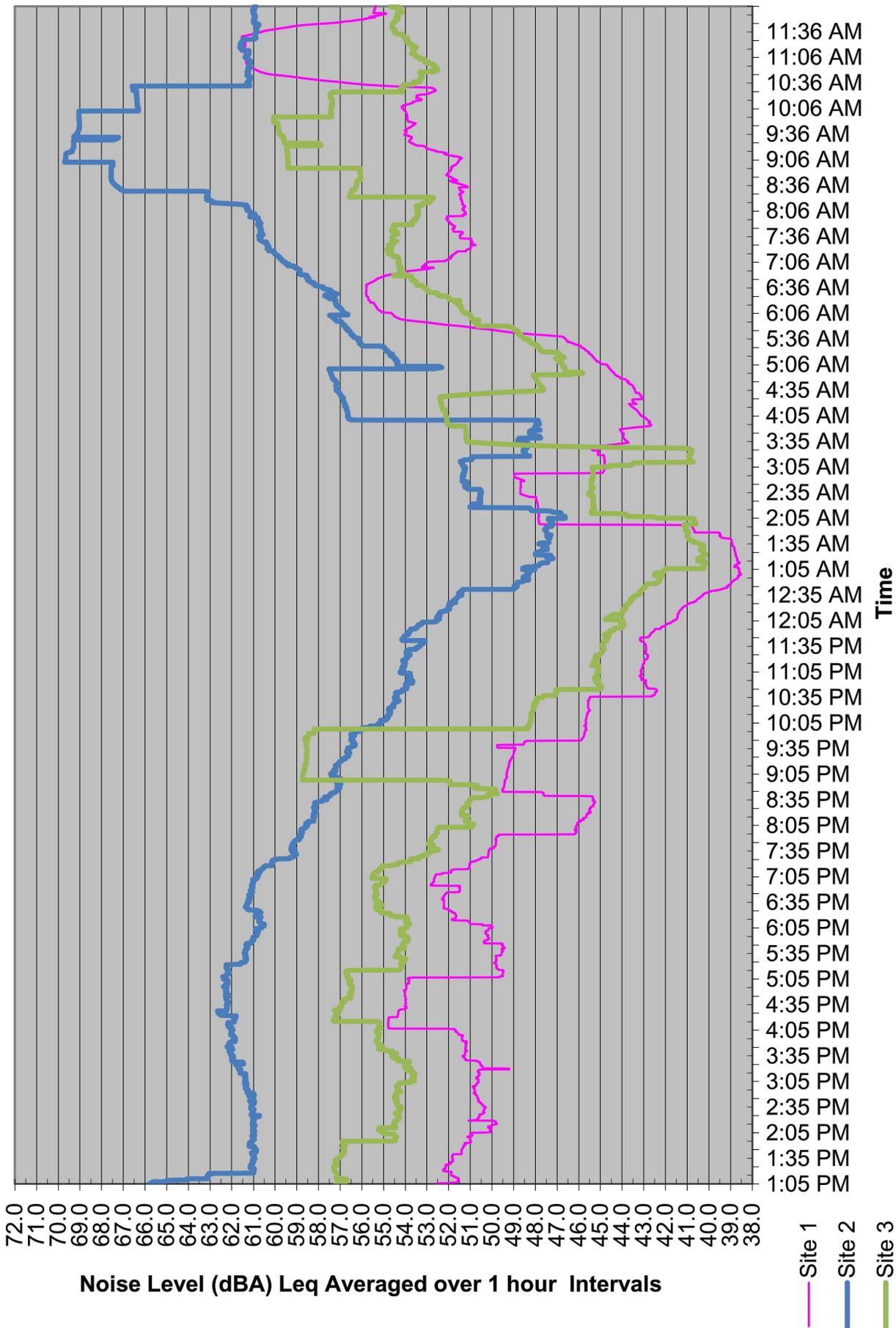
Notes:

¹ Daytime defined as 7:00 a.m. to 10:00 p.m. (Section 8.24.040 of the Municipal Code)

² Nighttime define as 10:0 p.m. to 7:00 a.m. (Section 8.24.040 of the Municipal Code)

Source: Noise measurements taken between Wednesday April 1, and Thursday, April 2, 2020.





SOURCE: Three Larson Davis Model LXT1 Type 1 Sound Level Meters.



Figure 4
Field Noise Measurements Graph

6.0 MODELING PARAMETERS AND ASSUMPTIONS

6.1 Construction Noise

The noise impacts from construction of the proposed project have been analyzed through use of the FHWA's Roadway Construction Noise Model (RCNM). The FHWA compiled noise measurement data regarding the noise generating characteristics of several different types of construction equipment used during the Central Artery/Tunnel project in Boston. Table F below provides a list of the construction equipment anticipated to be used for each phase of construction as detailed in *Air Quality, Energy and Greenhouse Gas Emissions Impact Analysis Fire Station No. 1 & Headquarters Project* (Air Quality Analysis), prepared by Vista Environmental, June 22, 2020.

Table F – Construction Equipment Noise Emissions and Usage Factors

Equipment Description	Number of Equipment	Acoustical Use Factor ¹ (percent)	Spec 721.560 Lmax at 50 feet ² (dBA, slow ³)	Actual Measured Lmax at 50 feet ⁴ (dBA, slow ³)
Demolition				
Concrete/Industrial Saws	1	20	90	90
Rubber Tired Dozers	1	40	85	82
Tractors/Loaders/Backhoes	3	40	84	N/A
Grading				
Grader	1	40	85	83
Rubber Tired Dozer	1	40	85	82
Excavator	1	40	85	81
Tractor, Loader or Backhoe ⁵	2	40	84	N/A
Building Construction				
Crane	1	16	85	81
Forklift (Gradall)	2	40	85	83
Generator	1	50	82	81
Tractor, Loader or Backhoe ⁵	1	40	84	N/A
Welder	3	40	73	74
Paving				
Cement & Mortar Mixer ⁵	1	50	80	80
Paver	1	50	85	77
Paving Equipment	1	50	85	77
Roller	2	20	85	80
Tractor, Loader or Backhoe ⁵	1	40	84	N/A
Architectural Coating				
Air Compressor	1	40	80	78

Notes:

¹ Acoustical use factor is the percentage of time each piece of equipment is operational during a typical workday.

² Spec 721.560 is the equipment noise level utilized by the RCNM program.

³ The "slow" response averages sound levels over 1-second increments. A "fast" response averages sound levels over 0.125-second increments.

⁴ Actual Measured is the average noise level measured of each piece of equipment during the Central Artery/Tunnel project in Boston, Massachusetts primarily during the 1990s.

⁵ For the tractor/loader/backhoe, the tractor noise level was utilized, since it is the loudest of the three types of equipment.

⁶ For the cement & mortar mixer, the concrete mixer truck noise level was utilized.

Source: Federal Highway Administration, 2006 and CalEEMod default equipment mix.

Table F also shows the associated measured noise emissions for each piece of equipment from the RCNM model and measured percentage of typical equipment use per day. Construction noise impacts to the nearby sensitive receptors have been calculated according to the equipment noise levels and usage factors listed in Table F and through use of the RCNM. For each phase of construction, the nearest piece of equipment was placed at the shortest distance of possible locations for the proposed activity to the nearest sensitive receptor and each subsequent piece of equipment was placed an additional 50 feet away. In order to account for the existing approximately 6 foot high wall located between the Parking site and the nearest home located to the southwest, 5 dB of shielding was added to the RCNM model. The RCNM printouts are provided in Appendix C.

6.2 Operational Noise

The proposed project would consist of the relocation of Fire Station No. 1 & Headquarters from its current location at 176 S Grand Street to its proposed location at 105 Water Street. In order to determine the noise that will be created by the proposed project, a 24-hour noise measurement was taken in the yard at the existing Fire Station No. 1, that captured all fire station-related noise sources, including if sirens were on when vehicles left the station. In addition, a reference noise measurement of operational rooftop mechanical equipment and the manufacturer noise specifications for a 250 kW backup generator have been utilized to provide a complete assessment of the potential operational noise that will be created by the proposed project. The following describes the 24-hour reference measurement procedure and reference noise measurement results.

24-hour Reference Noise Measurement Procedure

The 24 hour reference noise measurement of the existing Fire Station No. 1 & Headquarters was taken between 11:59 a.m. on April 29, 2020 and 11:59 a.m. on April 30, 2020, using a Larson-Davis Model 831 Type 1 precision sound level meter programmed in “slow” mode to record noise levels in “A” weighted form as well as the frequency spectrum of the noise broken down into 1/3 octaves. The sound level meter and microphone were mounted on a pole in the yard of the Fire Station, which is located approximately 8 feet east of the rear property line and approximately 30 feet west of the back doors to the Fire Station, that are normally left open. The sound level meter was calibrated before and after the monitoring using a Larson-Davis calibrator, Model CAL 200. The accuracy of the calibrator is maintained through a program established through the manufacturer and is traceable to the National Bureau of Standards. The unit meets the requirements of ANSI Standard S1.4-1984 and IEC Standard 942: 1988 for Class 1 equipment. All noise level measurement equipment meets American National Standards Institute (ANSI) specifications for sound level meters (S1.4-1983 identified in Chapter 19.68.020.AA).

Reference Noise Measurement and Manufacturer Noise Specification Results

The results of the 24 hour reference noise level measurement taken at Fire Station No. 1 & Headquarters, a reference noise measurement of rooftop mechanical equipment, and the manufacturer noise specifications for a 250 kW backup generator are presented in Table G and the reference noise measurement data printouts are included in Appendix D.

Table G – Reference Noise Level Measurements and Equipment Noise Specifications

Noise Measurement/Equipment Specification	Average Distance from Noise Sources (feet)	Noise Level (dBA)		
		L50	Leq	Lmax
24-hour Noise Measurement at Fire Station No.1 that captured vehicles, equipment and sirens	30	47.9	55.7	86.8
Rooftop noise measurement that captured HVAC equipment	10	66.6	66.6	67.6
Generac SD250 Diesel Generator with waterproof enclosure	23	83	83	83
Generac SD250 Diesel Generator with Level 2 Sound Enclosure	23	74	74	74

Source: Reference Noise Measurement printouts provided in Appendix D.

6.3 Vibration

Construction activity can result in varying degrees of ground vibration, depending on the equipment used on the site. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings in the vicinity of the construction site respond to these vibrations with varying results ranging from no perceptible effects at the low levels to slight damage at the highest levels. Table H gives approximate vibration levels for particular construction activities. The data in Table H provides a reasonable estimate for a wide range of soil conditions.

Table H – Vibration Source Levels for Construction Equipment

Equipment		Peak Particle Velocity (inches/second)	Approximate Vibration Level (L _v) at 25 feet
Pile driver (impact)	Upper range	1.518	112
	typical	0.644	104
Pile driver (sonic)	Upper range	0.734	105
	typical	0.170	93
Clam shovel drop (slurry wall)		0.202	94
Vibratory Roller		0.210	94
Hoe Ram		0.089	87
Large bulldozer		0.089	87
Caisson drill		0.089	87
Loaded trucks		0.076	86
Jackhammer		0.035	79
Small bulldozer		0.003	58

Source: Federal Transit Administration, 2018.

The construction-related vibration impacts have been calculated through the vibration levels shown above in Table H and through typical vibration propagation rates. The equipment assumptions were based on the equipment lists provided above in Table F.

7.0 IMPACT ANALYSIS

7.1 CEQA Thresholds of Significance

Consistent with the California Environmental Quality Act (CEQA) and the State CEQA Guidelines, a significant impact related to noise would occur if a proposed project is determined to result in:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Generation of excessive groundborne vibration or groundborne noise levels; or
- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

7.2 Generation of Noise Levels in Excess of Standards

The proposed project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. The following section calculates the potential noise emissions associated with the temporary construction activities and long-term operations of the proposed project and compares the noise levels to the City standards.

Construction-Related Noise

The construction activities for the proposed project are anticipated to include demolition and grading of both project sites, building construction, paving of the onsite driveways and parking lots, and application of architectural coatings. Noise impacts from construction activities associated with the proposed project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities. The nearest sensitive receptors to the Fire Station site are homes located on the east side of Jameson Street, which are as near as 60 feet east of the Fire Station site. The nearest sensitive receptors to the Parking site are homes located as near as 30 feet southwest of the Parking site.

Section 8.24.050(E) of the Municipal Code exempts construction noise from the City noise standards that occurs between 7:00 a.m. and 8:00 p.m. Monday through Saturday and between 9:00 a.m. and 8:00 p.m. on Sundays and holidays. However, the City construction noise standards do not provide any limits to the noise levels that may be created from construction activities and even with adherence to the City standards, the resultant construction noise levels may result in a significant substantial temporary noise increase to the nearby residents and offsite workers.

In order to determine if the proposed construction activities would create a significant substantial temporary noise increase, the FTA construction noise criteria thresholds detailed above in Section 4.1 have been utilized, which shows that a significant construction noise impact would occur if construction noise exceeds 90 dBA Leq at any of the nearby sensitive receptors. The calculated construction noise results are shown below in Table I and the RCNM printouts are provided in Appendix C.

Table I – Construction Noise Levels at the Nearest Homes

Construction Phase	Construction Noise Level (dBA Leq) at:	
	Nearest Homes to Fire Station Site ¹	Nearest Homes to Parking Site ²
Demolition	82	82
Grading	81	81
Building Construction	76	61
Paving	74	73
Painting	71	71
FTA Construction Noise Threshold³	90	90
Exceed Threshold?	No	No

¹ The nearest homes to the Fire Station site are located on the east side of Jameson Street and are as near as 60 feet east of the Fire Station site.

² The nearest homes to the Parking site are located as near as 30 feet southwest from the southwest corner of the Parking site. 5 dB of shielding was added to account for the existing 6 foot high wall located on the home’s property line.

³ FTA Construction Noise Threshold obtained from Table A above.

Source: RCNM, Federal Highway Administration, 2006

Table I shows that the greatest noise impacts would occur during the demolition phase of construction, with a noise level as high as 82 dBA Leq at the nearest homes to the Fire Station site and nearest homes to the Parking site. Table I also shows that none of the construction phases would exceed the FTA construction noise standard of 90 dBA for residential uses. Therefore, through adherence to allowable construction times provided in 8.24.050(E) of the Municipal Code, the construction activities for the proposed project would not create a substantial temporary increase in ambient noise levels that are in excess of applicable noise standards. Impacts would be less than significant.

Operational-Related Noise

The proposed project would consist of the relocation of Fire Station No. 1 & Headquarters. Potential noise impacts associated with the operations of the proposed project would be from project-generated vehicular traffic on the nearby roadways as well as from onsite noise sources associated with the operation of the proposed project.

Roadway Vehicular Noise

Vehicle noise is a combination of the noise produced by the engine, exhaust and tires. According to the General Plan an increase in ambient noise levels is assumed to be a significant noise impact if a project causes ambient noise levels to exceed the following:

- Where the existing ambient noise level is less than 60 dBA, a project related permanent increase in ambient noise levels of 5 dBA CNEL or greater.
- Where the existing ambient noise level is greater than 65 dBA, a project related permanent increase in ambient noise levels of 3 dBA CNEL or greater.

Since the proposed project consists of the relocation of the Fire Station No. 1 & Headquarters from 176 S Grand Street to the proposed location, which is approximately 0.7 mile away, no traffic analysis was prepared for the project, since the project generated vehicle trips would occur on the same roads for both without and with project conditions. However, the proposed project has the potential to increase traffic on Chapman Avenue in the immediate vicinity of the project site. According to the *Program Environmental Impact Report Orange General Plan*, March 2010, in the year 2030 Chapman Avenue

between Cambridge Street and Tustin Street will have 28,400 vehicles per day. According to the CalEEMod model run in the Air Quality Analysis the proposed project would generate up to 1,932 daily trips, which would result in up to a 6.8 percent increase of daily trips on Chapman Avenue in the vicinity of the project site.

In order for project-generated vehicular traffic to increase the noise level on Chapman Avenue by 3 dB, the roadway traffic would have to double, and for the roadway noise levels to increase by 1.5 dB, the roadway traffic would have to increase by 50 percent. Since the proposed project would only result in a maximum of a 6.8 percent increase in traffic volumes on Chapman Avenue, the project-related roadway noise increase is anticipated to be negligible. It should also be noted that a large percentage of trips generated from the existing Fire Station No. 1 & Headquarters currently travel on Chapman Avenue in the vicinity of the project site, so the actual project trip generation would be much less than 6.8 percent of the traffic on Chapman Avenue. Roadway noise impacts created from the proposed project would be less than significant.

Onsite Noise Impacts

The operation of the proposed Fire Station No. 1 & Headquarters may create an increase in noise levels created onsite from fire station activities, rooftop mechanical equipment, and the backup generator at the nearby homes located as near as 60 feet east of the Fire Station site. The Parking site would consist long-term employee parking behind a security gate, with only two visitor parking spaces. The Parking site would have very little parking activity that would create noise levels that would be well below City noise standards.

Section 8.24.040(A) of the City's Municipal Code limits noise generated from onsite activities at the nearby residential properties to 55 dBA Leq and 70 dBA Lmax between the hours of 7:00 a.m. and 10:00 p.m. and 50 dBA Leq and 65 dBA Lmax between the hours of 10:00 p.m. and 7:00 a.m..

In order to determine the noise impacts from onsite from fire station activities that include siren use at a fire station, rooftop mechanical equipment, and the backup generator, reference noise measurements were taken or manufacturer specifications were obtained for each noise source and have been detailed above in Section 6.2 and printouts of the reference noise measurements are provided in Appendix C.

Table J provides a summary of the reference noise levels that are detailed above in Section 6.2 and shows the anticipated noise level from each source at the nearest homes located on the east side of the Fire Station site. The operational reference noise measurements are shown in Appendix D and the noise reduction calculations provided by the proposed minimum 7.7 foot high sound wall on the east side of the staff parking area that is detailed in Project Design Feature 1, a 4 foot high parapet wall that will shield the rooftop equipment, and use of a sound enclosure on the backup generator that is detailed in Project Design Feature 2 are shown in Appendix E.

Table J –Operational Noise Levels at the Nearest Homes to the Fire Station Site

Noise Source	Reference Noise		Calculated Noise Levels		City Noise Standards (Day/Night)	Exceed Standard? (Day/Night)
	Distance Receptor to Source (feet)	Reference Noise Level (dBA)	Distance to Homes (feet)	Noise Level ¹ (dBA Leq)		
Fire Station Activities (including siren use)	30	55.7 Leq	150	34 Leq	55/50	No/No
		67.9 Lmax		65 Lmax	70/65	No/No
Rooftop Equipment	10	66.6 Leq	70	31 Leq	55/50	No/No
		79.2 Lmax		43 Lmax	70/65	No/No
Backup Generator	23	76.0 Leq	200	50 Leq	55/50	No/No
		76.0 Lmax		50 Lmax	70/65	No/No

Notes:

¹ The calculated noise levels account for the noise reduction provided by Project Design Feature 1 of the proposed 7.7-foot high wall on the east side of staff parking area and the proposed 4-foot parapet wall on the roof for the Rooftop Equipment and Project Design Feature 2 that requires a sound enclosure for the backup generator (see Appendix H).

Table I shows that with implementation of Project Design Features 1 and 2 that the onsite operational noise levels created by the proposed Fire Station No. 1 & Headquarters would be within the City’s daytime and nighttime average and maximum noise standards at the nearest homes, located on the east side of the Fire Station site. Therefore, the proposed project would not result in a substantial permanent increase in ambient noise levels from onsite noise sources. Impacts would be less than significant.

Emergency Vehicle Siren Noise on Nearby Roads

The onsite noise analysis, provided above, analyzed the noise impacts created from all anticipated onsite noise impacts, including emergency vehicle siren noise. However, there is potential that the proposed relocation of Fire Station No. & Headquarters, will result in increased emergency vehicle siren use on the nearby roads. According to the Fire Department, Fire Station No. 1 received 16,483 total calls in 2019, which equates to an average of 45 calls per day. It should be noted that a majority of calls do not require the use of sirens (typically less than 23 calls per day use sirens) and that approximately a quarter of the calls from the existing Fire Station No. 1 travel along Chapman Avenue in the vicinity of the project site (approximately 6 calls per day currently travel on Chapman Avenue from Fire Station No. 1), so the proposed relocation of Fire Station No. 1 would likely result in an increase of siren use in the vicinity of the project site by an average of approximately 17 calls per day (i.e., $45/2 = 23 - 6 = 17$).

Section 8.24.050(D) of the Municipal Code exempts noise created from emergency vehicles and Section 8.24.050(L) of the Municipal Code exempts noise created from vehicles operating on public roadways. As such, emergency vehicle siren use is exempt from the Municipal Code noise standards. However, the General Plan details that an increase in ambient noise levels is assumed to be a significant noise impact if a project causes ambient noise levels to exceed the following:

- Where the existing ambient noise level is less than 60 dBA, a project related permanent increase in ambient noise levels of 5 dBA CNEL or greater.
- Where the existing ambient noise level is greater than 65 dBA, a project related permanent increase in ambient noise levels of 3 dBA CNEL or greater.

It is anticipated that the home at that would experience the greatest impact from increased siren use is located at 120 N Monterey Road, which is located as near as 175 feet north of the proposed Fire Station exit driveway on Chapman Avenue. The distance between the nearest home and Chapman Avenue that is located in front of the proposed fire station driveway was selected, since that is the nearest point to the home that would capture siren noise from emergency vehicles traveling both east and west on Chapman Avenue and represents the worst-case location for siren noise. Noise Measurement Site B that is shown above in Table E, was taken near the south property line at 120 N Monterey Road, and measured a noise level of 64.0 dBA CNEL.

Most emergency vehicle sirens are rated around 124 dB at 10 feet from the siren (<https://www.fireapparatusmagazine.com/2017/04/04/siren-limitation-training/#gref>). Based on standard geometric spreading of noise, at 175 feet, the siren noise would be 99 dB. The nearest home is located behind a row of commercial buildings and Caltrans research (Caltrans, 2013) has found that a row of buildings provide approximately 5 dB of attenuation. As such, this would lower the siren noise to 94 dB at the nearest home.

It is assumed that the peak siren noise level would last approximately 10 seconds at the nearest home to the proposed Fire Station driveway. Based on the average increase of 17 calls with sirens per day, this would result in a 2.8 minute increase in siren noise per day at the nearest home, which represents 1/508 of the day (24 hour period). Based on the arithmetic averaging of noise, the increased siren use would increase the noise at the home to 68.7 dBA CNEL $((1 \times 94 \text{ dB} + 507 \times 64 \text{ dB})/508 = 68.7 \text{ dBA})$. The increased siren use would result in a 4.7 dB noise level increase at the nearest home to the proposed Fire Station No. 1 driveway, which is within the 5 dB increase threshold detailed above. It should be noted, that due to the local nature of the proposed fire station calls, the number of new trips and associated siren use would drop-off quickly as you move away from the project site, and therefore other homes in the vicinity of the project site would experience much lower siren noise impacts than the nearest home to the proposed Fire Station No. 1 driveway. Therefore, emergency vehicle siren noise impacts would be less than significant.

Level of Significance

Less than significant impact.

7.3 Generation of Excessive Groundborne Vibration

The proposed project would not expose persons to or generation of excessive groundborne vibration or groundborne noise levels. The following section analyzes the potential vibration impacts associated with the construction and operations of the proposed project.

Construction-Related Vibration Impacts

The construction activities for the proposed project are anticipated to include demolition and grading of both project sites, building construction, paving of the onsite driveways and parking lots, and application of architectural coatings. Vibration impacts from construction activities associated with the proposed project would typically be created from the operation of heavy off-road equipment. The nearest sensitive receptors to the Fire Station site are homes located on the east side of Jameson Street, which are as near as 60 feet east of the Fire Station site. The nearest sensitive receptors to the Parking site are homes located as near as 30 feet southwest of the Parking site.

Section 5.10.3 of the *City of Orange General Plan Program EIR* (General Plan EIR), March 2010, determined that a significant vibration impact would occur if vibration levels would exceed 0.2 inch per second PPV at any nearby building.

The primary source of vibration during construction would be from the operation of a bulldozer. From Table H above a large bulldozer would create a vibration level of 0.089 inch per second PPV at 25 feet. Based on typical propagation rates, the vibration level at the nearest offsite residential structure (30 feet away) would be 0.073 inch per second PPV. The vibration level at the nearest offsite structure would be below the 0.2 inch per second PPV threshold detailed above. Impacts would be less than significant.

Operations-Related Vibration Impacts

The proposed project would consist of the relocation of Fire Station No. 1 & Headquarters. The proposed project would result in the operation of fire trucks on the Fire Station site, which are a known source of vibration. The nearest receptors to the Fire Station site are homes located on the east side of Jameson Street, which are as near as 150 feet east of where fire trucks would operate on the Fire Station site.

Caltrans has done extensive research on vibration level created along freeways and State Routes and their vibration measurements of roads have never exceeded 0.08 inches per second PPV at 15 feet from the center of the nearest lane, with the worst combinations of heavy trucks. Fire truck activities would occur onsite as near as 150 feet from the nearest offsite receptor. Based on typical propagation rates, the vibration level at the nearest offsite receptor would be 0.006 inch per second PPV. Therefore, vibration created from operation of the proposed project would be within the 0.2 inch per second PPV threshold of detailed above. Impacts would be less than significant.

Level of Significance

Less than significant impact.

7.4 Aircraft Noise

The proposed project would not expose people residing or working in the project area to excessive noise levels from aircraft. The nearest airport is Fullerton Municipal Airport that is located approximately five miles northwest of the project site. The project site is located outside of the 60 dBA CNEL noise contours of Fullerton Municipal Airport. John Wayne Airport is located approximately seven miles southwest of the project site. The project site is located outside the 60 dBA CNEL noise contours of John Wayne Airport. No impacts would occur from aircraft noise.

Level of Significance

No impact.

8.0 REFERENCES

California Department of Transportation, *2016 Annual Average Daily Truck Traffic on the California State Highway System*, 2018.

California Department of Transportation (Caltrans), *Technical Noise Supplement to the Traffic Noise Analytics Protocol*, September 2013.

California Department of Transportation, *Transportation- and Construction-Induced Vibration Guidance Manual*, September 2013.

City of Orange, *City of Orange General Plan*, March 9, 2010.

City of Orange, *Orange General Plan Program Environmental Impact Report*, March, 2010.

City of Orange, *Orange California Code of Ordinances Chapter 8.24 – Noise Control*, August 12, 2014.

Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, September 2018.

U.S. Department of Transportation, *FHWA Roadway Construction Noise Model User's Guide*, January, 2006.

Vista Environmental, *Air Quality, Energy, and Greenhouse Gas Emissions Impact Analysis Fire Station No. 1 & Headquarters Project*, June 22, 2020.

APPENDIX A

Field Noise Measurements Photo Index



Noise Measurement Site A - looking north



Noise Measurement Site A - looking northeast



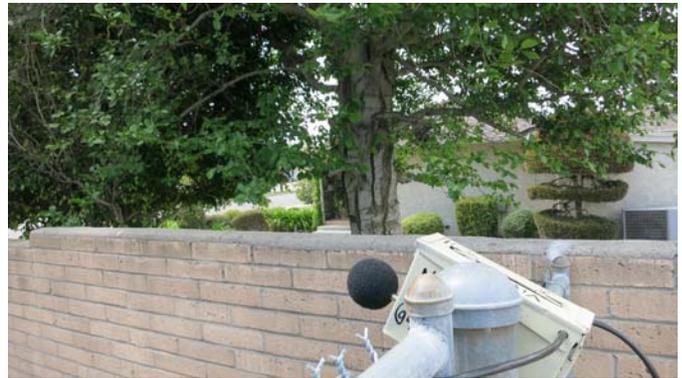
Noise Measurement Site A - looking east



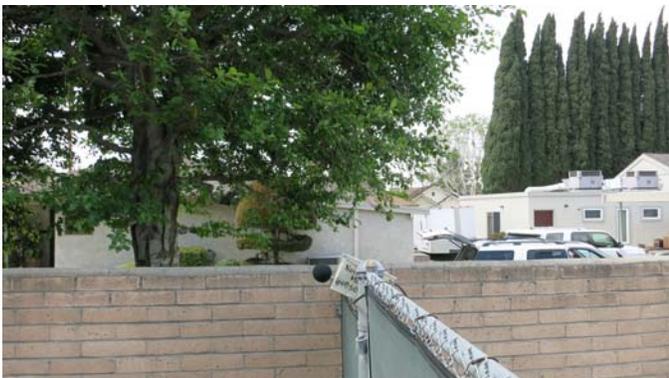
Noise Measurement Site A - looking southeast



Noise Measurement Site A - looking south



Noise Measurement Site A - looking southwest



Noise Measurement Site A - looking west



Noise Measurement Site A - looking northwest



Noise Measurement Site B- looking north



Noise Measurement Site B- looking northeast



Noise Measurement Site B- looking east



Noise Measurement Site B- looking southeast



Noise Measurement Site B- looking south



Noise Measurement Site B- looking southwest



Noise Measurement Site B- looking west



Noise Measurement Site B- looking northwest



Noise Measurement Site C - looking north



Noise Measurement Site C - looking northeast



Noise Measurement Site C - looking east



Noise Measurement Site C - looking southeast



Noise Measurement Site C - looking south



Noise Measurement Site C - looking southwest



Noise Measurement Site C - looking west



Noise Measurement Site C - looking northwest

APPENDIX B

Field Noise Measurements Printouts

Measurement Report

Report Summary

Meter's File Name	LxT_Data.001	Computer's File Name	SLM_0004671_LxT_Data_001.10.lbin
Meter	LxT1		
Firmware	2.302		
User	GT	Location	
Description	Orange Firestation 1 - Headquarters		
Note	Southwest Side - Near Maplewood St & Almond Ave Intersection		
Start Time	2020-04-01 12:35:28	Duration	24:00:00.0
End Time	2020-04-02 12:35:28	Run Time	24:00:00.0
		Pause Time	0:00:00.0

Results

Overall Metrics

LA _{eq}	52.5 dB		
LAE	101.9 dB	SEA	--- dB
EA	1.7 mPa²h		
EA8	568.8 µPa²h		
EA40	2.8 mPa²h		
LA _{Speak}	110.0 dB	2020-04-01 12:36:14	
LA _{Smax}	80.8 dB	2020-04-01 12:35:32	
LA _{Smin}	34.3 dB	2020-04-02 01:22:13	
LA _{eq}	52.5 dB		
LC _{eq}	61.9 dB	LC _{eq} - LA _{eq}	9.4 dB
LAI _{eq}	56.9 dB	LAI _{eq} - LA _{eq}	4.4 dB

Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LAS _{peak} > 135.0 dB	0	0:00:00.0
LAS _{peak} > 137.0 dB	0	0:00:00.0
LAS _{peak} > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight	
--- dB	--- dB	0.0 dB	
LDEN	LDay	LEve	LNight
--- dB	--- dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L _{eq}	52.5 dB		--- dB		--- dB	
L _{S(max)}	80.8 dB	2020-04-01 12:35:32	--- dB		--- dB	
L _{S(min)}	34.3 dB	2020-04-02 01:22:13	--- dB		--- dB	
L _{Peak(max)}	110.0 dB	2020-04-01 12:36:14	--- dB		--- dB	

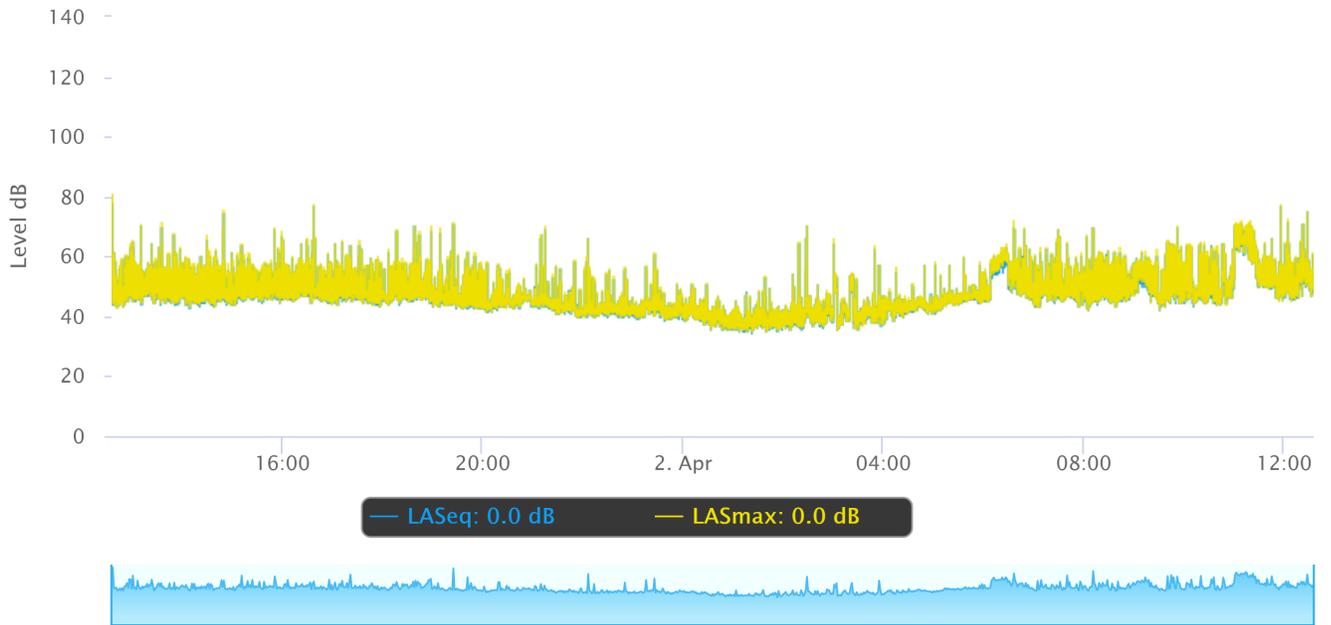
Overloads

Count	Duration
0	0:00:00.0

Statistics

LAS 5.0	57.7 dB
LAS 10.0	54.2 dB
LAS 33.3	47.7 dB
LAS 50.0	46.0 dB
LAS 66.6	44.1 dB
LAS 90.0	39.7 dB

Time History



Measurement Report

Report Summary

Meter's File Name	LxT_Data.001	Computer's File Name	SLM_0006082_LxT_Data_001.02.ldbin
Meter	LxT1		
Firmware	2.402		
User	GT	Location	
Description	Orange Firestation 1 - Headquarters		
Note	North Side on Monterey Rd		
Start Time	2020-04-01 12:18:57	Duration	24:00:00.0
End Time	2020-04-02 12:18:57	Run Time	24:00:00.0
		Pause Time	0:00:00.0

Results

Overall Metrics

LA _{eq}	61.9 dB		
LAE	111.2 dB	SEA	132.3 dB
EA	14.8 mPa²h		
EA8	4.9 mPa²h		
EA40	24.7 mPa²h		
LZS _{peak}	122.3 dB		2020-04-01 12:20:01
LAS _{max}	96.9 dB		2020-04-02 09:16:14
LAS _{min}	34.7 dB		2020-04-02 01:10:42
LA _{eq}	61.9 dB		
LC _{eq}	68.0 dB	LC _{eq} - LA _{eq}	6.1 dB
LAI _{eq}	64.8 dB	LAI _{eq} - LA _{eq}	2.9 dB

Exceedances

	Count	Duration
LAS > 85.0 dB	6	0:00:32.3
LAS > 115.0 dB	0	0:00:00.0
LZSpeak > 135.0 dB	0	0:00:00.0
LZSpeak > 137.0 dB	0	0:00:00.0
LZSpeak > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight	
--- dB	--- dB	0.0 dB	
LDEN	LDay	LEve	LNight
--- dB	--- dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L _{eq}	61.9 dB		--- dB		--- dB	
LS _(max)	96.9 dB	2020-04-02 09:16:14	--- dB		--- dB	
LS _(min)	34.7 dB	2020-04-02 01:10:42	--- dB		--- dB	
L _{Peak(max)}	--- dB		--- dB		122.3 dB	2020-04-01 12:20:01

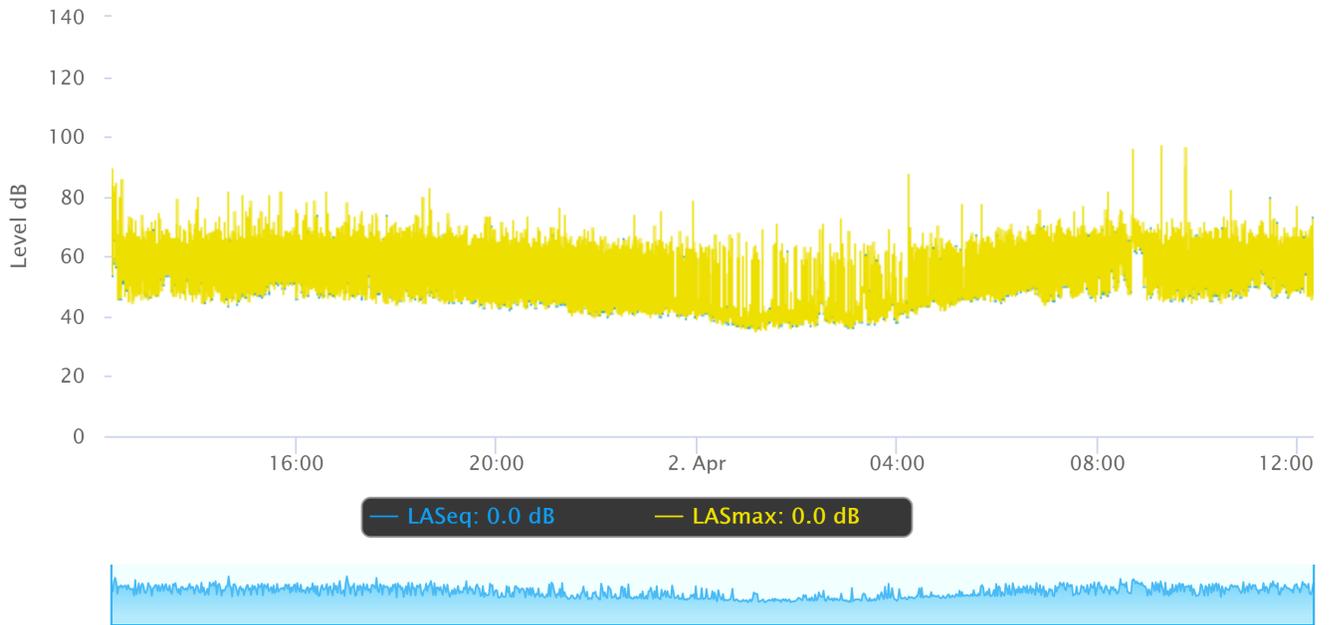
Overloads

Count	Duration
0	0:00:00.0

Statistics

LAS 5.0	65.4 dB
LAS 10.0	63.6 dB
LAS 33.3	58.0 dB
LAS 50.0	52.5 dB
LAS 66.6	47.1 dB
LAS 90.0	40.7 dB

Time History



Measurement Report

Report Summary

Meter's File Name	LxT_Data.001	Computer's File Name	SLM_0004209_LxT_Data_001.09.ldbin
Meter	LxT1		
Firmware	2.302		
User	GT	Location	
Description	Orange Firestation 1 - Headquarters		
Note	East Side on Jameson St		
Start Time	2020-04-01 12:26:13	Duration	24:00:00.0
End Time	2020-04-02 12:26:13	Run Time	24:00:00.0
		Pause Time	0:00:00.0

Results

Overall Metrics

LA _{eq}	54.2 dB		
LAE	103.6 dB	SEA	--- dB
EA	2.5 mPa²h		
EA8	847.3 µPa²h		
EA40	4.2 mPa²h		
LAS _{peak}	107.7 dB	2020-04-01 12:27:05	
LAS _{max}	91.0 dB	2020-04-01 21:19:17	
LAS _{min}	34.8 dB	2020-04-02 01:16:20	
LA _{eq}	54.2 dB		
LC _{eq}	63.3 dB	LC _{eq} - LA _{eq}	9.0 dB
LAI _{eq}	57.8 dB	LAI _{eq} - LA _{eq}	3.6 dB

Exceedances

	Count	Duration
LAS > 85.0 dB	3	0:00:06.9
LAS > 115.0 dB	0	0:00:00.0
LAS _{peak} > 135.0 dB	0	0:00:00.0
LAS _{peak} > 137.0 dB	0	0:00:00.0
LAS _{peak} > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight	
--- dB	--- dB	0.0 dB	
LDEN	LDay	LEve	LNight
--- dB	--- dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L _{eq}	54.2 dB		--- dB		--- dB	
LS _(max)	91.0 dB	2020-04-01 21:19:17	--- dB		--- dB	
LS _(min)	34.8 dB	2020-04-02 01:16:20	--- dB		--- dB	
L _{Peak(max)}	107.7 dB	2020-04-01 12:27:05	--- dB		--- dB	

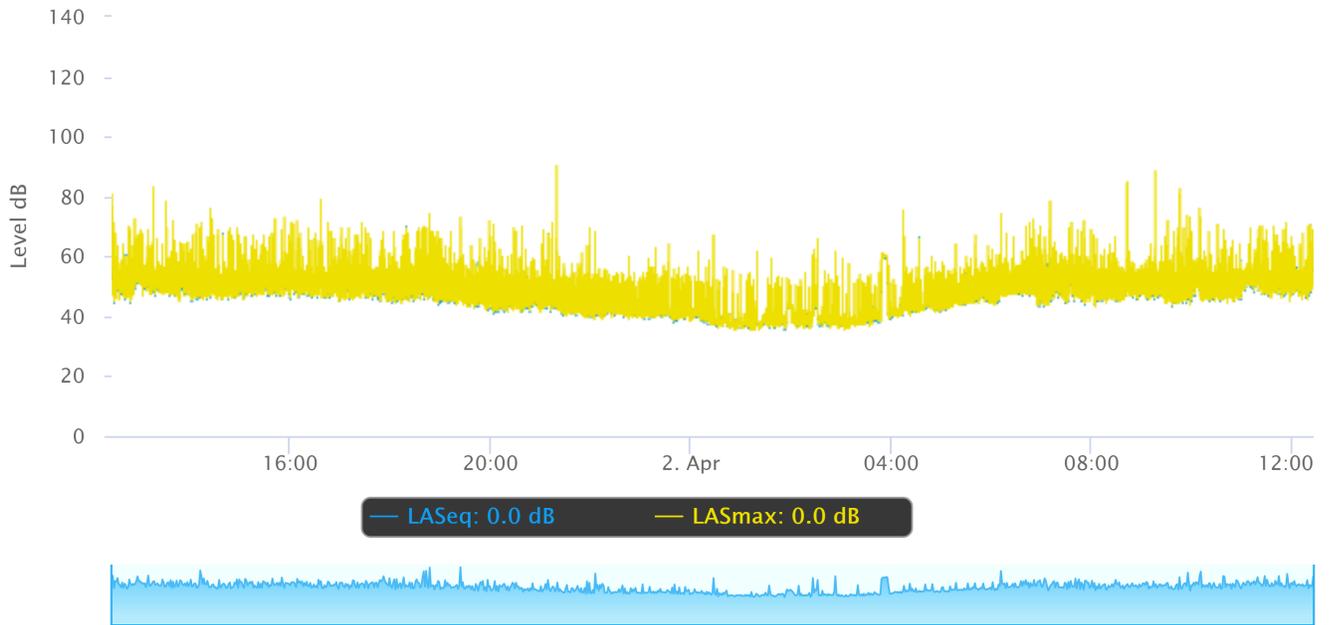
Overloads

Count	Duration
0	0:00:00.0

Statistics

LAS 5.0	57.1 dB
LAS 10.0	54.5 dB
LAS 33.3	50.5 dB
LAS 50.0	48.1 dB
LAS 66.6	45.2 dB
LAS 90.0	39.0 dB

Time History



APPENDIX C

RCNM Model Construction Noise Calculation Printouts

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 5/4/2020
 Case Description: Orange Fire Station No 1 & Headquarters - Demolition

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Nearest home to Fire Station Site	Residential	56.8	56.8	47.2

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	60	0
Dozer	No	40		81.7	110	0
Tractor	No	40	84		160	0
Tractor	No	40	84		210	0
Tractor	No	40	84		260	0

Equipment	Calculated (dBA)		Results			
	*Lmax	Leq	Day		Noise Limits (dBA)	
			Lmax	Leq	Lmax	Leq
Concrete Saw	88.0	81.0	N/A	N/A	N/A	N/A
Dozer	74.8	70.8	N/A	N/A	N/A	N/A
Tractor	73.9	69.9	N/A	N/A	N/A	N/A
Tractor	71.5	67.6	N/A	N/A	N/A	N/A
Tractor	69.7	65.7	N/A	N/A	N/A	N/A
Total	88	82	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 5/4/2020
 Case Description: Orange Fire Station No 1 & Headquarters - Demolition

---- Receptor #2 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Nearest home to Parking Site	Residential	55	55	47

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	30	5
Dozer	No	40		81.7	80	5
Tractor	No	40	84		130	5
Tractor	No	40	84		180	5
Tractor	No	40	84		230	5

Equipment	Results					
	Calculated (dBA)		Noise Limits (dBA)			
	*Lmax	Leq	Day Lmax	Leq	Evening Lmax	Leq
Concrete Saw	89.0	82.0	N/A	N/A	N/A	N/A
Dozer	72.6	68.6	N/A	N/A	N/A	N/A
Tractor	70.7	66.7	N/A	N/A	N/A	N/A
Tractor	67.9	63.9	N/A	N/A	N/A	N/A
Tractor	65.7	61.8	N/A	N/A	N/A	N/A
Total	89	82	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 5/4/2020
 Case Description: Orange Fire Station No 1 & Headquarters - Grading

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Nearest home to Fire Station Site	Residential	56.8	56.8	47.2

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Grader	No	40	85		60	0
Dozer	No	40		81.7	110	0
Excavator	No	40		80.7	160	0
Tractor	No	40	84		210	0
Tractor	No	40	84		260	0

Equipment	Calculated (dBA)		Results Noise Limits (dBA)			
	*Lmax	Leq	Day		Evening	
			Lmax	Leq	Lmax	Leq
Grader	83.4	79.4	N/A	N/A	N/A	N/A
Dozer	74.8	70.8	N/A	N/A	N/A	N/A
Excavator	70.6	66.6	N/A	N/A	N/A	N/A
Tractor	71.5	67.6	N/A	N/A	N/A	N/A
Tractor	69.7	65.7	N/A	N/A	N/A	N/A
Total	83	81	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 5/4/2020
 Case Description: Orange Fire Station No 1 & Headquarters - Grading

---- Receptor #2 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Nearest home to Parking Site	Residential	54.8	54.8	47

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Grader	No	40	85		30	5
Dozer	No	40.0		81.7	80	5
Excavator	No	40		80.7	130	5
Tractor	No	40	84		180	5
Tractor	No	40	84		230	5

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)			
	*Lmax	Leq	Day		Evening	
			Lmax	Leq	Lmax	Leq
Grader	84.4	80.5	N/A	N/A	N/A	N/A
Dozer	72.6	68.6	N/A	N/A	N/A	N/A
Excavator	67.4	63.4	N/A	N/A	N/A	N/A
Tractor	67.9	63.9	N/A	N/A	N/A	N/A
Tractor	65.7	61.8	N/A	N/A	N/A	N/A
Total	84	81	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 5/4/2020
 Case Description: Orange Fire Station No 1 & Headquarters - Building

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Nearest home to Fire Station Site	Residential	56.8	56.8	47.2

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Crane	No	16		80.6	70	0
Gradall	No	40		83.4	120	0
Gradall	No	40		83.4	170	0
Generator	No	50		80.6	220	0
Welder / Torch	No	40		74	270	0
Welder / Torch	No	40		74	320	0
Welder / Torch	No	40		74	370	0
Tractor	No	40	84		420	0

Equipment	Calculated (dBA)		Results			
	*Lmax	Leq	Day		Evening	
			Lmax	Leq	Lmax	Leq
Crane	77.6	69.7	N/A	N/A	N/A	N/A
Gradall	75.8	71.8	N/A	N/A	N/A	N/A
Gradall	72.8	68.8	N/A	N/A	N/A	N/A
Generator	67.8	64.8	N/A	N/A	N/A	N/A
Welder / Torch	59.4	55.4	N/A	N/A	N/A	N/A
Welder / Torch	57.9	53.9	N/A	N/A	N/A	N/A
Welder / Torch	56.6	52.6	N/A	N/A	N/A	N/A
Tractor	65.5	61.5	N/A	N/A	N/A	N/A
Total	78	76	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 5/4/2020

Case Description: Orange Fire Station No 1 & Headquarters - Building

---- Receptor #2 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Nearest home to Parking Site	Residential	54.8	54.8	47

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Crane	No	16		80.6	365	5
Gradall	No	40		83.4	415	5
Gradall	No	40		83.4	465	5
Generator	No	50		80.6	515	5
Welder / Torch	No	40		74	565	5
Welder / Torch	No	40		74	615	5
Welder / Torch	No	40		74	665	5
Tractor	No	40	84		715	5

Equipment	Calculated (dBA)		Results Noise Limits (dBA)			
	*Lmax	Leq	Day		Evening	
			Lmax	Leq	Lmax	Leq
Crane	58.3	50.3	N/A	N/A	N/A	N/A
Gradall	60.0	56.0	N/A	N/A	N/A	N/A
Gradall	59.0	55.1	N/A	N/A	N/A	N/A
Generator	55.4	52.4	N/A	N/A	N/A	N/A
Welder / Torch	47.9	44.0	N/A	N/A	N/A	N/A
Welder / Torch	47.2	43.2	N/A	N/A	N/A	N/A
Welder / Torch	46.5	42.5	N/A	N/A	N/A	N/A
Tractor	55.9	51.9	N/A	N/A	N/A	N/A
Total	60	61	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 5/4/2020
 Case Description: Orange Fire Station No 1 & Headquarters - Paving

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Nearest home to Fire Station Site	Residential	56.8	56.8	47.2

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Concrete Mixer Truck	No	40		78.8	70	0
Paver	No	50		77.2	120	0
Paver	No	50		77.2	170	0
Roller	No	20		80	220	0
Roller	No	20		80	270	0
Tractor	No	40	84		320	0

Equipment	Calculated (dBA)		Results			
	*Lmax	Leq	Day		Noise Limits (dBA) Evening	
			Lmax	Leq	Lmax	Leq
Concrete Mixer Truck	75.9	71.9	N/A	N/A	N/A	N/A
Paver	69.6	66.6	N/A	N/A	N/A	N/A
Paver	66.6	63.6	N/A	N/A	N/A	N/A
Roller	67.1	60.1	N/A	N/A	N/A	N/A
Roller	65.4	58.4	N/A	N/A	N/A	N/A
Tractor	67.9	63.9	N/A	N/A	N/A	N/A
Total	76	74	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 5/4/2020
 Case Description: Orange Fire Station No 1 & Headquarters - Paving

---- Receptor #2 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Nearest home to Parking Site	Residential	54.8	54.8	47.0

Description	Impact Device	Usage(%)	Equipment		Receptor Distance (feet)	Estimated Shielding (dBA)
			Spec Lmax (dBA)	Actual Lmax (dBA)		
Concrete Mixer Truck	No	40		78.8	40	5
Paver	No	50		77.2	90	5
Paver	No	50		77.2	140	5
Roller	No	20		80	190	5
Roller	No	20		80	240	5
Tractor	No	40	84		290	5

Equipment	Calculated (dBA)		Results			
	*Lmax	Leq	Day		Noise Limits (dBA) Evening	
			Lmax	Leq	Lmax	Leq
Concrete Mixer Truck	75.7	71.8	N/A	N/A	N/A	N/A
Paver	67.1	64.1	N/A	N/A	N/A	N/A
Paver	63.3	60.3	N/A	N/A	N/A	N/A
Roller	63.4	56.4	N/A	N/A	N/A	N/A
Roller	61.4	54.4	N/A	N/A	N/A	N/A
Tractor	63.7	59.8	N/A	N/A	N/A	N/A
Total	76	73	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 5/4/2020
 Case Description: Orange Fire Station No 1 & Headquarters - Painting

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Nearest home to Fire Station Site	Residential	56.8	56.8	47.2

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	70	0

Equipment	Results						
	Calculated (dBA)				Noise Limits (dBA)		
	Day		Evening				
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	
Compressor (air)	74.7	70.8	N/A	N/A	N/A	N/A	
Total	75	71	N/A	N/A	N/A	N/A	

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
Nearest home to Parking Site	Residential	54.8	54.8	47.0

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	40	5

Equipment	Results						
	Calculated (dBA)				Noise Limits (dBA)		
	Day		Evening				
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	
Compressor (air)	74.6	70.6	N/A	N/A	N/A	N/A	
Total	75	71	N/A	N/A	N/A	N/A	

*Calculated Lmax is the Loudest value.

APPENDIX D

Operational Reference Noise Measurements Printouts

Measurement Report

Report Summary

Meter's File Name	831_Data.001	Computer's File Name	SLM_0002509_831_Data_001.05.ldbin
Meter	831		
Firmware	2.314		
User	GT		Location
Description	Orange Fire Station No. 1 & Headquarters		
Note	Located on pole next to west property line of existing Fire Station at 176 S Grand St		
Start Time	2020-04-29 11:59:20	Duration	24:00:00.0
End Time	2020-04-30 11:59:20	Run Time	24:00:00.0
		Pause Time	0:00:00.0

Results

Overall Metrics

LA _{eq}	55.7 dB		
LAE	105.1 dB	SEA	--- dB
EA	3.6 mPa²h		
LZ _{peak}	110.9 dB	2020-04-29 11:59:24	
LAS _{max}	86.8 dB	2020-04-29 16:31:32	
LAS _{min}	35.7 dB	2020-04-30 06:27:41	
LA _{eq}	55.7 dB		
LC _{eq}	63.2 dB	LC _{eq} - LA _{eq}	7.5 dB
LAI _{eq}	58.6 dB	LAI _{eq} - LA _{eq}	2.9 dB

Exceedances

	Count	Duration
LAS > 65.0 dB	108	0:23:49.7
LAS > 85.0 dB	1	0:00:12.6
LZ _{peak} > 135.0 dB	0	0:00:00.0
LZ _{peak} > 137.0 dB	0	0:00:00.0
LZ _{peak} > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight	
58.1 dB	57.4 dB	0.0 dB	
LDEN	LDay	LEve	LNight
58.5 dB	58.0 dB	53.3 dB	49.1 dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L _{eq}	55.7 dB		63.2 dB		70.4 dB	
LS _(max)	86.8 dB	2020-04-29 16:31:32	91.1 dB	2020-04-29 16:31:29	98.2 dB	2020-04-29 15:37:05
LF _(max)	89.0 dB	2020-04-29 11:59:24	92.5 dB	2020-04-29 16:31:29	104.3 dB	2020-04-29 15:37:05
LI _(max)	93.4 dB	2020-04-29 11:59:24	95.5 dB	2020-04-29 11:59:24	106.9 dB	2020-04-29 15:37:05
LS _(min)	35.7 dB	2020-04-30 06:27:41	50.2 dB	2020-04-30 04:02:40	54.2 dB	2020-04-30 04:15:23
LF _(min)	35.1 dB	2020-04-30 06:28:01	48.0 dB	2020-04-30 04:02:39	51.0 dB	2020-04-30 04:16:25
LI _(min)	35.7 dB	2020-04-30 06:28:01	50.7 dB	2020-04-30 04:04:33	55.5 dB	2020-04-30 04:14:25
L _{Peak(max)}	107.7 dB	2020-04-29 11:59:24	108.8 dB	2020-04-29 11:59:24	110.9 dB	2020-04-29 11:59:24

Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	1	0:00:02.0

Statistics

LAS 5.0	57.9 dB
LAS 10.0	53.4 dB
LAS 33.3	49.6 dB
LAS 50.0	47.9 dB
LAS 66.6	46.1 dB
LAS 90.0	41.7 dB

General Information

```

Serial Number                02509
Model                        831
Firmware Version             2.112
Filename                     831_Data.005
User                         GT
Job Description              Northwest Fresno Walmart Relocation
Location                    Rooftop HVAC Unit

Measurement Description
Start Time                  Saturday, 2013 July 27 18:31:43
Stop Time                  Saturday, 2013 July 27 18:41:44
Duration                   00:10:01.1
Run Time                   00:10:01.1
Pause                      00:00:00.0
Pre Calibration             Saturday, 2013 July 27 17:53:07
Post Calibration            None
Calibration Deviation      ---
  
```

Note

Located 10 feet southeast of rooftop HVAC Unit 14 located on western side of roof
 94 F, 30% Hu., 29.45 in Hg, no wind, partly cloudy

Overall Data

```

LAeq                        66.6    dB
LASmax                      2013 Jul 27 18:33:16  67.6    dB
LApeak (max)                2013 Jul 27 18:32:17  81.6    dB
LASmin                      2013 Jul 27 18:41:08  65.8    dB
LCeq                        75.8    dB
LAeq                        66.6    dB
LCeq - LAeq                 9.2     dB
LA1eq                       67.2    dB
LAeq                        66.6    dB
LA1eq - LAeq                0.6     dB
Ldn                          66.6    dB
LDay 07:00-23:00           66.6    dB
LNight 23:00-07:00        ---     dB
Lden                         66.6    dB
LDay 07:00-19:00           66.6    dB
LEvening 19:00-23:00      ---     dB
LNight 23:00-07:00        ---     dB
LAE                          94.4    dB
# Overloads                  0
Overload Duration           0.0     s
# OBA Overloads              0
OBA Overload Duration       0.0     s
  
```

Statistics

```

LAS5.00                     67.0    dBA
LAS10.00                    66.9    dBA
LAS33.30                    66.7    dBA
LAS50.00                    66.6    dBA
LAS66.60                    66.5    dBA
LAS90.00                    66.3    dBA

LAS > 65.0 dB (Exceedence Counts / Duration)  1 / 601.1  s
LAS > 85.0 dB (Exceedence Counts / Duration)  0 / 0.0    s
LApeak > 135.0 dB (Exceedence Counts / Duration)  0 / 0.0    s
LApeak > 137.0 dB (Exceedence Counts / Duration)  0 / 0.0    s
LApeak > 140.0 dB (Exceedence Counts / Duration)  0 / 0.0    s
  
```

Settings

```

RMS Weight                  A Weighting
Peak Weight                 A Weighting
Detector                    Slow
Preamp                      PRM831
Integration Method          Linear
OBA Range                   Normal
OBA Bandwidth               1/1 and 1/3
OBA Freq. Weighting        Z Weighting
OBA Max Spectrum           Bin Max
Gain                        +0     dB

Under Range Limit          26.2    dB
Under Range Peak           75.8    dB
Noise Floor                17.1    dB
Overload                   143.4   dB
  
```

1/1 Spectra

Freq. (Hz):	8.0	16.0	31.5	63.0	125	250	500	1k	2k	4k	8k	16k
LZeq	70.9	64.4	61.4	74.2	68.2	64.9	66.3	61.7	55.1	49.9	44.3	44.0
LZSmax	83.8	78.9	70.0	78.4	72.3	66.1	67.8	63.1	56.9	53.2	46.7	45.4
LZSmin	53.2	56.5	56.7	67.7	66.1	63.5	65.0	60.7	53.9	48.4	43.2	43.7

1/3 Spectra

Freq. (Hz):	6.3	8.0	10.0	12.5	16.0	20.0	25.0	31.5	40.0	50.0	63.0	80.0
LZeq	68.1	65.7	63.2	61.0	58.0	59.3	56.0	57.8	55.8	69.7	72.0	59.3
LZSmax	82.3	79.5	78.7	77.2	72.8	72.3	67.9	63.5	64.0	74.2	76.1	72.0
LZSmin	41.9	46.3	48.8	48.7	46.5	49.7	50.1	51.8	41.2	63.9	67.9	54.5
Freq. (Hz):	100	125	160	200	250	315	400	500	630	800	1k	1.25k
LZeq	61.6	63.7	64.5	59.0	58.7	60.9	63.2	60.8	59.9	59.2	56.1	54.6
LZSmax	71.3	68.0	67.3	61.6	61.7	64.1	65.5	64.2	62.0	60.7	57.6	58.6
LZSmin	52.9	60.0	57.2	45.1	56.0	58.9	61.1	58.4	58.4	57.1	54.9	53.3
Freq. (Hz):	1.6k	2k	2.5k	3.15k	4k	5k	6.3k	8k	10k	12.5k	16k	20k
LZeq	52.0	49.8	48.4	46.4	45.4	42.8	41.1	38.6	38.5	38.4	39.0	40.2
LZSmax	54.4	52.3	51.2	50.2	49.7	45.7	45.4	41.6	40.4	40.4	41.4	41.3
LZSmin	50.9	48.4	46.9	45.0	43.7	41.4	39.6	37.5	37.9	38.0	38.7	39.9

Calibration History

Preamp	Date	dB re. 1V/Pa
PRM831	27 Jul 2013 17:53:07	-25.9
PRM831	27 Jul 2013 13:36:08	-25.6
PRM831	28 Apr 2013 15:34:24	-25.9
PRM831	23 Apr 2013 10:17:33	-25.0
PRM831	27 Feb 2013 19:15:30	-25.7
PRM831	24 Jan 2013 12:00:16	-25.6
PRM831	15 Jan 2013 07:50:44	-26.2
PRM831	04 Jan 2013 13:47:46	-26.5

APPENDIX E

Operational Noise Sound Wall Noise Reduction Calculations

Stationary Noise Calculations - Mitigated Average Noise Levels (Leq)

Stationary Noise Sources	Reference Distance	Reference Leq	Distance	Reference Leq	1 (Line Source: hard=0, soft=5; Point Source: hard=1, soft=1.5)
Fire Station Activities	30	55.7	150	42 (eq. N-2141.2 of TeNS)	
Rooftop HVAC	10	66.6	70	50	
Generator with Sound Enclosure	23	76.0	200	57	

Stationary Noise Sources	Distance from Receptor to Wall	Distance from source to Wall	without wall		with wall		Exterior Source Height (feet)	Observer Height (feet)	Source Frequency (hz)	barrier to receiver - b (all)	path difference		line of sight (slope)	Barrier Atten	
			Height of Wall (feet)	Wall Noise Level at Residence	Height of Wall (feet)	Noise Level at Residence					source to barrier - a	source to receiver - c			y = a+b-c (auto)
Fire Station Activities	60	90	7.7	42	34	5	5	800	60.0607	90.04049	150	0.1012	1	0.287887	-7.36
Rooftop HVAC	60	10	4	50	31	30	5	800	60.0083	27.85678	74.33034	13.5348	1	38.49889	-18.97
Generator with Sou	60	140	7.7	57	50	5	5	800	60.0607	140.026	200	0.0868	1	0.246763	-7.08

Stationary Noise Calculations - Mitigated Maximum Noise Levels (Lmax)

Stationary Noise Sources	Reference Distance		Reference Lmax		1 (Line Source: hard=0, soft=-5; Point Source: hard=1, soft=1.5)
	Distance	Lmax	Distance	Lmax	
Fire Station	30	86.8	150	73 (eq. N-2141.2 of TeNS)	
Rooftop HVAC	10	79.2	70	62	
Generator with Sound Enclosure	23	76.0	200	57	

Stationary Noise Sources	Distance from Receptor to Wall	Distance from source to Wall	Height of Wall (feet)		without Wall		with wall		Source Height (feet)	Exterior Observer Height (feet)	Source Frequency (hz)	barrier to receiver - b (all)	path difference		line of sight (slope)	Barrier Atten
			Receptor to Wall	of Wall (feet)	Wall Level	Residence	at Level at Residence	Noise Level at Residence					source to barrier - a	source to receiver - c		
Fire Station	60	90	7.7	73	65	5	5	800	60.0607	800	90.04049	150	0.1012	1	0.287887	-7.36
Rooftop HVAC	60	10	4	62	43	30	5	800	60.0083	800	27.85678	74.33034	13.5348	1	38.49889	-18.97
Generator with Sou	60	140	7.7	57	50	5	5	800	60.0607	800	140.026	200	0.0868	1	0.246763	-7.08



AGENDA ITEM

DESIGN REVIEW

April 15, 2020

TO: William R. Crouch, AICP, AIA, NCARB, LEED (AP), Community Development Director

THRU: Anna Pehoushek, Assistant Community Development Director

FROM: Chad Ortlieb, Senior Planner

1. SUBJECT

Design Review No. 5008-20, Fire Station No. 1, 105 and 180 S. Water Street

2. SUMMARY

The City of Orange is proposing a new 16,574 square foot Fire Station No. 1 building, an attached 11,353 square foot Fire Headquarters office, an associated parking lot across the street at 180 S. Water Street, and to utilize an existing 3,780 on-site building, currently used by the Water Division, for reserve apparatus.

3. BACKGROUND INFORMATION

Applicant: City of Orange

Owner: City of Orange

Property Location: 105 and 180 S. Water Street

General Plan Designation: Public Facilities Max. 0.5 FAR and Institutions Max 2.0 FAR (PFI) and Low Density Residential 2-6 du/ac (LDR)

Zoning Classification: Office Professional (O-P) and Single Family Residential 6,000 sq. ft. (R-1-6)

Existing Development: Vacant land and an existing 3,780 on-site building, currently used by the Water Division

Associated Application: Zone Change No. 1301-20 and Mitigated Negative Declaration No. 1862-18

Previous DRC Project Review: None

4. PROJECT DESCRIPTION

The City will be constructing a new Fire Station No. 1 and headquarters administration building at 105 S. Water Street. Combined, the total building area is 27,927 square feet. The project also includes the construction of a parking lot at 180 S. Water Street and the

repurposing of an existing 3,780 square foot storage building currently used by the Water Division for the storage of Fire Department apparatus.

Fire Station No. 1 and Headquarters Building -105 S. Water Street

The building is configured with a “H” shaped footprint with hollows of the “H” accommodating the Apparatus room and apparatus entry and exiting to the site. The east side (Water Street-facing) of the “H” contains a single-story wing of rooms for the on duty responder fire crew and the west side (Jameson Street-facing) contains the headquarters offices in a two-story configuration. The response driveway for the apparatus exits north onto Chapman Avenue and the return driveway, visitor parking, and staff parking lot is behind the building to the south.

The building provides undulation, consistent hip roof usage with a flat roof for the apparatus bay, stepbacks for second story features, coherently alternating colors and materials, and architectural details such as:

- Grooved stucco walls
- Red accordion apparatus bay doors
- Brick veneer façade with horizontal grooves on the apparatus bay building and tower entry feature
- Concrete Spanish tile-style roofing material
- Charcoal-colored window and door trim
- Cornice treatment over the flat roof of the apparatus bay section
- Mildly arching stone-like veneer over apparatus bays
- Ample window placement in appropriately regularly-spaced configuration
- Faux-window or vent accents placed in voids in the wall planes

The parking lot south of Fire Station No. 1 contains 5 visitor parking spaces outside of a security gate and 21 staff parking spaces inside the gated parking area. The gate type is unspecified. Inside the staff parking area is an enclosure for a generator and fuel tank and another enclosure for mechanical equipment. The enclosure type is unspecified.

The site perimeter is landscaped with trees and shrubs at appropriately regularly-spaced intervals. Trees include Magnolias at the Chapman Avenue-facing frontage, Goldenrain trees facing Water and Jameson Streets, and Brisbane Box trees between the site and southern boundary where the water yard begins. Shrubs include a variety mixed with accent plantings and groundcover as specified on the landscape plan.

Site lighting and photometrics are not available at this design stage.

Parking Lot – 180 S. Water Street

The parking lot contains 54 staff parking spaces behind a fenced perimeter with a sliding access gate onto Water Street. Two guest parking spaces are located outside the gate. A second sliding gate is provided to the contiguous but undeveloped City property to the west that is not being developed as part of this project. The fence and gate type is unspecified. The parking lot perimeter and islands within it are landscaped with trees and shrubs at appropriate regularly-spaced intervals and with the same types as planted for the Fire Station No. 1 building. The exception being that Jacaranda trees will be planted

within the parking lot. Parking lot lighting and photometrics are not available at this design stage.

Storage Building

The existing storage building south of Fire Station No.1 is sheet metal-clad with roll up doors facing Water Street. The building is proposed to be repurposed for use in storing Fire Department apparatus. It is anticipated that the building will be structurally reinforced, re-clad with sheet metal, and fitted with new automatic bay doors. The sheet metal, doors, and color of the building is not yet decided at this time.

5. EXISTING SITE

The sites are vacant and unimproved except for an existing block wall at property line facing Chapman Avenue, temporary perimeter chain-link along the property lines facing Jameson and Water Streets, and the metal storage building.

6. EXISTING AREA CONTEXT

The area is the eastern gateway to Old Towne but is not in the Historic Overlay district. The surroundings are as follows:

	Zoning	Surrounding Use
North	Office Professional (O-P)	East Chapman Avenue and single-story office buildings and residences
South	Office Professional (O-P) and Single Family Residential (R-1-6)	South Jameson Street and single-story residences, some which may be eligible for future consideration as an Individually Significant Historic Building
East	Public Institution (P-I)	City of Orange Water Division Yard with a building which may be eligible for future consideration as an Individually Significant Historic Building
West	Office Professional (O-P) and, Single Family Residential (R-1-6)	South Water Street and the proposed parking lot and a two-story office building.

7. ANALYSIS AND STATEMENT OF THE ISSUES

Staff thinks that the overall design approach is appropriate for the site and surrounding context, and that the design element provides for building articulation and materials that reference historic residential forms and materials along Chapman. The massing of the project is also sensitive to the surrounding residential neighborhoods. The project continues to have opportunities for design enhancement and refinement at this phase. Continued coordination by Public Works with the Community Development department is recommended for the following project components:

1. Details on perimeter fencing should be provided for review. Tube steel fencing matching the fencing at the Water Yard is recommended.
2. A lighting configuration plan and photometric plan should be provided for review to verify needs of site security and prevention of off-site intensity and glare.

3. Details of the generator and mechanical equipment enclosure should be provided to show the height, enclosure material, and nature of the equipment inside.
4. The first horizontal joint shown upward from the base of Fire Station No. 1 should implement a differing paint color as was designed on the Main Library. Physical paint samples should be provided for the whole of the building.
5. The brick veneer and roofing material for the Fire Station No. 1 as shown on the plan exhibits have differing reddish hues. Physical material samples with hue-matching characteristics should be provided for acceptance by the Community Development Department prior to material purchase.
6. The use of Jacaranda trees in the parking area could result in sticky flower deposits on staff and visitor vehicles. The selection of an alternate tree and the review of the landscape and irrigation plans, as they are refined, should be coordinated with the City's Senior Landscape Coordinator.
7. As plans develop, the metal siding, doors, and paint color for the repurposed storage building should be reviewed by the Community Development Department.

8. ADVISORY BOARD RECOMMENDATION

Streamlined Multi-Disciplined Accelerated Review Team (SMART) review occurred on February 19, 2020, and comments were transmitted to the project manager. The City is supportive of the project as it is adaptively refined to reach final plan development. No further SMART review will occur.

9. PUBLIC NOTICE

No public notice is required for Design Review.

10. ENVIRONMENTAL REVIEW

Mitigated Negative Declaration No. 1862-18 is being prepared for the project.

11. STAFF RECOMMENDATION AND REQUIRED FINDINGS

The courts define a "Finding" as a conclusion which describes the method of analysis decision makers utilize to make the final decision. A decision making body "makes a Finding," or draws a conclusion, through identifying evidence in the record (i.e., testimony, reports, environmental documents, etc.) and should not contain unsupported statements. The statements which support the Findings bridge the gap between the raw data and the ultimate decision, thereby showing the rational decision making process that took place. The "Findings" are, in essence, the ultimate conclusions which must be reached in order to approve (or recommend approval of) a project. The same holds true if denying a project; the decision making body must detail why it cannot make the Findings.

Findings for DRC applications come from three sources:

- The Orange Municipal Code (OMC)
- The Infill Residential Design Guidelines
- The Historic Preservation Design Standards for Old Towne (commonly referred to the Old Towne Design Standards or OTDS)
- The Orange Eichler Design Standards

The Findings are applied as appropriate to each project. Based on the following Finding and statement in support of such Finding, staff recommends the DRC approve the focused project refinement subject to recommended conditions.

- The project design upholds community aesthetics through the use of an internally consistent, integrated design theme and is consistent with all adopted specific plans, applicable design standards, and their required findings (OMC 17.10.07.F.3).

The project is respectful of the area community aesthetics and sensitive to the gateway corridor to Old Towne in that it utilizes architectural elements appropriate to a fire station and headquarters office. Several of the building materials are characteristic of corridor buildings including the use of plaster walls, brick façade, hip roof forms, and architectural detailing. The height of the building is minimized to that needed to support apparatus bays and crew occupancy, and office needs. The second story component is stepped back from the first story level and a public entry point is focused under a tower feature. The building provides architectural interest via indentations in architectural plane. Architectural elements are alternated and intertwined. Windows are regularly-spaced. Landscaping is provided around the perimeter of the sites and includes an adequate setback with trees that soften views to the building and parking lots. The building is sited between three streets which further reduces any impacts of mass to adjacent properties. Repurposing of the existing storage building will ensure that no greater visual mass will occur than exists for that building now and planned improvements would enhance the appearance.

The issues identified in the staff report will be resolved through a cooperative working relationship among the Public Works Department and applicable City Departments.

There is no specific plan or applicable design standards applicable to this property.

12. CONDITIONS

The City, as a regulating authority, does not seek to condition its own projects. However, the seven issue items listed within this staff report are the considerations upon which this project is evaluated by the Community Development Department. Public Works staff has agreed the issues should be addressed to improve the project and meet the mutual goal of all City Departments to further project completion with appropriate design.

13. ATTACHMENTS

1. Vicinity map
2. Project Plans



CITY OF ORANGE

DEPARTMENT OF COMMUNITY DEVELOPMENT

www.cityoforange.org

ADMINISTRATION
(714) 744-7240
Fax: (714) 744-7222

PLANNING DIVISION
(714) 744-7220
Fax: (714) 744-7222

BUILDING DIVISION
(714) 744-7200
Fax: (714) 744-7245

CODE ENFORCEMENT DIVISION
(714) 744-7244
Fax: (714) 744-7245

April 22, 2020

VIA ELECTRONIC MAIL

City of Orange
Eduardo Lopez, P.E., T.E., Senior Civil Engineer
300 E. Chapman Ave
Orange, CA 92866
elopez@cityoforange.org

RE: Design Review No. 5008-20 – Fire Station No. 1, 105 and 180 S. Water Street

Dear Mr. Lopez:

The project schedule for the City Fire Station No. 1 project necessitates a Design Review Committee (DRC) meeting in April. However, no DRC meetings are scheduled do to the City implementing Covid-19 safety practices. The City Manager authorized me, as the Community Development Director, to approve City projects until such time that Design Review Committee (DRC) Meetings can be conducted.

Pursuant to the project description and findings in the attached DRC Staff Report, dated April 15, 2020, I have considered and administratively approved Fire Station No. 1 based on an understanding that the Department of Public Works will work with applicable City Departments to address the issues identified in the staff report and as reiterated below. In making such a determination, I considered the findings as required in OMC Section 17.10.070.G.

This approval is based on an understanding that the following issues will be resolved as project design is refined:

1. Details on perimeter fencing should be provided for review. Tube steel fencing matching the fencing at the Water Yard is recommended.
2. A lighting configuration plan and photometric plan should be provided for review to verify needs of site security and prevention of off-site intensity and glare.
3. Details of the generator and mechanical equipment enclosure should be provided to show the height, enclosure material, and nature of the equipment inside.

4. The first horizontal joint shown upward from the base of Fire Station No. 1 should implement a differing paint color as was designed on the Main Library. Physical paint samples should be provided for the whole of the building.
5. The brick veneer and roofing material for the Fire Station No. 1 as shown on the plan exhibits have differing reddish hues. Physical material samples with hue-matching characteristics should be provided for acceptance by the Community Development Department prior to material purchase.
6. The use of Jacaranda trees in the parking area could result in sticky flower deposits on staff and visitor vehicles. The selection of an alternate tree and the review of the landscape and irrigation plans, as they are refined, should be coordinated with the City's Senior Landscape Coordinator.
7. As plans develop, the metal siding, doors, and paint color for the repurposed storage building should be reviewed by the Community Development Department.

If you have any questions, please contact Chad Ortlieb, Senior Planner at (714) 744-7243 or by email at cortlieb@cityoforange.org.

Sincerely,



William R. Crouch, AICP, AIA, NCARB, LEED (AP)
Community Development Director

Attachments: DRC Staff Report, dated April 15, 2020



AGENDA ITEM

PLANNING COMMISSION

August 24, 2020

TO: CHAIR SIMPSON AND MEMBERS OF PLANNING COMMISSION

THRU: Anna Pehoushek, Assistant Community Development Director *APD*

FROM: Chad Ortlieb, Senior Planner *C.O.*

1. SUBJECT

Public Hearing: Mitigated Negative Declaration No. 1862-18, Zone Change No. 1301-20, Design Review No. 5008-20, and Tentative Parcel Map No. 0016-20; Fire Station No. 1 and Headquarters Project; 105 S. Water Street and 180 S. Water Street

2. SUMMARY

The City of Orange is proposing to build a new 16,574 square foot Fire Station No. 1 building and attached 11,353 square foot Fire Headquarters office at 105 S. Water Street, an associated parking lot across the street at 180 S. Water Street, and to utilize an existing 3,780 on-site building, currently used by the Water Division, for reserve apparatus. The project site is zoned as Office Professional (O-P) and Single Family Residential (R-1-6). The project proposes a zone change of the Fire Station and headquarters site to Public Institution (P-I) to better reflect the existing nature of the land uses in the neighborhood and to ensure that the proposed project is consistent with the General Plan. A parcel map is proposed to consolidate underlying parcels.

3. RECOMMENDED ACTION

Adopt Planning Commission Resolution No. PC 20-20 entitled:

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ORANGE RECOMMENDING THAT THE CITY COUNCIL ADOPT MITIGATED NEGATIVE DECLARATION NO. 1862-18; APPROVE ZONE CHANGE NO. 1301-20 AND ADOPT AN ORDINANCE CHANGING THE ZONING FROM OFFICE PROFESSIONAL AND SINGLE FAMILY RESIDENTIAL, 6,000 SQ. FT. TO PUBLIC INSTITUTION; AND APPROVE DESIGN REVIEW NO. 5008-20, AND TENTATIVE PARCEL MAP NO. 0016-20 FOR THE CONSTRUCTION OF FIRE STATION NO. 1 AND HEADQUARTERS LOCATED AT 105 S. WATER STREET AND THE ASSOCIATED PARKING LOT LOCATED AT 180 WATER STREET

PC ITEM _____

1

08/24/2020

4. AUTHORIZATION GUIDELINES

Orange Municipal Code (OMC) Table 17.08.020 and Section 17.10.020.B.2. authorizes the Planning Commission to advise the City Council on Zone Changes and OMC Table 17.08.020 General Note (b) authorizes the Planning Commission to advise the City Council on all associated applications for the project. OMC Section 17.10.080 and Section 7.A of the City of Orange Local CEQA Guidelines authorize the Planning Commission to recommend an action on Mitigated Negative Declarations.

5. PROJECT BACKGROUND

<i>Applicant:</i>	City of Orange
<i>Property Owner</i>	City of Orange
<i>Property Location</i>	105 S. Water Street and 180 S. Water Street
<i>Existing General Plan Land Use Element Designation</i>	Public Facilities Max. 0.5 FAR and Institutions Max 2.0 FAR (PFI) and Low Density Residential 2-6 du/ac (LDR)
<i>Proposed General Plan Land Use Element</i>	No change
<i>Existing Zoning Classification</i>	Office Professional (O-P) and Single Family Residential 6,000 sq. ft. (R-1-6)
<i>Proposed Zoning</i>	Public Institution (P-I) for the fire station and headquarters. The parking lot will remain Single Family Residential 6,000 sq. ft. (R-1-6)
<i>Site Size</i>	Fire Station and Headquarters Lot – 1.52 acres Parking Lot - 1.23 acres
<i>Circulation</i>	Existing circulation patterns (automobile and pedestrian) and sidewalks around the site will be retained. The apparatus exit/response driveway for Fire Station No. 1 will be onto Chapman Avenue. Stop signs and emergency warning systems will be installed along Chapman Avenue. Water Street will be used for apparatus returns to the site. Pedestrian access to Fire Station No. 1 and Headquarters will be located at the northeast corner of the building at the Chapman Avenue and Water Street intersection. Persons using the parking lot across Water Street would need to cross the street.

<i>Existing Conditions</i>	<p>The main project site where the building is proposed is unpaved, graded with little to no vegetation, and is vacant except for an existing storage building onsite. There are multiple parcels that exist on the site and a Tentative Parcel Map is proposed to merge all the parcels into a single parcel.</p> <p>The parking site is a combination of asphalt paving and compacted gravel, fenced, with a few small trees and shrubs on site.</p>
<i>Surrounding Land Uses and Zoning</i>	<p>The area is the eastern gateway to Old Towne but is not in the Historic Overlay district. Surrounding Land Uses and Zoning are as described on pages 5 and 6 under the Existing Setting section of the project Mitigated Negative Declaration and in the Design Review Committee Staff Report. Generally, the site is surrounded by Office Professional and Single Family Residential zones and uses. (Attachment 1).</p>
<i>Previous Applications/Entitlements</i>	<p>No previous applications or entitlements are applicable to either of the sites.</p>

6. PROJECT DESCRIPTION

The City intends to replace existing Fire Station No. 1 and Fire Headquarters located at 176 S. Grand Street by the construction of a new facility at 105 S. Water Street with a support parking lot at 180 S. Water Street.

Fire Station No. 1 will be approximately 16,574 square feet in size, plus an attached two-story Headquarters which will include approximately 11,353 square feet of space (27,927 square feet total). The two-story Headquarters building would be 30 feet eight inches in height, with its exhaust tower structure reaching a height of 33 feet three inches. The apparatus room for Fire Station No. 1 would be 24 feet in height.

A total of 80 parking spaces will be provided. Parking consists of 21 staff and five visitor spaces on the Fire Station and Headquarters site and 54 staff parking spaces on the parcel located across Water Street to the west behind an automated security gate.

The floor area ratio (FAR) of the fire station and headquarters site, combined with the existing contiguous water yard facilities is 0.38, which is within the 0.5 FAR limit of the Public Facilities and Institutions General Plan Land Use Designation.

Fire Station No. 1 will include the following components:

- Apparatus room with room for two engines, a truck, a rescue vehicle, and a battalion vehicle. The room will have three bays with shutters and three internal doors.
- Exercise room
- Fire station offices
- Ready room to allow for the crew and staff to quickly respond to the apparatus
- Restrooms
- Dorm spaces

- Study/library
- Turn-out room to place turnout gear at the station prior to decontamination and be stored afterward
- Extractor room to house commercial grade washer-extractors and dryers dedicated to cleaning Personal Protective Equipment (PPE)
- Kitchen

Fire Headquarters will include the following components:

- Administration space for the Headquarters including offices and workstations
- Training classroom
- Lockers
- Storage
- Conference rooms

The existing storage building located on the site will be retrofitted and refurbished and will provide approximately 3,780 square feet of space to serve as Reserve Apparatus storage for the new facility. The retrofitting would include replacement of the interior slab, reskinning the building exterior with new metal panels and addition of new lighting.

The retrofitted Reserve Apparatus storage facility will store additional vehicles and be utilized for disaster equipment storage.

Both the main project site and the parking site will have associated lighting and 6-foot high perimeter fencing, constructed of masonry and steel tubes.

The wall on the east side of the proposed staff parking lot that is located on the southeast corner of the Fire Station site will be a 7.7-foot high concrete masonry unit wall. This will also function as a sound wall and any doors installed in the wall will be solid doors with self-closing hinges. Additionally, as a measure of sound proofing, a sound enclosure will be installed on the proposed emergency generator that is depicted in Figure 3 of the MND.

The proposed project will also include necessary utility upgrades including, but not limited to, sewer, stormwater, dry utilities and solid waste management.

Architecture

The building is configured with an “H” shaped footprint with hollows of the “H” accommodating the apparatus room and apparatus entry and exiting to the site. The east side (Water Street-facing) of the “H” contains a single-story wing of rooms for the on-duty responder fire crew and the west side (Jameson Street-facing) contains the headquarters offices in a two-story configuration. The architecture of the Orange Fire Station No. 1 and Headquarters has been designed to reflect the Spanish Revival style found throughout the Old Towne Orange Historic District. The two-story building will have an offset massing that steps back from the street as the building increases in height. The roof will be a combination of flat parapet areas flanked by low-sloped mansards. Concrete roofing tiles, designed to simulate clay, will be used on all sloped roof areas. The west side will feature a second-story arcade element and a heavy-timber pergola to help break up the massing. Window and door openings, with charcoal gray frames, will occur symmetrically at exterior planes, at regular intervals. The exterior finish is primarily composed of a smooth, cream-colored stucco, terracotta-colored brick veneer and cast concrete panels. Decorative wrought iron details, period style lighting, and a small tower element at the main entrance

will help complete the historic styling. Additional discussion of architecture and landscaping is contained in the attached April 15, 2020, Design Review Committee Staff Report (Attachment 5).

Landscaping

All the existing trees will be retained and protected on site, including the pine tree at the parking site. Two Ficus trees on Chapman Avenue, however, will be removed. Once constructed, the site perimeter will be landscaped with 44 trees and a variety of shrubs at appropriately regularly-spaced intervals. Trees include Magnolias at the Chapman Avenue-facing frontage, Natchez Crepe Myrtle trees facing Water and Jameson Streets, Goldenrain trees at the visitor parking lot, and Brisbane Box trees between the site and southern boundary where the Water Yard begins. Shrubs include a variety mixed with accent plantings and groundcover as specified on the landscape plan.

Zone Change

The General Plan Land Use Element designation for this site is Public Facilities and Institutions (PFI). The project site is currently zoned as Office Professional (O-P) and Single Family Residential (R-1-6). The Project proposes a zone change of the Fire Station and Headquarters site to Public Institution (P-I) to better reflect the existing nature of the land uses in the neighborhood and to ensure that the proposed project is consistent with the General Plan PFI Land Use Designation in accordance with State Law. The Zone Change is shown in Attachments 3 and 4.

Parcel Map

There are multiple parcels that exist on the site and a Tentative Parcel Map is proposed to merge all the parcels into a single parcel. A Tentative Parcel Map has not been created at this time per the specifications of the Subdivision Map Act. A Tentative Parcel Map, to be approved by the Community Development Director, will be completed and recorded as a final map with the County prior to a building permit for the project. The map shown in Attachment 2 represents the parcels requiring consolidation under the future parcel map.

7. ANALYSIS AND STATEMENT OF THE ISSUES

No issues exist for this project because the design and construction has occurred under City staff oversight to meet City needs and specifications in relation to fire prevention, fire suppression, emergency response, area context, and site design. Potentially significant environmental effects have been mitigated to less than significant with the mitigation measures provided in Mitigated Negative Declaration No. 1862-18.

Pursuant to Government Code sections 53090(a) and 53091(a) the City is not required to comply with the strict application of its zoning ordinances. Hence the Zoning Code's height limitation of 32 feet, the tree count calculation of the Landscape Design Guidelines, and the 6-foot wall height limitation do not apply to this project. Instead, the project has been reviewed by staff and designed in a manner compatible with height, massing, architecture and landscaping that integrate with the project surroundings for the public benefit.

On June 24, 2020, the City sent a combined Public Hearing and Notice of Intent to Adopt Mitigated Negative Declaration No. 1862-18 to a total of 201 property owners/tenants within a 300-foot radius of the project site and 37 agencies and/or persons specifically requesting notice. A notice was published in the Orange County Register newspaper on June 25, 2020. The project site was posted in three locations with the notification on that same date.

9. ENVIRONMENTAL REVIEW

Mitigated Negative Declaration: Mitigated Negative Declaration No. 1862-18 was prepared to evaluate the physical environmental impacts of the project, in conformance with the provisions of the California Environmental Quality Act (CEQA) per State CEQA Guidelines Section 15070 and in conformance with the Local CEQA Guidelines (Attachment 7). The Mitigated Negative Declaration finds that the project will have less than significant impacts to the environment, with the implementation of standard conditions and mitigation measures. The 30-day public review period was initiated on June 25, 2020, ending on July 25, 2020. Copies of the document were available for public review at City Hall and on the City website.

Staff received three written comment letters and a phone call during the public review period. The letters and the City's responses are included in Attachment 8.

10. ADVISORY BOARD RECOMMENDATION

Streamlined Multi-Disciplinary Accelerated Review Team (SMART):

SMART reviewed the project on February 19, 2020 and recommended that the project proceed through the plan preparation phase with consideration given to comments received.

Design Review Committee (DRC):

At the time this project sought DRC review, no DRC meetings were scheduled due to the City implementing Covid-19 safety practices. The City Manager authorized the Community Development Director to review and approve City projects for Design Review. On April 22, 2020, the Community Development Director recommended that the project be approved for Design Review based on an understanding that the Department of Public Works will work with applicable City Departments to address the considerations identified in the Design Review staff report (Attachments 5 and 6).

11. ATTACHMENTS

1. Vicinity Map
2. Project Plans
3. Existing Zoning
4. Proposed Zoning
5. Design Review Staff Report Dated April 15, 2020
6. Community Development Director Design Review Recommendation Letter Dated April 22, 2020
7. MND No. 1862-18
8. MND No. 1862-18 Public Comments and City Response to Comments
9. Planning Commission Resolution No. 20-20 (including Ordinance ##-20)

Approval Date:

Draft Minutes

Planning Commission
 City of Orange

August 24, 2020
 7:00 p.m.

STAFF PARTICIPATION VIA TELECONFERENCE:

- Mary Binning, Sr. Assistant City Attorney
- Anna Pehoushek, Assistant Community Development Director
- Chad Ortlieb, Senior Planner
- Eddie Lopez, City Project Engineer
- Jessica Wang, Administrative Specialist
- Simonne Fannin, Recording Secretary

REGULAR SESSION

- 1.1 **CALL TO ORDER:** Chair Simpson called the meeting to order at 7:01 p.m.
- 1.2 **FLAG SALUTE:** Chair Simpson led the flag salute.
- 1.3 **ROLL CALL: Present:** Commissioners Simpson, Glasgow, Willits, Vazquez, Martinez
- 1.4 **PUBLIC PARTICIPATION:**

Chair Simpson opened the public hearing.

Anna Pehoushek, Assistant Community Development Director stated no public comments were received.

- 1.5 **ASSISTANT COMMUNITY DEVELOPMENT DIRECTOR REPORTS: None**
- 1.6 **ANNOUNCEMENT OF APPEAL PROCEDURES (details found on last page of this agenda)**
- 2. **CONSENT CALENDAR: None**
- 3. **CONTINUED HEARING:**
- 3.1 **Mitigated Negative Declaration No. 1862-18, Zone Change No. 1301-20, Design Review No. 5008-20, and Tentative Parcel Map No. 0016-20; Fire Station No. 1 and Headquarters Project; 105 S. Water Street and 180 S. Water Street (continued from August 17th, 2020).**

The City of Orange is proposing a new 16,574 square foot Fire Station No. 1 building and attached 11,353 square foot Fire Headquarters office at 105 S. Water Street, an associated parking lot across the street at 180 S. Water Street, and to utilize an existing 3,780 on-site building, currently used by the Water Division, for reserve apparatus.

RECOMMENDED ACTION:

Adopt Planning Commission Resolution No. PC 20-20 entitled:

A RESOLUTION OF THE PLANNING COMMISSION RECOMMENDING THAT THE CITY COUNCIL ADOPT MITIGATED NEGATIVE DECLARATION NO. 1862-18 AND APPROVE ZONE CHANGE NO. 1301-20, DESIGN REVIEW NO. 5008-20, AND TENTATIVE PARCEL MAP NO. 0016-20 FOR THE CONSTRUCTION OF FIRE STATION NO. 1 AND HEADQUARTERS LOCATED AT 105 S. WATER STREET AND THE ASSOCIATED PARKING LOT LOCATED AT 180 WATER STREET.

NOTE: Mitigated Negative Declaration No. 1862-18 was prepared to evaluate the physical environmental impacts of the project, in conformance with the provisions of the California Environmental Quality Act (CEQA) per State CEQA Guidelines Section 15070 and in conformance with the Local CEQA Guidelines (Attachment 7). The Mitigated Negative Declaration finds that the project will have less than significant impacts to the environment, with the implementation of standard conditions and mitigation measures.

Chad Ortlieb, Senior Planner provided an overview of the project consistent with the staff report.

Chair Simpson and Vice Chair Glasgow disclosed residents they spoke with asked to have the sidewalk adjacent to the project discontinued on S. Jameson Street to the centerline of E. Century Drive.

Commissioner Willits disclosed he was approached by a local resident regarding the wall.

The Commissioners had questions and comments on the following:

- Architecture is a good fit and well done.
- Length of the block wall behind the south end of the fire station to Chapman.
- The Commissioners recommended softening the landscaping of the sidewalk area up to the Water Department.
- Emergency warning systems and circulation pattern onto Chapman.
- Location of employee and visitor parking.
- Egress/ingress and circulation to the fire station and Water Department.
- Opportunities for undergrounding utility poles on Almond.
- Preservation of street pavement for large utility trucks.

Anna Pehoushek, Assistant Community Development Director responded no public comments were received this item.

The public comment portion of the meeting was closed.

A motion was made to adopt Planning Commission Resolution No. PC 20-20 entitled a Resolution of the Planning Commission recommending that the City Council adopt Mitigated Negative Declaration No. 1862-18 and approve Zone Change No. 1301-20, and adopt an ordinance changing the zoning from Office Professional and Single Family Residential 6,000 square feet to Public

Institution and approve Design Review No. 5008-20, and Tentative Parcel Map No. 0016-20 for the construction of Fire Station No. 1 and headquarters located at 105 S. Water Street and the associated parking lot located at 180 Water Street with the added recommendation of discontinuing sidewalk along the S. Jameson Street edge of the project through to the centerline of E. Century Drive and to have contiguous landscaping matching that along the Water Yard Jameson Street frontage.

- MOTION:** Commissioner Vazquez
- SECOND:** Commissioner Glasgow
- AYES:** Commissioners Simpson, Glasgow, Willits, Vazquez, Martinez
- NOES:** None
- ABSENT:** None
- ABSTAIN:** None

MOTION CARRIED

4. ADJOURNMENT: 7:38 p.m.

The next Regular Planning Commission Meeting will be held on Wednesday, September 9, 2020, at 7:00 p.m.

Anna Pehoushek, Assistant Community Development Director

**MITIGATED NEGATIVE DECLARATION NO. 1862-18
ZONE CHANGE NO. 1301-20,
DESIGN REVIEW NO. 5008-20,
TENTATIVE PARCEL MAP NO. 0016-20**

RESOLUTION NO. PC 20-20

**A RESOLUTION OF THE PLANNING COMMISSION OF
THE CITY OF ORANGE RECOMMENDING THAT THE
CITY COUNCIL ADOPT MITIGATED NEGATIVE
DECLARATION NO. 1862-18 AND APPROVE ZONE
CHANGE NO. 1301-20, DESIGN REVIEW NO. 5008-20, AND
TENTATIVE PARCEL MAP NO. 0016-20 FOR THE
CONSTRUCTION OF FIRE STATION NO. 1 AND
HEADQUARTERS LOCATED AT 105 S. WATER STREET
AND THE ASSOCIATED PARKING LOT LOCATED AT
180 WATER STREET**

APPLICANT: CITY OF ORANGE

Moved by Commissioner Vazquez, and seconded by Vice-Chair Glasgow that the following resolution be adopted:

WHEREAS, the Planning Commission has authority per Orange Municipal Code (OMC) Table 17.08.020, OMC Section 17.10.020, and Section 7.A of the City of Orange Local CEQA Guidelines to review and make recommendations to the City Council relating to Mitigated Negative Declaration No. 1862-18, Zone Change No. 1301-20, Design Review No. 5008-20, and Tentative Parcel Map No. 0016-20; and

WHEREAS, the property subject to Zone Change No. 1301-20 has had a zoning classification of Office Professional and Single Family Residential, 6,000 sq. ft., which is not consistent with the Public Facilities and Institutions General Plan land use designation; and

WHEREAS, California Government Code Section 65860 requires consistency between a city's General Plan and zoning designations; and

WHEREAS, Mitigated Negative Declaration No. 1862-18, Zone Change No. 1301-20, Design Review No. 5008-20, and Tentative Parcel Map No. 0016-20 were reviewed in accordance with the provisions of the OMC and City policies and procedures; and

WHEREAS, on February 19, 2020, the City Streamlined Multi-Disciplinary Accelerated Review Team reviewed the project and recommended that the project proceed; and

WHEREAS, on April 22, 2020, the Community Development Director recommended that the project be approved for Design Review based on an understanding that the Department of Public Works will work with applicable City Departments to address the considerations identified in the Design Review staff report; and

WHEREAS, the Planning Commission conducted one duly advertised public hearing on August 24, 2020, at which time interested persons had an opportunity to testify either in support of, or opposition to, the proposal and for the purpose of considering Mitigated Negative Declaration No. 1862-18, Zone Change No. 1301-20, Design Review No. 5008-20, and Tentative Parcel Map No. 0016-20, relating to property described as follows:

105 SOUTH WATER STREET- LOTS 1 THROUGH 8, IN BLOCK B, OF THE JAMESON TRACT IN THE CITY OF ORANGE, COUNTY OF ORANGE AS RECORDED IN BOOK 13, PAGE 44 IN THE OFFICE OF THE RECORDER OF LOS ANGELES COUNTY, CALIFORNIA)

180 SOUTH WATER STREET- CHAPMAN TR LOT 2 BLK D PORS OF LOT TR 175 – APN No. 390-452-05

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission recommends that the City Council approve Mitigated Negative Declaration No. 1862-18, Zone Change No. 1301-20, Design Review No. 5008-20, and Tentative Parcel Map No. 0016-20, to change existing zoning from Office Professional (O-P) and Single Family Residential (R-1-6) to Public Institution (P-I) (1) to better reflect the existing nature of the land uses in the neighborhood and to ensure that the proposed project is consistent with the General Plan Public Facilities and Institutions Land Use Designation, (2) to authorize the design and construction of Fire Station No. 1 and Headquarters, and adopt an Ordinance establishing the subject Zone Change, as depicted on maps included in Attachment A to this Resolution, attached hereto, at 105 S. Water Street including the associated parking lot at 180 S. Water Street, and (3) to consolidate the underlying parcels based on the following findings:

SECTION 1 – FINDINGS

General Plan

1. *The project must be consistent with the goals and policies stated within the City's General Plan.*

The proposed Public Institution (P-I) zoning is consistent with the General Plan Land Use Element Public Facilities and Institutions (PFI) designation. Establishing P-I zoning on the site would eliminate the existing General Plan/zoning inconsistency in conformance with state law and is the appropriate zoning designation to facilitate a Fire Station and Headquarters building. The P-I zoning is also consistent with the adjacent P-I zoning designation for the Water Yard use. The General Plan contains Land Use Element policies 6.1 and 6.2 which encourage good urban design and reducing land use conflicts between residential and non-residential uses which the project accomplishes through such features as minimized height, perimeter walls and fencing, and ample landscaping. The project also is consistent with Safety Element Goals 3.0 and 6.0 in that the project will

assist in protecting lives and property from urban and wildland fires, will provide up to date infrastructure, and will enable the City to provide public safety services of the highest quality. The project is also consistent with Noise Element Goal 1.0 in that a noise attenuating wall and enclosure is provided to maintain noise thresholds for the surroundings. The project is consistent with Urban Design Element Goals 3.0 and 6.0 in that the project design promotes the appearance of the site with the new fire station and headquarters building in way that provides a contemporary interpretation of historic buildings in nearby Old Towne, demarks a primary entry route into Old Towne, and furthers the announcement of this public-services-concentrated area of the City where the Water Yard, Library, and City Hall are all within half a mile or less of each other. Hence, the project promotes contextually appropriate infill development on a currently vacant lot. In addition, the project will provide design compatibility with the surroundings through the use of compatible architecture, materials, fencing, landscaping and enhancement of an existing storage building. Therefore, the project is consistent with General Plan goals and policies.

Design Review

1. *The project design upholds community aesthetics through the use of an internally consistent, integrated design theme and is consistent with all adopted specific plans, applicable design standards, and their required findings (OMC 17.10.07.G.3).*

The project is respectful of the area community aesthetics and sensitive to the gateway corridor to Old Towne in that it utilizes architectural elements appropriate to a fire station and headquarters office. Several of the building materials are characteristic of corridor buildings including the use of plaster walls, brick façade, hip roof forms, and architectural detailing. The height of the building is minimized to that needed to support apparatus bays and crew occupancy, and office needs. The second story component is stepped back from the first story level and a public entry point is focused under a tower feature. The building provides architectural interest via indentations in architectural plane. Architectural elements are alternated and intertwined. Windows are regularly-spaced. Landscaping is provided around the perimeter of the sites and includes an adequate setback with trees that soften views to the building and parking lots. The building is sited between three streets which further reduces any impacts of mass to adjacent properties. Repurposing of the existing storage building will ensure that no greater visual mass will occur than exists for that building now and planned improvements would enhance the appearance.

There is no specific plan or applicable design standards applicable to this property.

Tentative Parcel Map

1. *The proposed map is consistent with applicable general and specific plans as specified in Government Code Section 65451.*

This finding is met as described in the General Plan Consistency finding. There is no specific plan for this site.

- 2. The design or improvement of the proposed subdivision is consistent with applicable general and specific plans.*

This finding is met as described in the General Plan Consistency finding. There is no specific plan for this site.

- 3. The site is physically suitable for the type of development.*

The site is flat with no topographical obstructions, or subsurface conditions that would hinder construction and the site maintains direct access to the public right-of-way where all utilities necessary to serve the project are located.

- 4. The site is physically suitable for the proposed density of development.*

The site combined with the Water Yard facilities maintains a 0.38 Floor Area Ratio (FAR), which is less than the 0.5 FAR maximum allowed by the General Plan Land Use Element. All the necessary Fire Station and administrative Headquarters offices and apparatus bays are easily accommodated on the site in a manner that is compatible with the surrounding area through the use of minimalized height, stepbacks, indentation in building plane, and hip or flat roof usage.

- 5. The design of the subdivision or the proposed improvements are not likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.*

The subdivision is merely for parcel consolidation. There is no significant habitat on the site other than trees. There are no other significant habitats that would result in substantial injury to fish or wildlife or their habitat as a result of the subdivision. Rather, the fire suppression support that the fire station would provide would likely preserve habitat. Biological mitigation measures from Mitigated Negative Declaration No. 1862-18 reduce potential construction impacts to nesting birds to less than significant levels.

- 6. The design of the subdivision or type of improvements is not likely to cause serious public health problems.*

Fire Station No. 1 would respond to public and individual health threats. Hence no public health problems are anticipated, rather public health enhancement is anticipated.

- 7. The design of the subdivision or the type of improvements will not conflict with easements, acquired by the public at large, for access through or use of, property within the proposed subdivision.*

The site has a wall or fence barrier around it. The public does not use the site for access. Existing vehicular and pedestrian access will remain along the Chapman Avenue, Water Street, and Jameson Street rights-of-way.

Site Plan

1. *The project is compatible with surrounding development and neighborhoods.*

The project has been reviewed by staff and designed in a manner compatible with height, massing, architecture and landscaping that integrate with the project surroundings for the public benefit. The architecture of the Orange Fire Station No. 1 and Headquarters has been designed to reflect the Spanish Revival style found throughout the Old Towne Orange Historic District. The two-story building will have an offset massing that steps back from the street as the building increases in height. The roof will be a combination of flat parapet areas flanked by low-sloped mansards. Concrete roofing tiles, designed to simulate clay, will be used on all sloped roof areas. The west side will feature a second-story arcade element and a heavy-timber pergola to help break up the massing. Window and door openings, with charcoal gray frames, will occur symmetrically at exterior planes, at regular intervals. The exterior finish is primarily composed of a smooth, cream-colored stucco, terracotta-colored brick veneer and cast concrete panels. Decorative wrought iron details, period style lighting, and a small tower element at the main entrance will help complete the historic styling. Parking to support the project will be provided on and adjacent to the Fire Station and Headquarters and fencing and landscaping will be used to diminish any significant appearance of mass or view of parking areas.

2. *The project conforms to City development standards and any applicable special design guidelines or specific plan requirements.*

The project design and construction has occurred under City staff oversight to meet City needs and specifications in relation to fire prevention, fire suppression, emergency response, area context, and site design. Pursuant to Government Code sections 53090(a) and 53091(a) the City is not required to strictly comply with its zoning ordinances. Hence the Zoning Code's height limitation of 32 feet, the tree count calculation of the Landscape Design Guidelines, and the 6-foot wall height limitation do not apply to this project. Instead, the project has been reviewed by staff and designed in a manner compatible with height, massing, architecture and landscaping that integrate with the project surroundings for the public benefit. There are no special design guidelines nor a specific plan for this site.

3. *The project provides for safe and adequate vehicular and pedestrian circulation, both on- and off-site.*

The project provides for emergency vehicle exiting onto Chapman Avenue and re-entry via Water Street. Employee and visitor parking is accessible off of Water Street. Pedestrian access occurs via existing sidewalks on Chapman Avenue and Water Street with safe crossing at the Chapman Avenue and Water Street corners. Notification striping and signage will be utilized to notify vehicular and pedestrian traffic of emergency response vehicle exiting onto Chapman Avenue.

4. *City services are available and adequate to serve the project.*

The project is infill development located in an urban area where all wet and dry utilities, pedestrian and vehicular circulation, and City services are available. The Fire Station and Headquarters building itself are a City service.

5. *The project has been designed to fully mitigate or substantially minimize adverse environmental effects.*

Mitigated Negative Declaration No. 1862-18 was prepared for the project and includes mitigation measures adopted for the purpose of reducing potentially significant impacts to nesting birds, cultural resources, Native American cultural resources, and paleontological deposits to less than significant levels.

SECTION 2 – ENVIRONMENTAL REVIEW

Mitigated Negative Declaration No. 1862-18 was prepared to evaluate the physical environmental impacts of the project, in conformance with the provisions of the California Environmental Quality Act (CEQA) per State CEQA Guidelines Section 15070 and in conformance with the Local CEQA Guidelines. The Mitigated Negative Declaration (MND) finds that the project will have less than significant impacts to the environment, with the implementation of standard conditions and mitigation measures.

The draft MND was circulated for a 30-day public review period from June 25, 2020, ending on July 25, 2020. Copies of the MND were available for public review at City Hall and on the City's website. On June 24, 2020, the City sent a combined Public Hearing and Notice of Intent to Adopt Mitigated Negative Declaration No. 1862-18 to a total of 201 property owners/tenants within a 300-foot radius of the project site plus, a combination of 37 agencies and/or persons specifically requesting notice. A notice was published in the Orange County Register newspaper on June 25, 2020. The project site was posted in three locations with the notification on that same date.

The Planning Commission reviewed and considered written comment letters during the CEQA public review period along with any testimony at the public hearing. After examining the MND and associated Mitigation Monitoring Program, the Planning Commission adopted Resolution No. 20-20 recommending that the City Council find that that the project will not create significant environmental impacts.

SECTION 3 – MITIGATION MEASURES

BE IT FURTHER RESOLVED that the following mitigation measures are imposed with project approval:

- BIO-1: Nesting Birds. If Project clearing and construction must occur during the avian nesting season (February 1 to September 1), a survey for active nests must be

conducted by a qualified biologist no more than three days prior to the activities to determine the presence/absence, location, and status of any active nests on or adjacent to the Project site. If no active nests are discovered or identified, no further mitigation is required. In the event that active nests are discovered on site, a suitable buffer determined by the qualified biologist should be established around such active nests. Buffers typically have a minimum width of 300 feet (500 feet for raptors). No ground-disturbing activities shall occur within this buffer until the biologist has confirmed that breeding/nesting is completed, and the young have fledged the nest. Limits of construction to avoid a nest site shall be established in the field by a qualified biologist with flagging and stakes or construction fencing. Construction personnel shall be instructed regarding the ecological sensitivity of the fenced area. The results of the survey shall be documented and filed with the Community Development Director within five days after the survey.

CUL-1 In the event a potentially significant cultural resource is encountered during earthwork activities, as determined by the foreperson, qualified Native American Monitor, or any City official, all subsurface construction activities within a 100-foot radius of the find shall cease and workers shall avoid altering the materials until a qualified archaeologist who meets the Secretary of Interior's Professional Qualification Standards for archaeology has evaluated the situation. The City of Orange Public Works Department shall include a standard inadvertent discovery clause in the construction contract to inform contractors of this requirement. Any resources found during construction activities shall expeditiously be recorded on appropriate Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA criteria by a qualified archaeologist. Potentially significant cultural resources consist of but are not limited to stone, bone, glass, ceramics, wood, or shell artifacts, or features including hearths, structural remains, or historic dumpsites. If the resource is determined to be significant under CEQA Guidelines Section 15064.5, the qualified archaeologist shall expeditiously prepare and implement a research design and archaeological data recovery plan that will capture those categories of data for which the site is significant in accordance with Section 15064.5 of the CEQA Guidelines. The archaeologist shall also expeditiously perform appropriate technical analyses, prepare a comprehensive report complete with methods, results, and recommendations, and provide for the permanent curation or repatriation of the recovered resources in cooperation with the designated most likely descendant as needed. The report shall be submitted to the City of Orange Community Development Department, the South Central Coastal Information Center, and the State Historic Preservation Office (SHPO), if required.

GEO-1 In the event a previously unrecorded paleontological deposit is encountered during construction; all activity shall cease in the vicinity of the find and be

redirected elsewhere, and the City shall be immediately informed of the discovery. A paleontologist shall be retained by the City to make recommendations on the treatment of the deposits. The recommendations shall be developed in accordance with applicable provisions of Public Resources Code Section 21083.2 and State CEQA Guidelines 15126.4. The City shall be consulted on the treatment of the deposits. The City shall follow all recommendations made by the paleontologist. The deposits shall not be disturbed or removed until the appropriate treatment has been recommended by the paleontologist and approved by the City. No construction activity in the vicinity of the find, the boundary of which shall be determined by the paleontologist, may resume until the recommendations for treatment of the deposits have been implemented. If applicable, the final report containing site forms, site significance, and mitigation measures shall be submitted to the Community Development Department when finalized. The final written report shall be submitted to the appropriate regional paleontological Information Center within three months after work has been completed.

TCR-1: Prior to the commencement of any ground disturbing activity at the project site, the project applicant shall retain a Native American Monitor approved by the Gabrieleno Band of Mission Indians-Kizh Nation – the tribe that consulted on this project pursuant to Assembly Bill A52 (the “Tribe” or the “Consulting Tribe”). The monitor will have experience working with a qualified archaeologist, as defined in the Secretary of the Interior’s Professional Qualifications Standards, and/or education or professional training in a related field, such as anthropology, archaeology or ethnology. A copy of the executed contract shall be submitted to the City of Orange Community Development Department prior to the issuance of any permit necessary to commence a ground-disturbing activity. The on-site monitoring shall commence when ground-disturbing activities begin and shall end when the project site ground-disturbing activities are completed, or when the Native American Monitor has indicated that the site has a low potential for impacting Tribal Cultural Resources, whichever occurs first.

Ground disturbing activities are defined as activities that may include, but are not limited to, pavement removal, potholing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the project area. The Tribal Monitor will complete daily monitoring logs that will provide descriptions of the day’s activities, including construction activities, locations, soil, and any cultural materials identified. Upon discovery of any Tribal Cultural Resources, construction activities shall cease in the immediate vicinity of the find (not less than the surrounding 100 feet) until the find can be assessed.

All Tribal Cultural Resources unearthed by project activities shall be evaluated by the qualified archaeologist and Tribal monitor approved by the Consulting Tribe.

If the resources are determined to be Native American in origin, the Consulting Tribe will retain it/them in the form and/or manner the Tribe deems appropriate, for educational, cultural and/or historic purposes. If human remains and/or grave goods are discovered or recognized at the Project Site, all ground disturbance shall immediately cease, and the county coroner shall be notified per Public Resources Code Section 5097.98, and Health & Safety Code Section 7050.5. Human remains and grave/burial goods shall be treated alike per California Public Resources Code Section 5097.98(d)(1) and (2).

Work may continue on other parts of the Project Site while evaluation and, if necessary, mitigation takes place in accordance with CEQA Guidelines Section 15064.5(f). If the resource is determined by the qualified archaeologist and tribal monitor to be a non-Native American resource the applicant would be required to implement MM CUL-1.

I hereby certify that the foregoing resolution was adopted on August 24, 2020, by the Planning Commission of the City of Orange by the following vote:

AYES: Chair Simpson, Vice-Chair Glasgow and Commissioners Martinez, Vazquez and Willits

NOES: None

ABSENT: None



Dave Simpson, Planning Commission Chair

8-25-20

Date



Agenda Item

City Council

Item #: 11.2.

9/8/2020

File #: 20-088

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Cash, Public Works Director

1. SUBJECT

Public Hearing to consider modernizing the City's Transportation System Improvement Program (TSIP) fees.

2. SUMMARY

Modernizing the TSIP primarily consists of consolidating the three existing program areas to establish a single citywide fee; diversifying project categories eligible to be funded through the fee program, and adjusting fees. Staff has prepared the updated Orange Municipal Code (OMC) ordinances and resolutions to establish the citywide fee area and adjust the TSIP fee.

3. RECOMMENDED ACTION

1. Introduce and approve Ordinance No. 17-20 for First Reading. An Ordinance of the City Council of the City of Orange amending Chapter 15.41 of the Orange Municipal Code to update the program areas subject to Transportation Systems Improvement Program fees and modify the yearly adjustment method for Transportation Systems Improvement Program fees.
2. Approve Resolution No. 11270. A Resolution of the City Council of the City of Orange repealing Resolution No. 10284 and revising the Transportation Systems Improvement Program fee categories and related fees.

4. FISCAL IMPACT

The proposed ordinance and resolution will ensure that that the TSIP fees will keep pace with construction costs over time. The revised impact fees will become effective November 12, 2020. The total revenue generation will depend on the pace at which new development projects are entitled.

5. STRATEGIC PLAN GOALS

Goal 1: Provide for a safe community

- b. Provide and maintain infrastructure necessary to ensure the safety of the public

Goal 2: Be a fiscally healthy community

- b. Analyze future fiscal needs and potential revenue opportunities

6. DISCUSSION AND BACKGROUND

The City has been assessing a Transportation System Improvement Program (TSIP) fee on new development for many years. Considered a mitigation fee under the California Government Code, TSIP effectively provides a mechanism for a development to pay its fair share toward additional transportation infrastructure needed to support associated increases in transportation demand. While the current TSIP fee structure has adequately served the City in the past, it has a number of limitations that should be addressed in order to continue to meet the City's needs. Those include:

1. The TSIP is currently comprised of three (3) separate fee areas, and fees collected from within any one area are generally designated to fund improvements in that same area. Often times, the areas of funding availability and needs are not aligned, which can result in funding delays for high priority projects located in underfunded fee areas. The establishment of multiple fee areas can be appealing to (a) large cities, particularly those with geographically, or economically non-contiguous areas or (b) developing cities that experience a geographic imbalance in development activity (and, therefore, infrastructure needs). However, medium sized, built-out cities, such as present day Orange, typically benefit more from the added flexibility of a citywide transportation fee program.
2. As presently constituted, the TSIP is only intended to fund projects that are capacity-enhancing. While capacity-enhancing projects remain important and would continue to be identified as eligible improvements, the TSIP has the potential to fund additional types of transportation projects, including those that can make our streets safer, smarter, and more vibrant. Examples of additional project categories include, but are not limited to, traffic calming, intelligent transportation systems, active transportation (pedestrian and bicycle improvements,) and complete streets.
3. The TSIP fee was last updated in 2008 and has not been adjusted since. Over the last 12 years, the construction cost index (CCI) has increased by approximately 40 percent. At the same time, the purchasing power of fees collected have been rapidly diminishing. If this trend were to continue, fee revenues will eventually become insufficient in providing for infrastructure needed to support development. To put our fees in perspective, five other full-service Orange County cities (Anaheim, Fullerton, Santa Ana, Huntington Beach, and Brea) were surveyed for comparison. The survey indicated that, Orange's TSIP fees (average of the three existing fee areas) are generally well below the five-city average. In the case of certain land uses, e.g. single family residential and office, Orange's TSIP fees are over 50 percent below average.

Nexus Study

In order to modernize the TSIP and address the above limitations a nexus study must be conducted, the purpose of which is to provide the technical analysis necessary under the Mitigation Fee Act to support an updated fee. Among other things, the nexus study does the following:

- Identifies transportation improvements to be included;
- Identifies the cost of said improvements;
- Determines proportionate allocation of cost to new development; and
- Establishes the maximum allowable fee that can legally be collected for various types of new development, e.g., residential, commercial, office, etc.

The nexus study that has been conducted for purposes of modernizing the TSIP fee provides support

for modernization of the fee. In the study, prepared by Economic and Planning Systems, Inc., the issue of consolidating the three (3) existing fee areas was analyzed. The study found justification for consolidating the three (3) existing fee areas into a single citywide fee area. The city transportation network is such that transportation demand generated by one part of the city has the potential to affect any other part of the city.

The study also identified projects that would be eligible for funding through a new TSIP and their estimated costs. As part of the project development process, projects of low feasibility, such as those that require right-of-way acquisition, were eliminated, and replaced with other project types. Many projects that have been historically funded through TSIP were retained, including right-turn lane additions, new traffic signals, traffic signal modifications, and feasible intersection widening. In addition, next-generation traffic signal equipment, fiber optic and communication system expansion, complete streets projects, traffic calming, curb ramp replacement, and bicycle master plan implementation were introduced which will allow for a broader range of capacity and transportation improvements funded under the fee and will allow for technological transportation advances to be funded under the program.

Lastly, the nexus study also determined that, based on projected growth, infrastructure needs, and the full portion of project costs that can be attributed to new development, the maximum allowable fee that can be charged is approximately 500% higher than the existing fee levels. The percentage difference between maximum allowable and existing will vary across land use due to changes in traffic generation intensity further discussed below. Because charging the maximum allowable fee can render development cost-prohibitive, cities may set their fees anywhere at or below the maximum allowable.

Proposed Changes to Fee Structure

TSIP fees, like most transportation development fees, are typically apportioned across various land uses based on the relative impact that each land use is expected to have on the transportation system (traffic demand.) Doing so results in a more equitable fee program in which any given development project would pay its fair share, no more or less. Over time, modifications in human behavior, social preferences, and technological advancements can significantly affect the traffic generation intensity associated with each land use category. Therefore, to maintain equity in the fee program would preclude using existing fees as a basis for upward adjustments, as the assumptions around each land uses' impact on the transportation system have changed in the intervening years. Rather, the fees should also be reapportioned across the various land uses to reflect changes in travel demand, in addition to any changes in magnitude.

Based on the above, the fee setting process was guided by the following principles:

1. Increase the overall revenue generation potential of the fee program by an amount that would result in recovering some of the cumulative CCI increases since 2008;
2. Ensure that the fees do not exceed the maximum allowable as identified in said nexus study;
3. Reapportion the fees between land uses based on up-to-date trip rates and the nexus study;
4. Balance the need to adequately fund transportation facilities with the desire to promote development; and
5. Provide for a built-in annual adjustment based on future changes to the CCI, similar to the City's other development fees.

To best achieve these objectives, staff recommends setting the TSIP fees based on 25 percent of the maximum project cost that can be attributed to new development. The resulting fees for each land use, shown in the table below, were determined by calculating 25 percent of the maximum project cost attributable to new development, subtracting out the existing TSIP fund balance, and dividing the result by projected growth in travel demand in the City. This cost was then apportioned across land uses based on their relative impact in generating new trips and vehicle miles. Since the understanding of trips generated by each land use has changed since 2008, the percentage change between the proposed and existing fees will vary from one land use to another. Those land uses that today generate fewer trips than they did in 2008 will see a relatively lower increase in fees compared to land uses where trip generation has stayed the same or increased. The percentage change for each land use is shown in the table below.

Setting the fee in this manner increases the revenue generation potential of the TSIP program and captures some of the deferred fee increases since 2008, while still maintaining fee competitiveness with our comparator cities. For comparison, the city collected \$568,749 in TSIP fees in 2019. If instead, the proposed rates were applied to the same 2019 projects, that total would have been \$728,682, an increase of 28 percent. With that in mind, the actual percentage increase over any period of time or across any combination of past projects would vary based on land use composition and location (since the previous fees were area specific and, again, the proposed fee adjustments vary by land use.)

In addition to changes to the proposed fee amounts, staff also recommends two additional adjustments in order to promote fee equity and fee schedule streamlining:

1. Based on trip generation intensity, TSIP fees for condos and townhomes should be calculated based on multi-family rates, rather than single family rates; and
2. Eliminate from the fee schedule educational, hospital, religious and child care uses. Fees for these land uses will be considered an "atypical/other" use and charged a per-trip end fee rate.

The table below shows five values for each land use. Those are, the current average fee, the fee had it been adjusted by CCI since 2008 (40% increase over current fee), the maximum allowable fee per the nexus study, the proposed fee using 25% of the allowable increase per the nexus study, and the percent change between the proposed fee and the current average fee per land use category. An expanded table with more detailed information is also attached.

TSIP FEE TABLE

Land Use	Existing Average	Existing Average Adjusted to 2020 Dollars	Maximum Allowable	PROPOSED (25 percent of Maximum Allowable) ⁴	% Change (Proposed vs. Existing)
Single Family (per unit) ¹	\$1,022.00	\$1,439.00	\$6,119.86	\$1,473.90	44%
Apartments/ Multi Family (per unit) ²	\$763.67	\$1,075.00	\$3,526.70	\$849.37	11%
Hotel (per room)	\$912.33	\$1,285.00	\$5,370.77	\$1,293.49	42%

General Office (per square foot)	\$1.25	\$1.76	\$6.26	\$1.51	55%
Medical Office (per square foot)	\$4.11	\$5.79	\$22.36	\$5.38	31%
Industrial (per square foot)	\$0.79	\$1.12	\$3.19	\$0.77	-3%
Retail/ Commercial (per square foot)	\$4.64	\$6.53	\$15.76	\$3.80	-18%
Hospital (per bed)	\$1,342.33	\$1,890.01	\$14,339.18	n/a ³	n/a
Church/ Synagogue (per square foot)	\$1.04	\$1.46	\$4.46	n/a ³	n/a
School (per student)	\$146.67	\$206.51	\$1,304.15	n/a ³	n/a
Child Care (per square foot)	\$8.91	\$12.55	\$6.97	n/a ³	n/a
Atypical/ Other (per trip end)	\$113.67	\$160.04	\$642.44	\$154.72	36%

1. Condos and Townhomes are currently charged the single family rate. Because their traffic generation characteristics are more similar to apartments, they are reclassified as multi-family.
2. Proposed apartment rate will apply to condos and townhomes.
3. In order to streamline the fee schedule, these relatively uncommon land uses will be deleted. They will now fall under the "other" land use, with fees being calculated on a per trip end basis. The actual fee for each of the deleted land uses would be the same whether calculated per square foot/bed/student or per trip end.
4. 25% of allowable maximum revenue potential less existing TSIP fund balance.

Summary and Public Noticing

If approved, the above fees will go into effect on November 12, 2020, and adjusted annually to the CCI on July 1 of each year.

Public noticing of this hearing was done in a manner prescribed by state law and the Orange Municipal Code. Moreover, staff communicated the proposed increase, including a teleconference and a copy of the Nexus Study to the Building Industry Association, Orange County Chapter.

7. ATTACHMENTS

- Expanded TSIP Fee Table
- TSIP Nexus Study Report
- Transportation Fee Comparison Memo
- Ordinance 17-20
- Resolution 11270



Agenda Item

City Council

Item #: 11.2.

9/8/2020

File #: 20-088

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Christopher Cash, Public Works Director

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1. The TSIP is currently comprised of three (3) separate fee areas, and fees collected from within any one area are generally designated to fund improvements in that same area. Often times, the areas of funding availability and needs are not aligned, which can result in funding delays for high priority projects located in underfunded fee areas. The establishment of multiple fee areas can be appealing to (a) large cities, particularly those with geographically, or economically non-contiguous areas or (b) developing cities that experience a geographic imbalance in development activity (and, therefore, infrastructure needs). However, medium sized, built-out cities, such as present day Orange, typically benefit more from the added flexibility of a citywide transportation fee program.
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Nexus Study

In order to modernize the TSIP and address the above limitations a nexus study must be conducted, the purpose of which is to provide the technical analysis necessary under the Mitigation Fee Act to support an updated fee. Among other things, the nexus study does the following:

- Identifies transportation improvements to be included;
- Identifies the cost of said improvements;
- Determines proportionate allocation of cost to new development; and
- Establishes the maximum allowable fee that can legally be collected for various types of new development, e.g., residential, commercial, office, etc.

The nexus study that has been conducted for purposes of modernizing the TSIP fee provides support

for modernization of the fee. In the study, prepared by Economic and Planning Systems, Inc., the issue of consolidating the three (3) existing fee areas was analyzed. The study found justification for consolidating the three (3) existing fee areas into a single citywide fee area. The city transportation network is such that transportation demand generated by one part of the city has the potential to affect any other part of the city.

The study also identified projects that would be eligible for funding through a new TSIP and their estimated costs. As part of the project development process, projects of low feasibility, such as those that require right-of-way acquisition, were eliminated, and replaced with other project types. Many projects that have been historically funded through TSIP were retained, including right-turn lane additions, new traffic signals, traffic signal modifications, and feasible intersection widening. In addition, next-generation traffic signal equipment, fiber optic and communication system expansion, complete streets projects, traffic calming, curb ramp replacement, and bicycle master plan implementation were introduced which will allow for a broader range of capacity and transportation improvements funded under the fee and will allow for technological transportation advances to be funded under the program.

Lastly, the nexus study also determined that, based on projected growth, infrastructure needs, and the full portion of project costs that can be attributed to new development, the maximum allowable fee that can be charged is approximately 500% higher than the existing fee levels. The percentage difference between maximum allowable and existing will vary across land use due to changes in traffic generation intensity further discussed below. Because charging the maximum allowable fee can render development cost-prohibitive, cities may set their fees anywhere at or below the maximum allowable.

Proposed Changes to Fee Structure

TSIP fees, like most transportation development fees, are typically apportioned across various land uses based on the relative impact that each land use is expected to have on the transportation system (traffic demand.) Doing so results in a more equitable fee program in which any given development project would pay its fair share, no more or less. Over time, modifications in human behavior, social preferences, and technological advancements can significantly affect the traffic generation intensity associated with each land use category. Therefore, to maintain equity in the fee program would preclude using existing fees as a basis for upward adjustments, as the assumptions around each land uses' impact on the transportation system have changed in the intervening years. Rather, the fees should also be reapportioned across the various land uses to reflect changes in travel demand, in addition to any changes in magnitude.

Based on the above, the fee setting process was guided by the following principles:

1. Increase the overall revenue generation potential of the fee program by an amount that would result in recovering some of the cumulative CCI increases since 2008;
2. Ensure that the fees do not exceed the maximum allowable as identified in said nexus study;
3. Reapportion the fees between land uses based on up-to-date trip rates and the nexus study;
4. Balance the need to adequately fund transportation facilities with the desire to promote development; and
5. Provide for a built-in annual adjustment based on future changes to the CCI, similar to the City's other development fees.

To best achieve these objectives, staff recommends setting the TSIP fees based on 25 percent of the maximum project cost that can be attributed to new development. The resulting fees for each land use, shown in the table below, were determined by calculating 25 percent of the maximum project cost attributable to new development, subtracting out the existing TSIP fund balance, and dividing the result by projected growth in travel demand in the City. This cost was then apportioned across land uses based on their relative impact in generating new trips and vehicle miles. Since the understanding of trips generated by each land use has changed since 2008, the percentage change between the proposed and existing fees will vary from one land use to another. Those land uses that today generate fewer trips than they did in 2008 will see a relatively lower increase in fees compared to land uses where trip generation has stayed the same or increased. The percentage change for each land use is shown in the table below.

Setting the fee in this manner increases the revenue generation potential of the TSIP program and captures some of the deferred fee increases since 2008, while still maintaining fee competitiveness with our comparator cities. For comparison, the city collected \$568,749 in TSIP fees in 2019. If instead, the proposed rates were applied to the same 2019 projects, that total would have been \$728,682, an increase of 28 percent. With that in mind, the actual percentage increase over any period of time or across any combination of past projects would vary based on land use composition and location (since the previous fees were area specific and, again, the proposed fee adjustments vary by land use.)

In addition to changes to the proposed fee amounts, staff also recommends two additional adjustments in order to promote fee equity and fee schedule streamlining:

1. Based on trip generation intensity, TSIP fees for condos and townhomes should be calculated based on multi-family rates, rather than single family rates; and
2. Eliminate from the fee schedule educational, hospital, religious and child care uses. Fees for these land uses will be considered an “atypical/other” use and charged a per-trip end fee rate.

The table below shows five values for each land use. Those are, the current average fee, the fee had it been adjusted by CCI since 2008 (40% increase over current fee), the maximum allowable fee per the nexus study, the proposed fee using 25% of the allowable increase per the nexus study, and the percent change between the proposed fee and the current average fee per land use category. An expanded table with more detailed information is also attached.

TSIP FEE TABLE

Land Use	Existing Average	Existing Average Adjusted to 2020 Dollars	Maximum Allowable	PROPOSED (25 percent of Maximum Allowable) ⁴	% Change (Proposed vs. Existing)
Single Family (per unit) ¹	\$1,022.00	\$1,439.00	\$6,119.86	\$1,473.90	44%
Apartments/ Multi Family (per unit) ²	\$763.67	\$1,075.00	\$3,526.70	\$849.37	11%
Hotel (per room)	\$912.33	\$1,285.00	\$5,370.77	\$1,293.49	42%

General Office (per square foot)	\$1.25	\$1.76	\$6.26	\$1.51	55%
Medical Office (per square foot)	\$4.11	\$5.79	\$22.36	\$5.38	31%
Industrial (per square foot)	\$0.79	\$1.12	\$3.19	\$0.77	-3%
Retail/ Commercial (per square foot)	\$4.64	\$6.53	\$15.76	\$3.80	-18%
Hospital (per bed)	\$1,342.33	\$1,890.01	\$14,339.18	n/a ³	n/a
Church/ Synagogue (per square foot)	\$1.04	\$1.46	\$4.46	n/a ³	n/a
School (per student)	\$146.67	\$206.51	\$1,304.15	n/a ³	n/a
Child Care (per square foot)	\$8.91	\$12.55	\$6.97	n/a ³	n/a
Atypical/ Other (per trip end)	\$113.67	\$160.04	\$642.44	\$154.72	36%

1. Condos and Townhomes are currently charged the single family rate. Because their traffic generation characteristics are more similar to apartments, they are reclassified as multi-family.
2. Proposed apartment rate will apply to condos and townhomes.
3. In order to streamline the fee schedule, these relatively uncommon land uses will be deleted. They will now fall under the "other" land use, with fees being calculated on a per trip end basis. The actual fee for each of the deleted land uses would be the same whether calculated per square foot/bed/student or per trip end.
4. 25% of allowable maximum revenue potential less existing TSIP fund balance.

Summary and Public Noticing

If approved, the above fees will go into effect on November 12, 2020, and adjusted annually to the CCI on July 1 of each year.

Public noticing of this hearing was done in a manner prescribed by state law and the Orange Municipal Code. Moreover, staff communicated the proposed increase, including a teleconference and a copy of the Nexus Study to the Building Industry Association, Orange County Chapter.

7. ATTACHMENTS

- Expanded TSIP Fee Table
- TSIP Nexus Study Report
- Transportation Fee Comparison Memo
- Ordinance 17-20
- Resolution 11270

TSIP FEE TABLE

Land Use	EXISTING				Average Existing Adjusted to 2020 Dollars	Maximum Allowable	PROPOSED (25 percent of Maximum Allowable) ⁴	% Change (Proposed vs. Existing)
	Area "A"	Area "B"	Area "C"	Average				
Single Family (per unit) ¹	\$817.00	\$1,445.00	\$804.00	\$1,022.00	\$1,439.00	\$6,119.86	\$1,473.90	44%
Apartments/Multi Family (per unit) ²	\$712.00	\$1,015.00	\$564.00	\$763.67	\$1,075.00	\$3,526.70	\$849.37	11%
Hotel (per room)	\$817.00	\$1,234.00	\$686.00	\$912.33	\$1,285.00	\$5,370.77	\$1,293.49	42%
General Office (per square foot)	\$1.17	\$1.66	\$0.93	\$1.25	\$1.76	\$6.26	\$1.51	55%
Medical Office (per square foot)	\$3.83	\$5.46	\$3.04	\$4.11	\$5.79	\$22.36	\$5.38	31%
Industrial (per square foot)	\$0.74	\$1.05	\$0.59	\$0.79	\$1.12	\$3.19	\$0.77	-3%
Retail/Commercial (per square foot)	\$4.55	\$6.03	\$3.34	\$4.64	\$6.53	\$15.76	\$3.80	-18%
Hospital (per bed)	\$1,252.00	\$1,783.00	\$992.00	\$1,342.33	\$1,890.01	\$14,339.18	n/a ³	n/a
Church/Synagogue (per square foot)	\$0.97	\$1.38	\$0.77	\$1.04	\$1.46	\$4.46	n/a ³	n/a
School (per student)	\$137.00	\$195.00	\$108.00	\$146.67	\$206.51	\$1,304.15	n/a ³	n/a
Child Care (per square foot)	\$8.10	\$11.97	\$6.66	\$8.91	\$12.55	\$6.97	n/a ³	n/a
Atypical/Other (per trip end)	\$106.00	\$151.00	\$84.00	\$113.67	\$160.04	\$642.44	\$154.72	36%

1. Condos and Townhomes are currently charged the single family rate. Because their traffic generation characteristics are more similar to apartments, they are reclassified as multi-family
2. Proposed apartment rate will apply to condos and townhomes
3. In order to streamline the fee schedule, these relatively uncommon land uses will be deleted. They will now fall under the "other" land use, with fees being calculated on a per trip end basis. The actual fee for each of the deleted land uses would be the same whether calculated per square foot/bed/student or per trip end.
4. Based on 25% of maximum allowable revenue potential less existing TSIP fund balance

Report

City of Orange Transportation System Improvement Program Fee Update

The Economics of Land Use



FEHR & PEERS

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1. Study Overview and Results

Introduction

This Transportation Impact Fee Nexus Study (Nexus Study) provides the City of Orange (City) with the necessary technical documentation to update to the City's Transportation System Improvement Program (TSIP). A Nexus Study provides the technical basis for the City to collect fees consistent with Mitigation Fee Act (AB 1600/ Government Code Section 66000 et seq.). Impact fees are one-time charges on new development collected and used by the City to cover the cost of capital facilities and infrastructure that are required to serve new growth.¹ The fees are typically collected upon issuance of a building permit or certificate of occupancy.

The City established the TSIP in 1988. The current Program is comprised of three areas, each with its own fee rates, and has primarily funded projects improving roadway level of service. While the Program has successfully served its purpose, the City has determined that the Program can best serve the City's future transportation needs with an updated project list and overall structure that responds to changing trends in local land use and travel patterns, as well as to the passage of Senate Bill (SB) 743. The updated Program seeks to fund a broader range of project types, including multimodal transportation facilities and intelligent transportation systems, and shifting the current trip-based fee schedule to a Vehicle-Miles-Traveled (VMT) based fee schedule. The updated Program will also modify the Program from area-based to citywide, reflecting a more holistic approach to addressing the City's transportation needs. These changes are discussed further in the following section.

The Fee Program described in this Nexus Study is based on City growth projections from the Center for Demographic Research (CDR) at California State University – Fullerton and their impact on travel patterns based on the Orange County Transportation Authority (OCTA) travel demand model (or OCTAM). City staff worked with the Consultant Team to identify the transportation improvements and facilities needed to serve this growth. This Nexus Study quantifies the potential allocation of the proposed transportation improvements to new growth in the City and calculates the **maximum allowable** transportation impact fee by land use category. The City may decide to adopt fees below the maximum supportable level based on economic or policy considerations. Such fee reductions should be considered in conjunction with the availability of alternative sources of capital improvement funding.

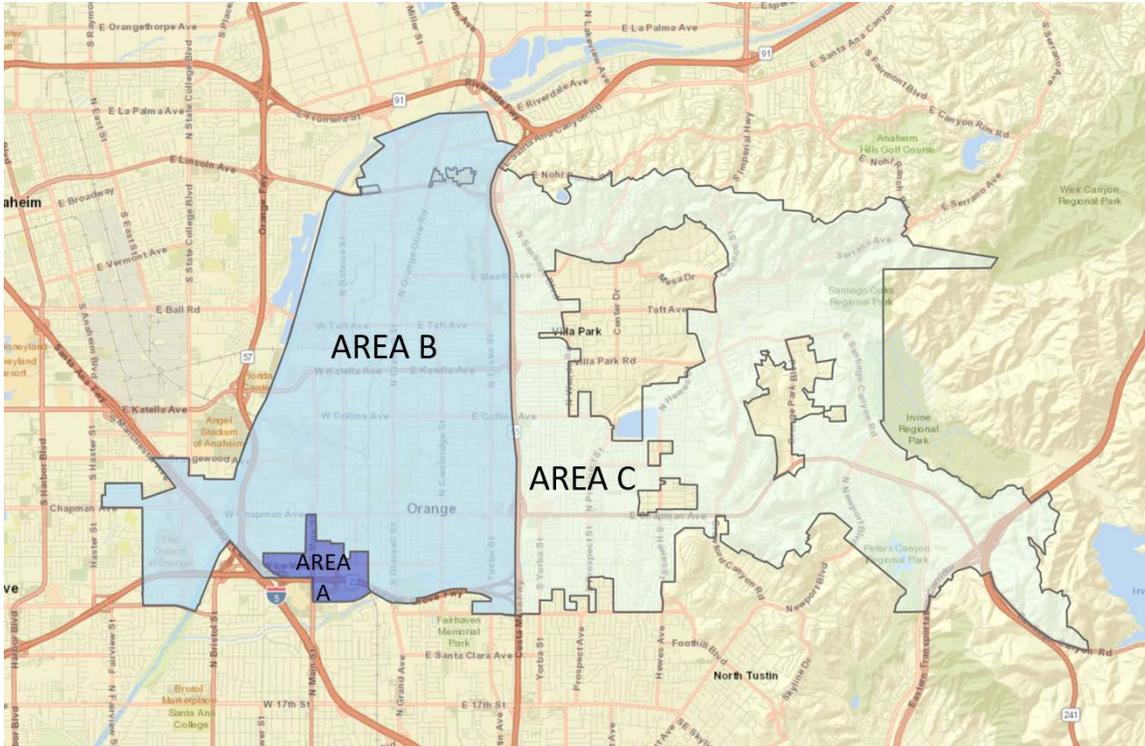
¹ New development includes any construction activity that requires a building permit and creates additional impacts on the City's transportation infrastructure once completed (e.g., through additional travel demand or "trips").

Changes to the TSIP

As referenced above, the update to the TSIP will entail several changes to the Program's project list and structure. Most notably, the Program will shift from a trips-based fee to a VMT-based fee, and from an area-based fee to a citywide fee, as described below:

- **Shift to VMT based fee:** The first shift, from trip to VMT-based, is driven by the passage of SB 743, a law passed in 2013 which updates the way transportation impacts are measured for new development projects in California. While project impacts were previously assessed based on level of service (LOS)—that is, whether or not the project will cause deficient operations —SB 743 requires that public agencies assess the project's environmental impacts based on the vehicle miles traveled generated by the new development as compared to a regional average. An example of the implications of this shift is that infill development projects will be assessed as having lower transportation impacts than new greenfield projects with lower density and homogeneous land-uses. The shift also encourages developers and public agencies to prioritize access to non-automobile modes of transportation. It should be noted that while the City is looking to incorporate VMT-reducing improvements into its updated project list, the Program will still include capacity-enhancing improvements needed to support future growth.
- **Shift to Citywide based fee:** The second shift, from an area-based to citywide-based fee, reflects the City's relatively built-out nature. When there were still large-scale greenfield developments in the City, the needs for new transportation infrastructure were area-specific, meant to support those new developments, and a fee based on the area of development (see **Figure 1**) ensured that developments in other parts of the City were not shouldering the burden of providing that infrastructure. Now that the City is built-out, and new development is increasingly infill in nature, new transportation infrastructure needs will be those that support citywide mobility. Additionally, in relation to the shift to a VMT-based fee, the Program's project list will include projects that provide greater access to non-automobile modes of transportation, such as transit and cycling, for all residents and employees of the City. Therefore, a citywide-based fee is a more appropriate format for the updated Program.

Figure 1 Map of Existing TSIP Areas



Legal Context

This Nexus Study is designed to provide the necessary technical analysis to support a schedule of transportation impact fees to be established by an Impact Fee Act Ordinance and Resolution. The Mitigation Fee Act allows the City to adopt an ordinance that enables the fee and defines the program structure and allows periodic updates to the fee level by resolution with the supporting technical analysis. The Resolution approach to setting the fee allows periodic adjustments of the fee amount that may be necessary over time, without amending the enabling ordinance.

Impact fee revenue can be collected and used to cover the cost of constructing capital and infrastructure improvements required to serve new development and growth in the City. As such, impact fees must be based on a reasonable nexus, or connection, between new growth and development and the need for a new facility or improvement. Impact fee revenue cannot be used to cover the operation and maintenance costs of these or any other facilities and infrastructure. In addition, impact fee revenue cannot be collected or used to cover the cost of existing needs/ deficiencies in the City transportation capital improvement network.

In establishing, increasing, or imposing a fee as a condition for the approval of a development project, Government Code 66001(a) and (b) state that the local agency must:

1. Identify the purpose of the fee;
2. Identify how the fee is to be used;
3. Determine how a reasonable relationship exists between the fee use and type of development project for which the fee is being used;
4. Determine how the need for the public facility relates to the type of development project for which the fee is imposed; and
5. Show the relationship between the amount of the fee and the cost of the public facility.

These statutory requirements have been followed in updating this impact fee, as documented in subsequent chapters. **Chapter 3** summarizes the specific findings that explain or demonstrate this nexus.

After the update TSIP is adopted, this Nexus Study and the technical information it contains should be maintained and reviewed periodically by the City to ensure Impact Fee accuracy and to enable the adequate programming of funding sources. To the extent that transportation improvement requirements, costs, and development potential changes over time, the Fee Program will need to be updated.

Maximum Allowable Fee Schedule

Table 1 shows the City's maximum allowable transportation impact fee schedule by land use consistent with nexus requirements and the associated analysis contained in this Technical Report. These transportation impact fees apply to new residential and nonresidential development and cover the transportation improvement costs required to support new development after existing deficiencies and known other funding sources have been taken into account. The fee estimates also include a two percent fee program administration fee, consistent with Mitigation Fee Act program administrative costs in many other California jurisdictions.² The fees apply to all new development, except those exempted by the Ordinance of other means, such as projects with vested rights that specifically exempt fees under the terms of an approved Development Agreement.³ The updated fee program consolidates several of the land use categories included in the existing program, a change discussed in further detail in **Chapter 3**.

Table 1 also includes City staff's recommendation for the fee levels that should be adopted. These recommended fees were calculated based on 25 percent of the maximum allowable fee per VMT calculated in the nexus analysis and detailed in **Chapter 4**. These

² The 2 percent administration cost is designed to cover expenses for preparation of the development impact fee study and subsequent updates as well as the required reporting, auditing, collection and other annual administrative costs involved in overseeing the program. Development impact fee programs throughout California have applied similar administrative charges.

³ These individual Development Agreements specify the specific transportation improvements/contributions to be made by these individual developments.

recommended levels will moderate the increase from current levels to better align with inflation since 2008 while maintaining consistency with the updated nexus analysis.

Table 1 Maximum Allowable Fee and Staff Recommended Fee by Land Use Category

Land Use	Unit	Maximum Allowable Fee per Unit [1]	Staff Recommended Fee Per Unit [2]
Single Family	Dwelling Unit	\$ 6,119.86	\$ 1,473.90
Multifamily	Dwelling Unit	\$ 3,526.70	\$ 849.37
Hotel	per room	\$ 5,370.77	\$ 1,293.49
General Office	per sq.ft.	\$ 6.26	\$ 1.51
Medical Office	per sq.ft.	\$ 22.36	\$ 5.38
Industrial	per sq.ft.	\$ 3.19	\$ 0.77
Retail/Commercial	per sq.ft.	\$ 15.76	\$ 3.80
Other Uses	per trip end	\$ 642.44	\$ 154.72

[1] Includes two percent program administration fee

[2] Calculated based on 25 percent of maximum allowable fee per VMT, plus a two percent program administration fee.

Source: Fehr & Peers; EPS

The adoption of the maximum allowable fee schedule would result in fee revenues of about \$51.2 million in today's dollar terms, based on the CDR and OCTA growth projections. This represents approximately 53 percent of the approximately \$95.9 million cost estimated for future transportation improvement projects identified as needed to mitigate impacts associated with projected growth in the City (see **Appendix**). The remaining additional \$44.7 million in costs will have to be funded through other revenue sources. If the City chooses to set the fees below the maximum allowable levels, the fee revenues generated by the Program will also decrease.

Key Issues and Assumptions

The results of this analysis are based on a variety of conditions and assumptions regarding facility costs, service standards, growth projections, and facility demand. Assumptions are covered in detail in later chapters, though some of the key issues are summarized below:

- Future Development and Trips.** The fee calculations were based on residential and nonresidential development projections through 2045, and associated vehicle miles generated. The primary source data for these calculations came from the CDR and from OCTA, utilizing the agency's Orange County Transportation Analysis Model (OCTAM) Version 5.0.
- Capital Improvement Program and Cost Estimates.** The list of transportation improvements included in the Fee Program was compiled by City staff, reflecting

expectations regarding future transportation facilities needs in the City. The City provided cost estimates for the identified improvements, which were reviewed and verified by Fehr & Peers.

- **Cost Allocation.** Transportation analysis conducted by Fehr & Peers was used to determine the portion of transportation improvements costs to be included in the Fee Program. Only transportation improvement costs specifically required to support new development are included in the transportation impact fee calculation. Funding remaining from the current Fee Program was subtracted from the gross cost estimates.

2. Transportation Projects and VMT

Projects List for Fee Program

Development impact fees are derived from a list of specific capital improvement projects and associated costs that are needed in part or in full to accommodate new growth. Consequently, the capital improvements included in the fee program need to be described in sufficient detail to generate cost estimates. However, impact fee programs do not, in themselves, represent actual approval of a City plan or capital project (and as such do require clearance through the California Environmental Quality Act or CEQA).

In consideration of the above, City staff compiled a list of capital improvement projects that are anticipated to meet future transportation needs in the City. These projects include improvements related to traffic signals; intelligent transportation systems (ITS); transit; streets, intersections, and arterials; bikeways; and related studies. The projects include those which will address needed capacity enhancements to existing infrastructure. In accordance with the Mitigation Fee Act, none of the projects included in the TSIP addresses existing deficiencies.

City staff additionally provided per unit or per project cost estimates for the projects included on the list, which were reviewed by Fehr & Peers. The full cost of the identified projects is approximately \$95.9 million. A detailed list of projects and associated costs is included in the **Appendix**.

VMT-Based Fee Program

In response to Senate Bill 743 (SB 743), the Office of Planning and Research (OPR) has updated the California Environmental Quality Act (CEQA) Statutes and Guidelines to include new transportation-related evaluation metrics.⁴ For the purposes of CEQA, level of service can no longer be used to determine a project's environmental impact. Instead, the final proposed Guidelines include a new Section 15064.3 on VMT analysis and thresholds for land use developments. OPR also released a Technical Advisory on Evaluating Transportation Impacts in CEQA.⁵

The City of Orange has recently adopted CEQA VMT thresholds which require that overall project-generated VMT are lower than estimated VMT generated through the General Plan buildout projections. Participation in the VMT fee program can be used as a mitigation measure for projects in order to comply with this threshold.⁶ As such, this fee program was evaluated to ensure that the transportation improvement projects proposed would

⁴ Association of Environmental Professionals, *2019 CEQA Statute & Guidelines*

⁵ Governor's Office of Planning and Research, *2018 Technical Advisory on Evaluating Transportation Impacts in CEQA*

⁶ City of Orange Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment, 2020

reduce the existing citywide VMT on a collective or aggregated basis. Citywide VMT includes trips that travel through the City in addition to trips to and from locations within the City that occur within City boundaries. The existing average weekday VMT that occur within the boundaries of Orange is 2,971,217 miles.

Induced VMT was calculated for capacity enhancing projects (i.e. arterial widenings) using the National Center for Sustainable Transportation’s Induced Travel Calculator. The Induced Travel Calculator allows users to estimate the annual VMT induced by adding lane miles to principal arterials such as Cannon Street and Chapman Avenue. Annual VMT was then converted to average weekday VMT.

Projects that would reduce VMT were quantified following guidance from the Quantifying Greenhouse Gas Mitigation Measures.⁷ VMT reductions were taken for projects with pedestrian/bicycle, traffic calming, or transit enhancement components.

Overall, VMT reducing projects account for 27 percent of total project costs. At the same time, as shown in **Table 2**, the project list would achieve an overall reduction in citywide VMT by approximately 3.7 percent.

Table 2 Impact of TSIP Project List on Vehicle Miles Traveled

Scenarios	VMT	Percentage Change From Existing
Existing Citywide VMT	2,971,217	--
VMT Induced by Project List	+ 69,231	+2.3%
VMT Reduced by Project List ¹	- 178,273	-6.0%
Citywide VMT with Fee Program	2,862,175	--
Net change in Citywide VMT with Fee Program	-109,042	-3.7%

⁷ California Air Pollution Control Officers Association, 2010

3. Land Use and Travel Demand Assumptions

This chapter documents the land use and travel demand assumptions and growth forecasts that underlie the fee calculations. These factors are critical in determining how to allocate new transportation improvement costs between existing and new development and between different land uses.

Land Use Assumptions

The existing and future land use estimates used in the TSIP fee are derived from projections made by the CDR, which are consistent with those in OCTAM Version 5.0, released in January 2020. The land use assumptions are summarized in **Table 3**.

Table 3 City of Orange Projected Growth (2020 to 2045)

Year	Total Population	Households	Total Employment	VMT ¹
Existing (2020)	140,878	43,731	125,401	8,461,124
Future (2045)	157,874	50,458	135,141	9,174,409
Growth	16,996	6,727	9,740	713,285

[1] Total vehicle miles traveled of trips to or from locations within the City of Orange.

Source: Center for Demographic Research at California State University – Fullerton; Orange County Transportation Authority; Fehr & Peers.

Travel Demand Assumptions

The land use forecasts documented above are used to estimate future travel demand, or trips, based on a variety of assumptions related to trip lengths by general land use category. These assumptions are summarized in **Table 5**. Trip rates were derived from the Institute of Transportation Engineer's Trip Generation Manual, 10th Edition, as detailed in **Table 6**.

Table 5 Trip Lengths by Trip Type

Trip Type	Trip Length (miles)
Residential (i.e. Home-Based Trips)	8.86
Nonresidential ¹ (i.e. Citywide Average Trip Length)	8.78

[1] The nonresidential trip length is used for the Other Uses land use category.

Source: OCTA; Fehr & Peers

Table 6 Trip Rates by Land Use Category

Land Use Code	Trip Type	Daily Trip Rate
210	Single Family Detached	9.44 per dwelling unit
221	Multifamily Housing (Mid-Rise)	5.44 per dwelling unit
310	Hotel	8.36 per room
710	General Office	9.74 per 1,000 sq. ft.
720	Medical Office	34.8 per 1,000 sq. ft.
110	Industrial	4.96 per 1,000 sq. ft.
820	Retail/Commercial ¹	37.75 per 1,000 sq. ft.

[1] Retail/Commercial trips assumed a 35% pass-by trip reduction to reflect vehicles already on the roadway network that would visit the commercial center.

Source: ITE; Fehr & Peers

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4. Nexus Analysis and Maximum Fee

This chapter presents the nexus analysis and calculations for the maximum allowable fee based on the land use projections and transportation improvements described in the previous chapter.

Overview of Nexus Methodology

A “nexus” or relationship between new development in the City and transportation improvements and their costs must be established before incorporating transportation improvement costs into a transportation impact fee calculation. To determine the appropriate costs to include in the new transportation fee calculation, it is necessary to conduct a series of steps:

1. **Identify Total Costs of Transportation Improvements.** The identification of the required transportation improvement projects and their associated costs (described in prior chapter).
2. **Remove Existing Deficiencies.** It is necessary to evaluate whether there is an existing deficiency at any of the project locations, and if so, the magnitude of that deficiency. Existing deficiencies are accounted for by reducing the project cost that is included in the Program, requiring funding from other sources for those deficiencies.
3. **Determine Proportionate Allocation to New Development.** Once existing deficiencies are identified, it is necessary to determine the proportion of the remaining project cost that is attributable to new development, and therefore can be included in the fee program.
4. **Account for Known Funding.** The balance remaining in the current Fee Program fund was subtracted from the gross cost estimates. As of the time of this report, the current Fee Program fund has a balance of \$625,000.

Purpose

The fee will help maintain adequate levels of transportation service in Orange and support reduction of vehicle miles traveled in the City overall.

Use of Fee

Fee revenue will be used to fund City transportation improvements, including street, arterial, and intersection improvements, traffic signal and ITS installations, transit system improvements, pedestrian and bikeway improvements, and associated studies to support these projects. The City staff and Consultant team has determined that these improvements are required to serve future growth.

The list of eligible transportation projects and costs are summarized in **Chapter 2** and further detailed in the **Appendix**. The updated program will shift from area-based to citywide-based, and fees collected on new development will be utilized for projects that serve the needs of overall city growth.

Relationship

New development in the City of Orange will increase demands for and travel on the City's transportation network. The TSIP fee revenue will be used to fund additional transportation improvements necessary to accommodate this growth. New development will benefit from the improved transportation infrastructure. As described above, fees will be collected citywide and be spent on projects that serve the needs of overall City growth, rather than projects that are area-specific.

Need

Each new development project will add to the incremental need for transportation capacity and improvement, as well as to vehicle miles traveled in the City. The transportation improvements considered in this study are considered necessary to meet the City's future transportation needs and goals, as well as to reduce overall VMT.

Proportionality

The fee levels are tied to fair share cost allocations to new Citywide development, based on the OCTAM transportation model developed by OCTA and adapted for this study purpose by Fehr & Peers. The fair share allocations take into account the relative impacts of existing development versus new development on transportation infrastructure, as well as the relative impacts of different land uses on transportation infrastructure.

Cost Allocation

The nexus analysis must first determine if transportation facilities that will be addressed by the projects in the fee program are currently deficient. If there are existing deficiencies at any of those locations, then an adjustment must be made in the fee calculations to ensure that new development pays its fair share and is not being charged to correct an existing deficiency.

The City uses Level of Service as a performance measure, with a standard of LOS D or better at intersections and roadway segments. Any capacity enhancing project with an intersection or roadway segment currently operating at LOS E or F was noted as an existing deficiency and the proportionate allocation to new development for the project was subsequently adjusted to reflect only the share that is attributable to new development.

The City identified an existing deficiency on Cannon Street between Serrano Avenue and Santiago Canyon Road, which currently operates at LOS E or F⁸, and confirmed that all

⁸ Traffic Impact Analysis for The Trails at Santiago Creek, published September 2018

other intersection enhancements and arterial widening projects locations do not currently operate at LOS E or F.

All other transportation improvement projects are network-wide enhancements. For these projects, the proportionate allocation to new development was determined based on the projected growth in VMT of 8.43 percent by trips made to or from the City.

Maximum Fee Calculation

The maximum projects cost that can be funded through the TSIP is approximately **\$51.2 million**. This was calculated by subtracting the remaining funds in the current fee program (\$625,000) from the total project costs that are attributable to new development in the City (\$51.8 million).

Table 7 shows the maximum supportable transportation impact fee per trip. The maximum fee per trip is calculated by dividing the aggregate fee program cost by the total amount of VMT generated by new development (as shown in **Table 3**). This results in a maximum fee per VMT of **\$71.74**. Based on the assumptions for average trip length for residential and nonresidential uses detailed in **Table 6**, this equates to a maximum fee per trip end of **\$635.58** for residential uses and **\$629.84** for nonresidential uses.

Table 7 Maximum Fee Per Vehicle Mile Traveled and Per Trip End

Item	Amount
Total Eligible Project Cost	\$ 51,793,000
Less Current Fee Balance	\$ (625,000)
Total Maximum Allowable Nexus Fee	\$ 51,168,000
Growth in VMT (miles)	713,285
Fee Per Vehicle Mile Traveled	\$ 71.74
Fee Per Trip End (Residential Uses) [1]	\$ 635.58
Fee Per Trip End (Nonresidential Uses) [2]	\$ 629.84

[1] Assumes a trip length of 8.86 miles

[2] Assumes a trip length of 8.78 miles

Source: Fehr & Peers; EPS

Finally, **Table 8** calculates the maximum fee for each land use category specified in the Program based on estimates of daily VMT per category. The maximum allowable fee by land use includes a 2 percent charge needed to cover the administrative cost of administering the TSIP. The maximum supportable fees are the fee levels that would generate sufficient fee revenues to cover the attributable program costs of \$51.2 million.

Table 8 Maximum Allowable Fee Schedule

Total Maximum Allowable Nexus Fee Schedule					
Land Use	Unit	Average Trip Length	Daily Trip Generation Rate	Pass-by Reduction	Fee per Unit [1]
Single Family	Dwelling Unit	8.86	9.44	-	\$ 6,119.86
Multifamily	Dwelling Unit	8.86	5.44	-	\$ 3,526.70
Hotel	per room	8.78	8.36	-	\$ 5,370.77
General Office	per sq.ft.	8.78	9.74	-	\$ 6.26
Medical Office	per sq.ft.	8.78	34.8	-	\$ 22.36
Industrial	per sq.ft.	8.78	4.96	-	\$ 3.19
Retail/Commercial	per sq.ft.	8.78	37.75	-35%	\$ 15.76
Other Uses	per trip end	8.78	1	-	\$ 642.44

[1] Includes two percent administrative fee.

Source: Fehr & Peers; EPS

APPENDIX

Projected VMT Growth: 8.43%

Total Maximum Allowable Nexus Fee:	\$51,793,000
VMT Reducing Nexus Fee:	\$13,975,000
LOS Nexus Fee:	\$37,818,000

Improvement	Project Description	Source	2013 TISP Cost	Cost Estimate By	Existing Quantity	Proposed Quantity	Unit Cost	Est. Cost	Existing Funds	% Funding Secured	Unfunded Cost	Existing Deficiency?	Rate	Subtotal	Max Nexus Amount
Traffic Signals and ITS															
New Traffic Signals - Various Locations	New Traffic Signal Installations (8.43% Additional Signals)	-	-	F&P	157	13	\$770,000	\$10,010,000	\$0	0%	\$10,010,000	No	100.00%	\$10,010,000	\$10,010,000
Traffic Signal Modificaitons - Various Locations	Signal Modifications/Phasing Updgrades (20 locations)	-	-	City	-	-	-	\$6,000,000	\$0	0%	\$6,000,000	No	8.43%	\$505,809	\$506,000
TS Equipment Upgrades	Replace outdated signal cabinets/cameras/bicycle detection/Battery back up	-	-	City	-	-	-	\$2,750,000	\$0	0%	\$2,750,000	No	8.43%	\$231,829	\$232,000
Traffic Signal Synchronization Matching Funds	Fund match for OCTA TSSP Projects: Signal Equipment and Timing/Synch; and ATSPMs	-	-	City	-	-	-	\$1,000,000	\$0	0%	\$1,000,000	No	8.43%	\$84,301	\$84,000
Pedestrian Signal Retrofits	Accesible Sysptems and Leading Ped Intervals Various	-	-	City	-	-	-	\$1,250,000	\$0	0%	\$1,250,000	No	8.43%	\$105,377	\$105,000
TMC and Signal System Upgrades	Upgrades to CCTV, Central System, Hardware, etc, ATSPMs	-	-	City	-	-	-	\$2,000,000	\$0	0%	\$2,000,000	No	8.43%	\$168,603	\$169,000
Communcations System Network Upgrades	Replace existing copper with SMFO and	-	-	City	-	-	-	\$1,500,000	\$0	0%	\$1,500,000	No	8.43%	\$126,452	\$126,000
Fiber Optic Network Extension gap Closures	Fiber Optic Installation	-	-	City	-	-	-	\$3,000,000	\$0	0%	\$3,000,000	No	8.43%	\$252,904	\$253,000
Subtotal														\$11,485,000	
Transit															
Bus Stop Furniture Improvements - 135 stops	Installation of Transit stop amenities	-	-	City	-	-	-	\$400,000	\$0	0%	\$400,000	No	8.43%	\$33,721	\$34,000
Fixed Route Transit System	Feasibility Study Underway, Alignment TBD	-	-	City	-	-	-	\$500,000	\$0	0%	\$500,000	No	8.43%	\$42,151	\$42,000
Subtotal														\$76,000	
Street Improvements															
ADA Curb Ramp Improvements	Locations TBD	-	-	City	-	-	-	\$15,000,000	\$0	0%	\$15,000,000	No	8.43%	\$1,264,522	\$1,265,000
Sidewalk and Pedestrian Improvements	Locations TBD	-	-	City	-	10560	200	\$2,112,000	\$0	0%	\$2,112,000	No	8.43%	\$178,045	\$178,000
Traffic Calming	Locations TBD	-	-	City	-	-	-	\$1,000,000	\$0	0%	\$1,000,000	No	8.43%	\$84,301	\$84,000
Complete Street Conversions	Locations TBD	-	-	City	-	-	-	\$10,000,000	\$0	0%	\$10,000,000	No	8.43%	\$843,014	\$843,000
Subtotal														\$2,370,000	
Studies															
Develop Active Transportation Plan		-	-	City	-	-	-	\$50,000	\$0	0%	\$50,000	N/A	8.43%	\$4,215	\$4,000
Upgrade TSIP Fee Program		-	-	City	-	-	-	\$25,000	\$0	0%	\$25,000	N/A	100.00%	\$25,000	\$25,000
Update Bicycle Master Plan		-	-	City	-	-	-	\$75,000	\$0	0%	\$75,000	N/A	8.43%	\$6,323	\$6,000
Develop ITS and Fiber Security Master Plan		-	-	City	-	-	-	\$200,000	\$0	0%	\$200,000	N/A	8.43%	\$16,860	\$17,000
Subtotal														\$52,000	
Intersection Enhancements															
Cannon/Serrano	Add WBL, NBR	General Plan	-	F&P	-	-	-	\$3,237,000	\$0	0%	\$3,237,000	No	100.00%	\$3,237,000	\$3,240,000
Tustin/22 WB	Add SBR	City	-	City	-	-	-	\$3,000,000	\$0	0%	\$3,000,000	No	100.00%	\$3,000,000	\$3,000,000
Right Turn Lane Additions	Various Locations (Assumes no right-of-way needed)	-	-	F&P	-	10	\$570,000	\$5,700,000	\$0	0%	\$5,700,000	No	100.00%	\$5,700,000	\$5,700,000
Subtotal														\$11,940,000	
Arterial Widening															
Cannon - Serrano to Santiago Canyon	4d to 6d (.6 miles)	MPAH	-	F&P	-	-	-	\$6,397,000	\$0	0%	\$6,397,000	Yes	90.11%	\$5,764,573	\$5,760,000
Cannon - Serrano to Santiago Canyon	Bridge Widening	MPAH	-	City	-	-	-	\$6,000,000	\$0	0%	\$6,000,000	Yes	90.11%	\$5,406,821	\$5,410,000
Chapman - Cannon to Canyon View	4d to 6u (.3 miles)	Prior TSIP	\$2,092,000	Prior TSIP	-	-	-	\$3,560,000	\$0	0%	\$3,560,000	No	100.00%	\$3,560,000	\$3,560,000
Subtotal														\$14,730,000.00	
Bikeway Improvements															
Class I	Assumes 2 mil for crossing improvements per mile and pedestrian lighting (no right-of-way; one side of street) (8.43% Additional Bicycle Facilities)	-	-	F&P	22.4	2.0	\$5,000,000	\$10,000,000	\$0	0%	\$10,000,000	No	100.00%	\$10,000,000	\$10,000,000
Class II	Assumes no roadway widening (8.43% Additional Bicycle Facilities)	-	-	F&P	22.4	2.0	\$500,000	\$1,000,000	\$0	0%	\$1,000,000	No	100.00%	\$1,000,000	\$1,000,000
Class III	(8.43% Additional Bicycle Facilities)	-	-	F&P	11.2	1.0	\$140,000	\$140,000	\$0	0%	\$140,000	No	100.00%	\$140,000	\$140,000
Subtotal														\$11,140,000.00	

Source: City of Orange; Fehr & Peers

MEMORANDUM

To: City of Orange
From: Economic & Planning Systems, Inc.
Subject: Orange TSIP Update - Transportation Fee Comparisons
Date: August 31, 2020

As part of the Transportation System Improvement Program (TSIP) update conducted for the City of Orange (City), Economic & Planning Systems (EPS) conducted a comparison of the City's existing, maximum allowable, and staff recommended transportation impact fees to fees in five peer cities in Orange County. The cities include Anaheim, Fullerton, Santa Ana, Huntington Beach, and Brea.

Table 1 summarizes the transportation impact fees levied by land use category in each city. It includes the current fees charged in Orange—both the actual transportation fee amount calculated in 2008 and that amount escalated to 2020 dollars; the maximum allowable transportation fee for the City as calculated for the TSIP update; and the staff recommended level for the fee update, which is based on 25 percent of the maximum allowable project cost calculated in the nexus analysis. The table includes all eight land use categories that will be included in Orange's updated TSIP, although not all of the peer cities assess distinct fees for all of those categories. The **Figures 1 through 7** show the transportation fee comparisons broken out for each land use category, excluding Medical Office use, which is only levied as distinct fees in Orange and Fullerton.

Overall, Orange's current transportation fees are lower than most of its peers, with the exception of its fee on retail, medical office, and hospital uses. The maximum allowable fees calculated for the TSIP update would be the highest in all land use categories except industrial uses. The staff recommended fee levels would be around the middle of the range represented among the peer cities.

The comparisons contained within this memo are for transportation impact fees only, and do not include any additional impact fees levied in the included cities. In addition to fees for transportation facilities, all six cities levy fees for parks facilities. Orange, Anaheim, Huntington Beach, and Brea levy fees for public safety facilities (i.e. police and fire), and Orange, Anaheim, and Huntington Beach levy fees for library facilities.

The Economics of Land Use



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Table 1: Summary of Transportation Impact Fees Charged by Land Use Type

Land Use Category	Orange (Max Allowable) [1]	Orange (Staff Rec.) [2]	Orange (Existing in 2020\$) [3]	Orange (Existing) [3]	Anaheim	Fullerton [4]	Santa Ana [5]	Huntington Beach [6]	Brea [7]
Single Family (per unit)	\$6,120	\$1,474	\$1,439	\$1,022	\$2,029	\$325	\$3,600	\$2,385	\$1,974
Multifamily (per unit)	\$3,527	\$849	\$1,075	\$764	\$1,297	\$195	\$825	\$1,597	\$1,203
Retail (per square foot)	\$15.76	\$3.80	\$6.53	\$4.64	\$5.50	\$1.74	\$3.27	\$4.18	\$2.35
General Office (per square foot)	\$6.26	\$1.51	\$1.37	\$0.97	\$3.67	\$0.98	\$3.27	\$4.18	\$1.25
Medical Office (per square foot)	\$22.36	\$5.38	\$5.79	\$4.11	N/A	\$1.26	N/A	N/A	N/A
Industrial (per square foot)	\$3.19	\$0.77	\$1.12	\$0.79	\$1.42	\$0.35	\$3.27	\$1.72	\$1.25
Hotel (per room)	\$5,371	\$1,293	\$1,285	\$912	\$1,297	\$242	\$1,308	\$1,438	N/A
Other/Atypical Uses (per trip-end)	\$642	\$155	\$160	\$114	\$1,285	\$186	N/A	N/A	\$89

[1] The maximum allowable fees for Orange include a two percent administration fee.

[2] The staff recommended fees for the Orange TSIP update are based on 25 percent of the maximum allowable project costs, plus a two percent administration fee.

[3] The existing transportation fee for Orange is the average of the three area fees. The table includes the currently charged fee level, set in 2008, as well as the fee level if it were escalated to 2020\$ based on the Construction Cost Index.

Orange's current fee program includes distinct fees for hospital, religious, childcare, and education uses. The updated program will group these uses under Other/Atypical Uses. The single family fee in Orange currently covers condos and townhomes as well. These uses will be charged under the Multifamily category in the updated program.

[4] Fullerton has distinct transportation fees for religious and hospital uses that are not reflected in this table. Fullerton's hospital fee is charged on a per square foot basis. The fee in the table assumes 2,500 sq. ft. per hospital bed.

[5] Santa Ana's transportation fee on residential units is levied per square foot; the table shows the single family fee as applied to a 2,000 sq. ft. house and the multifamily fee as applied to a 750 sq. ft. unit. The fee shown here covers most of the city but excludes the the Transit Zoning Code district and Harbor Specific Plan district, which have their own fees. The fees are only applicable to projects including five or more residential units.

Santa Ana's transportation fee on non-residential development is divided into six primary transportation system improvement area (TSIA) districts, and is not distinct by use. The fees shown here are the average of the six TSIA district fees, and excludes the Transit Zoning Code district and Harbor Specific Plan district, which have their own fees. The fee is levied on a per square foot, and the table shows a hotel per room fee assuming 400 sq. ft. per hotel room (includes common space)

[6] Huntington Beach's hotel fee for transportation is levied on a per trip basis. This table assumes 8.36 trips per room.

[7] Brea's transportation fee is based on the density of the residential project. The fee in the table for single family is for projects with densities of 6 dwelling units or fewer per acre, and the fee for multifamily is for projects with densities of 13 units or more per acre.

Brea has distinct transportation fees for Commercial/General/Mixed-Use retail and Regional Commercial retail. The retail fee in the table is for Commercial/General/Mixed-Use.

Figure 1: Transportation Impact Fees on Single Family Development (Per Unit)

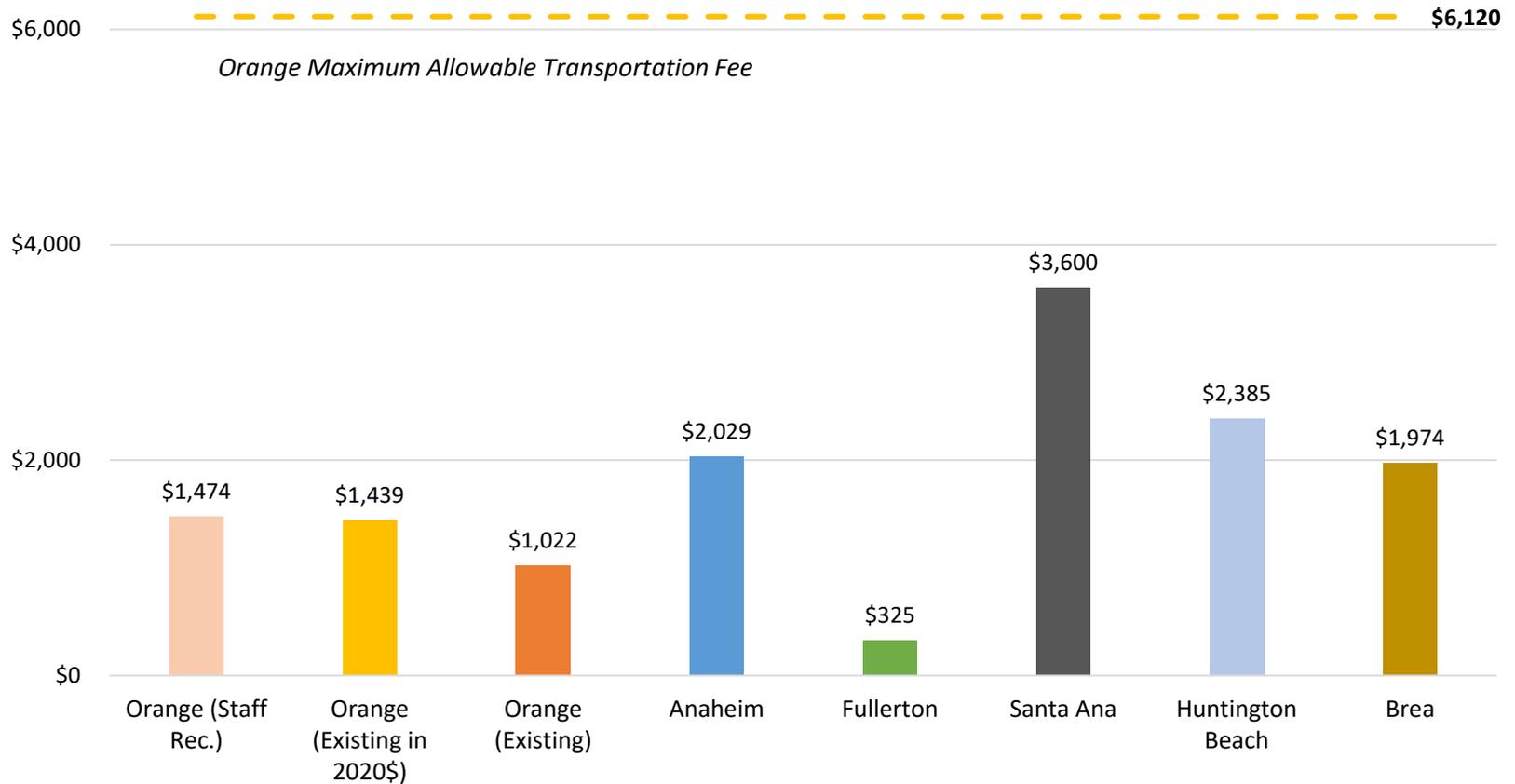


Figure 2: Transportation Impact Fees on Multifamily Development (Per Unit)

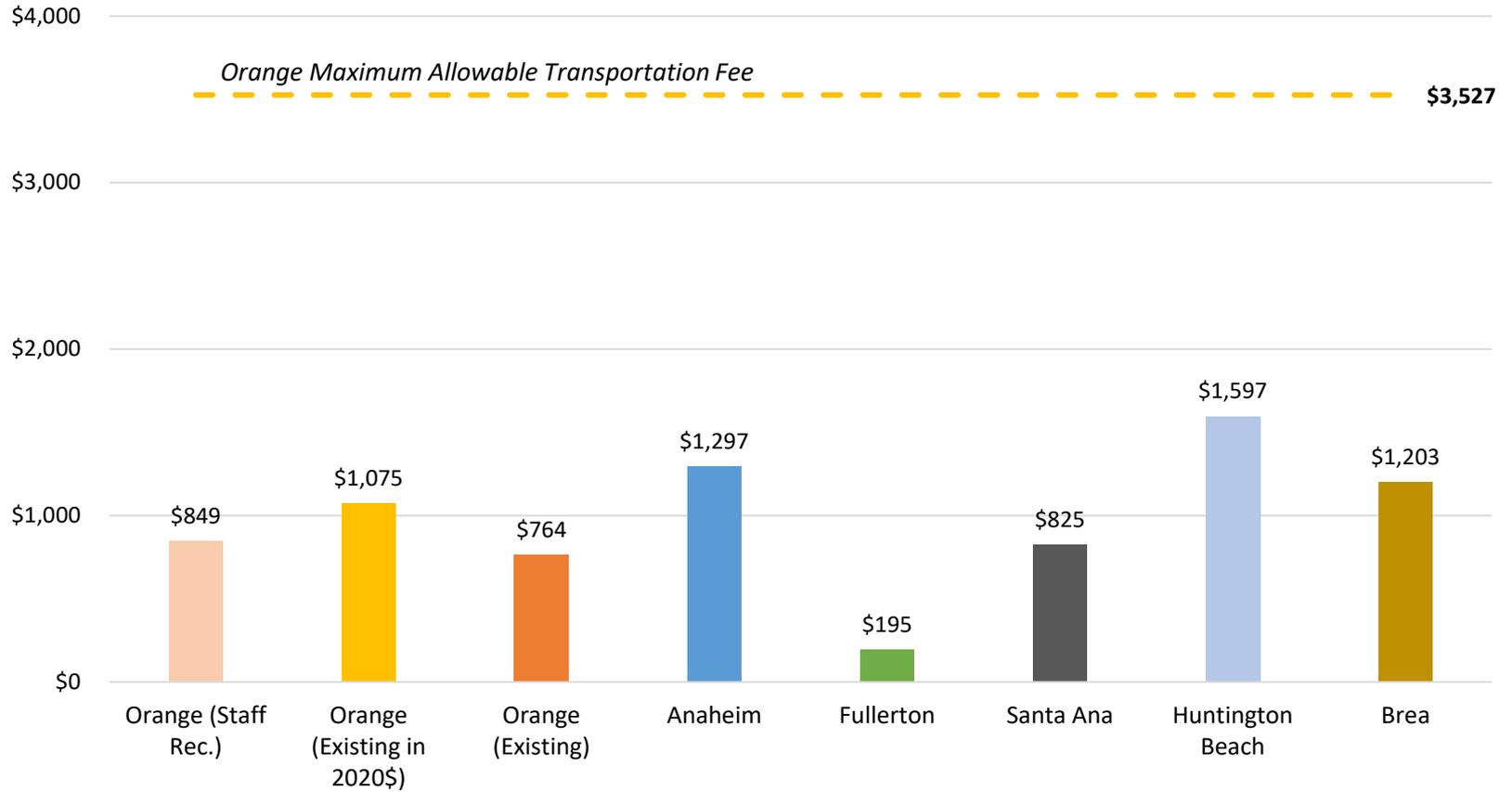


Figure 3: Transportation Impact Fees on Retail Development (Per Sq. Ft.)

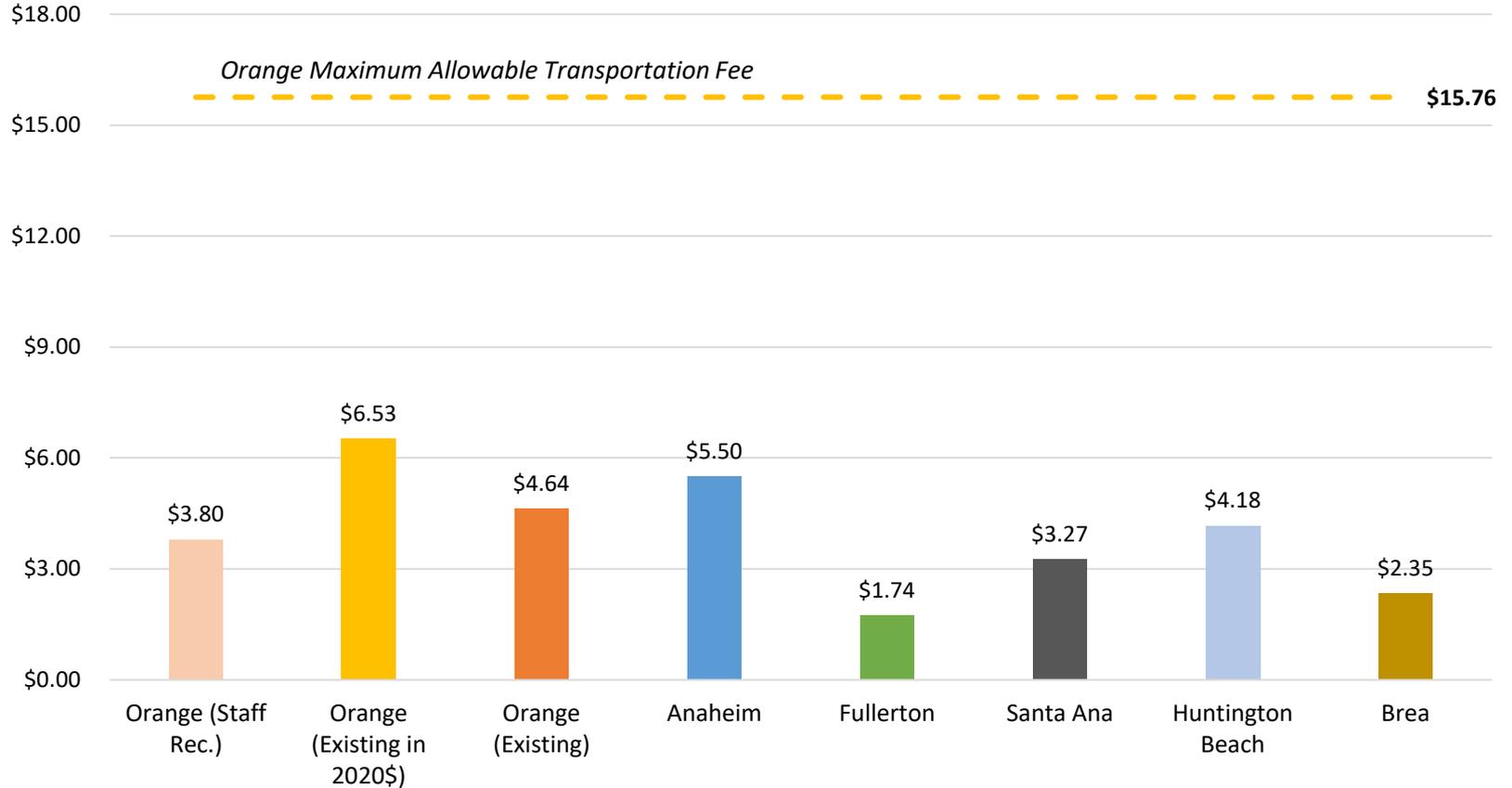


Figure 4: Transportation Impact Fees on Office Development (Per Sq. Ft.)

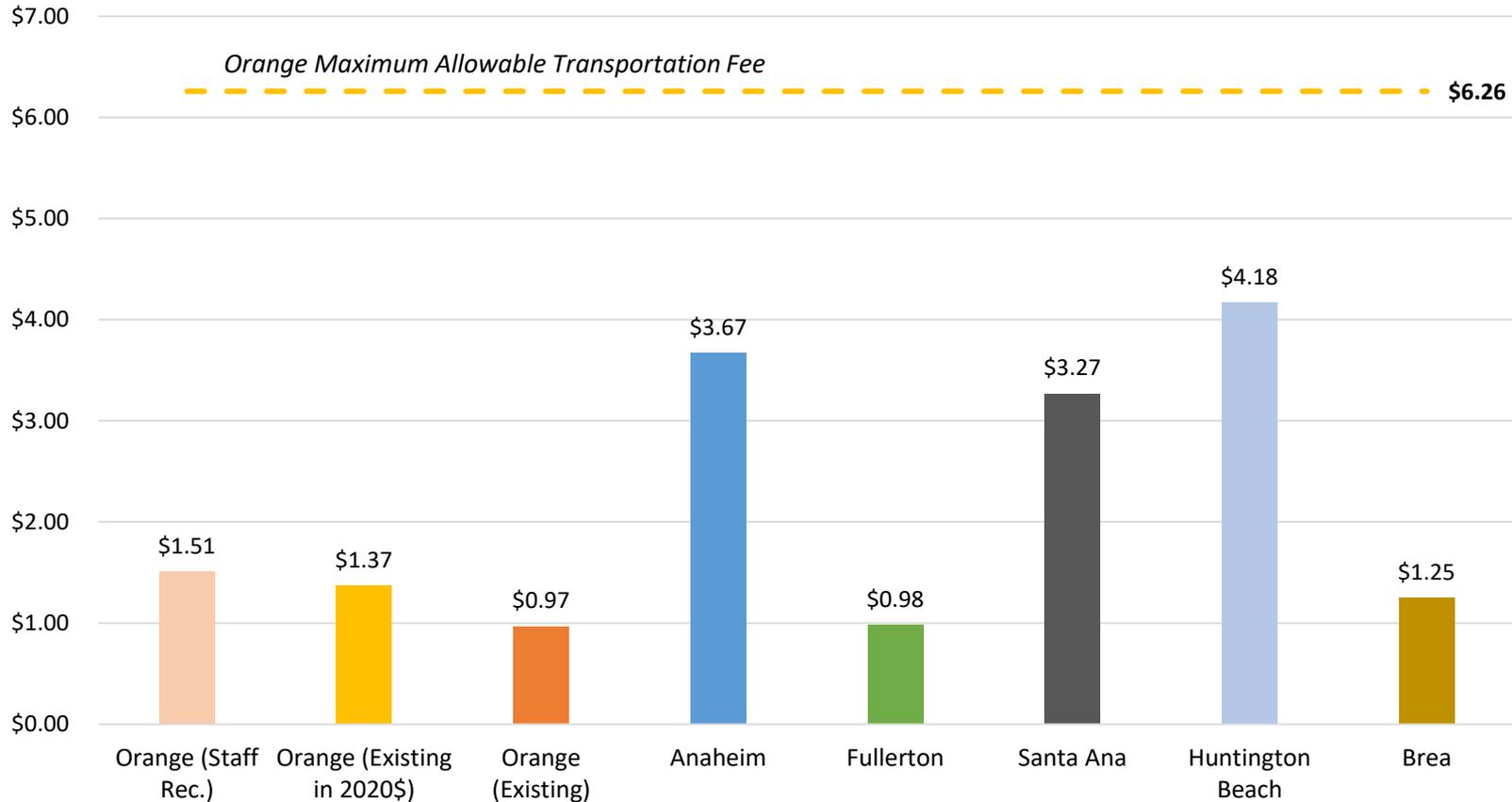


Figure 5: Transportation Impact Fees on Industrial Development (Per Sq. Ft.)

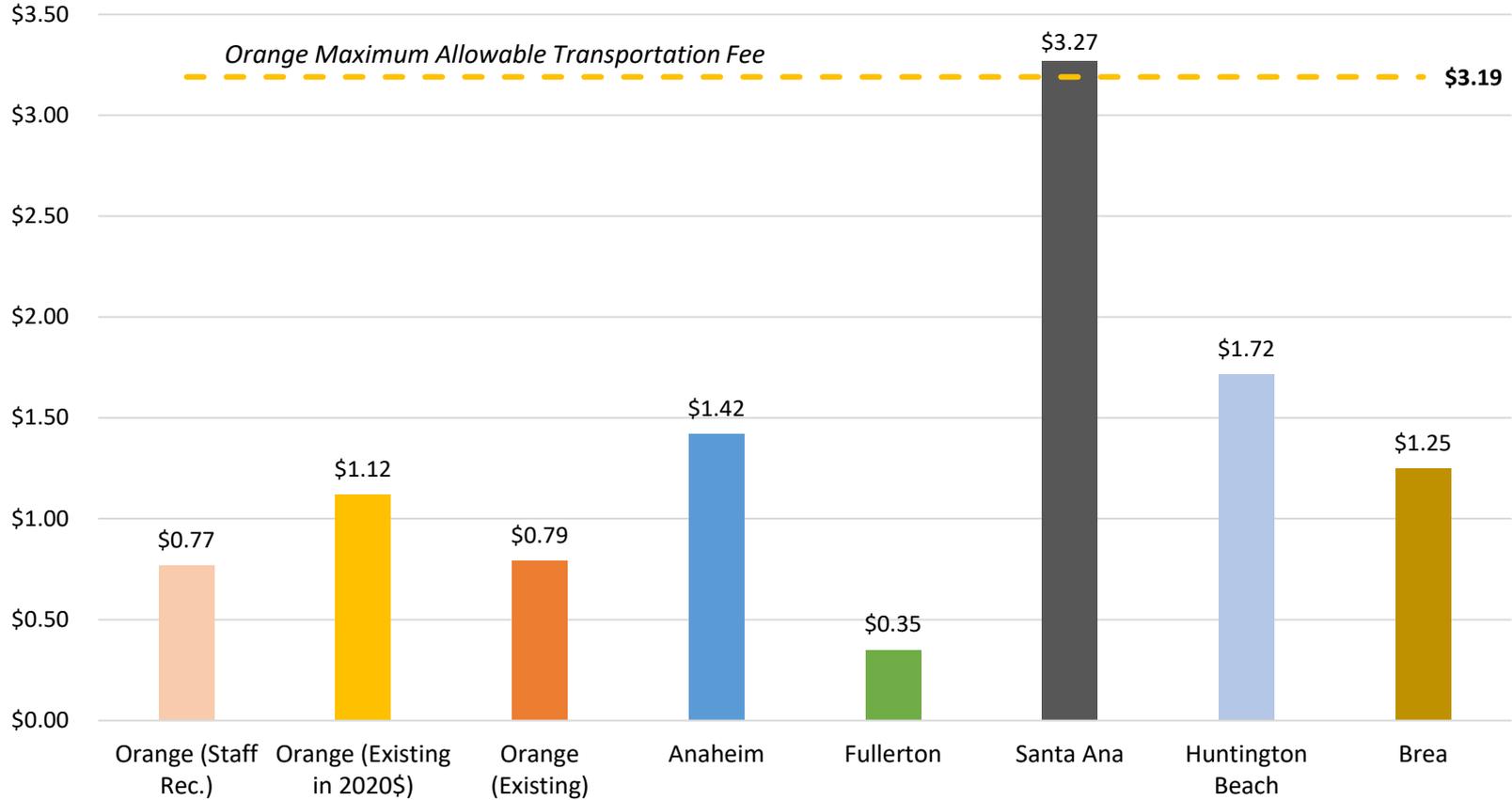


Figure 6: Transportation Impact Fees on Hotel Development (Per Room)

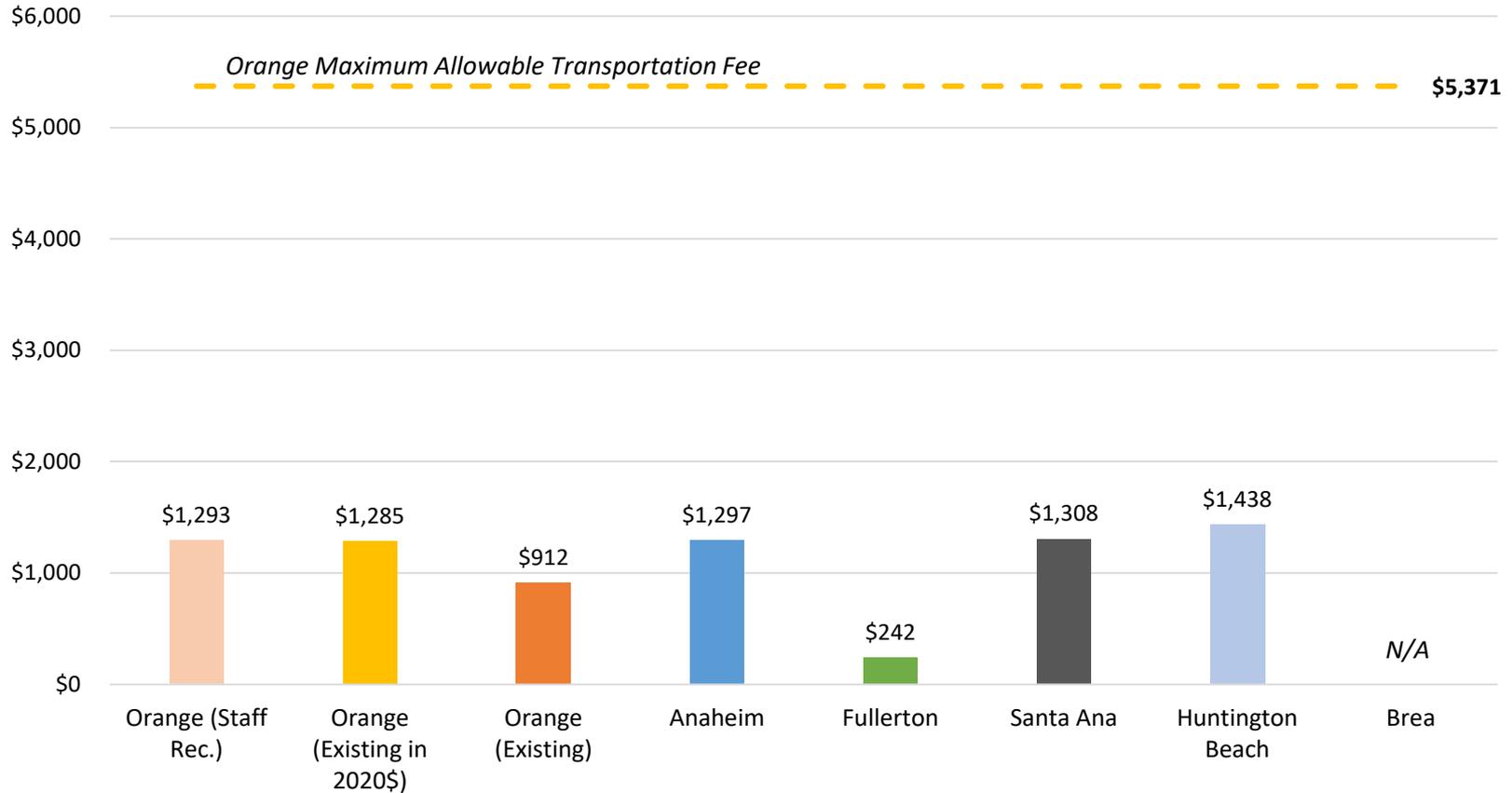
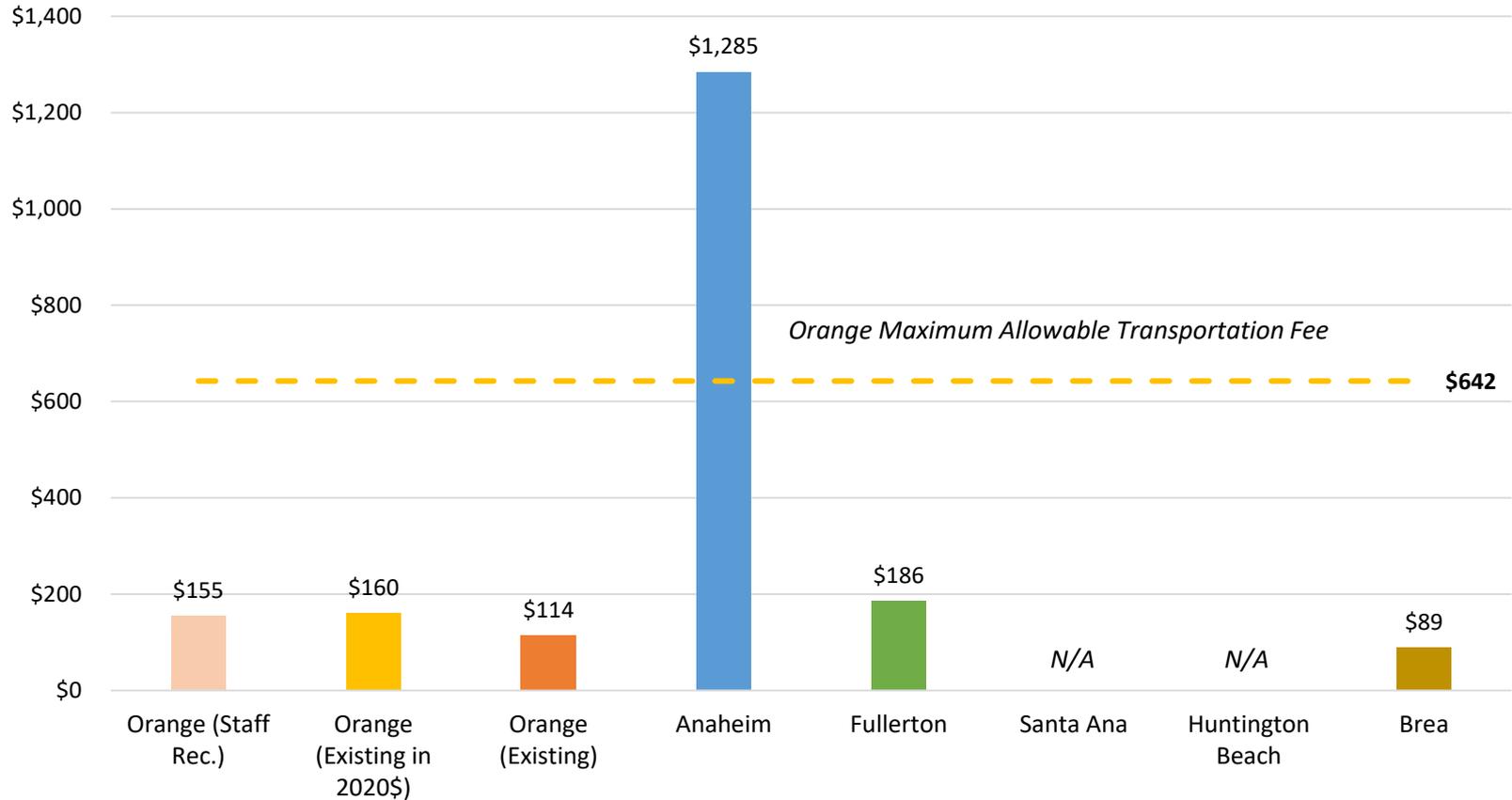


Figure 7: Transportation Impact Fees on Other/Atypical Uses (Per Trip-End)



ORDINANCE NO. 17-20

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ORANGE AMENDING CHAPTER 15.41 OF THE ORANGE MUNICIPAL CODE TO UPDATE THE PROGRAM AREAS SUBJECT TO TRANSPORTATION SYSTEMS IMPROVEMENT PROGRAM FEES, AND MODIFY THE YEARLY ADJUSTMENT METHOD FOR TRANSPORTATION SYSTEMS IMPROVEMENT PROGRAM FEES.

APPLICANT: CITY OF ORANGE

WHEREAS, the Mitigation Fee Act requires that Transportation Systems Improvement Program (“TSIP”) fees assessed on new development projects in the City are proportionate to the burden on the transportation facilities and infrastructure necessary to serve them and bear a rational relationship to the reasonable cost of providing transportation services occasioned by the new development; and

WHEREAS, the TSIP fee Program Areas were last updated in 1988 by Ordinance No. 17-88, and the TSIP fees were last updated in 2008 by City Council Resolution No. 10284; and

WHEREAS, the City commissioned a comprehensive study of its development impact fees for transportation facilities that evaluated the impact on transportation services by all types and locations of development and established the level of fees reasonably needed to provide transportation facilities and infrastructure as required by new development; and

WHEREAS, improvements to transportation services and facilities outside of the Program Areas formerly designated as “A,” “B” and “C” will provide City-wide benefits including benefits to the area from which the TSIP fees were collected.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF ORANGE DOES HEREBY ORDAIN AS FOLLOWS:

SECTION I:

Chapter 15.41, “Transportation Systems Improvement Program,” of the Orange Municipal Code is hereby deleted in its entirety and replaced with new Chapter 15.41 to read as follows:

Chapter 15.41 - TRANSPORTATION SYSTEMS IMPROVEMENT PROGRAM

15.41.010 - Findings and Purpose.

The City Council of the City of Orange finds and declares that all recitals set forth in the preamble of the ordinance codified in this chapter are true and such recitals are incorporated in

this chapter and set forth as findings of the City Council; and the City Council does further find and declare as follows:

- A. The State of California, through the enactment of Section 66000 et seq. of the Government Code of the State of California, also known as the Mitigation Fee Act, has determined the nexus that must be established in the enactment of development impact fees.
- B. The imposition of development impact fees is one of the preferred methods of ensuring that development bears a proportionate share of the cost of public facilities and services necessary to accommodate such development. This must be done in order to promote and protect the public health, safety and welfare.
- C. This chapter recognizes that new development projects within the City will result in additional growth and that such growth will place additional burdens on transportation facilities, infrastructure and services, necessitating the acquisition of land and construction of transportation facilities and expansion of services and infrastructure in order to meet and accommodate new development projects.
- D. New development projects should bear a proportionate financial burden in the construction and improvement of transportation facilities necessary to serve them.
- E. The cost of providing transportation facilities occasioned by new development projects exceeds the revenue generated by fees exacted from the development projects.
- F. In adopting fees authorized by this chapter, the City shall establish the fees based upon the costs generated through the need for new transportation facilities and other capital acquisition costs required, incrementally, by new development.
- G. The fees established by this chapter shall not exceed the reasonable cost of providing transportation facilities occasioned by new development projects.
- H. The fees established by this chapter shall bear a rational relationship to the reasonable cost of providing transportation facilities occasioned by new development projects.
- I. The fees established by this chapter are consistent with the goals and objectives of the City's general plan and are designed to mitigate the impacts caused by new development throughout the City. Development impact fees are necessary in order to help finance the required transportation facilities and to pay for new development's fair share of the costs.
- J. Imposition of fees to finance transportation facilities required by new development is necessary in order to avoid adversely impacting existing transportation facilities and services.

15.41.020 – Transportation Systems Improvement Program (TSIP) Fee.

- A. The City Council shall, by resolution, set forth the specific amount of the TSIP fee, which fee shall include an amount to recover the cost of preparation of the study and administrative overhead costs, to be set as a percentage of the TSIP fees which are collected pursuant to this chapter.
1. The amount of the fee shall not exceed the maximum amount established by a transportation nexus analysis. The amount of the fee is based on the projected net increase in vehicle miles traveled (VMT) determined as the product of daily trip-ends generated by each land use category and an average trip length. In this ordinance, the terms “trip” and “trip-end” are used to capture this relationship.
- B. The TSIP fee required by this chapter shall be due upon the following:
1. All Nonresidential Development. Upon the issuance of a building permit.
2. Residential Development. On the date of final inspection or certificate of occupancy for each unit, whichever occurs first. The rate at which the fee shall be charged for residential development shall be based upon the rate that was in place at the time a building permit was issued for each unit.
- a. “Residential development” means any project undertaken for the purpose of developing real property with one or more dwelling units, including a subdivision, apartment houses, dormitory-style housing, fraternity and sorority houses, room and board facilities, mobile homes, manufactured housing or structures, and structures moved into the City.
- b. “Dormitory-style housing” means student housing facilities for individual or group accommodation owned or operated, or authorized to be acquired, constructed, furnished, equipped and operated, by a college, university or private entity for use by students, faculty members, or other employees of any college or university.
3. Hospitals and Other Health Facilities Issued Building Permits by the State. As a condition precedent to approval of a grading plan, which requirement shall appear in any CUP issued for such a facility.
- C. The Director of Public Works may require specific transportation system improvements to be made and additional street rights-of-way dedicated and improved as an immediate condition of development or redevelopment of property. In this event, the cost of such improvements and street rights-of-way, upon verification of actual cost by the Department of Public Works, may be credited to the TSIP fee otherwise payable under this chapter if said improvement replaces those defined in the fee program.

15.41.030 - Building Permits and Conditional Use Permits Requiring Payment of Fee.

The payment of a TSIP fee, including an administrative fee to offset the operational oversight and administration of the impact fee program, shall be required when the application indicates the following:

- A. A construction or improvement project will result in an increase of floor, sales, storage or other usable area.
- B. A construction or improvement project will increase traffic demand from and to the site of the improvement.
- C. A change in facility use to a use that results in an increase of floor, sales, storage or other usable area or increases traffic demand from and to the site.

15.41.040 – Exemptions, Special Provisions and Application of Fees.

- A. The following categories of projects are exempt from the application of TSIP fees:
 - 1. An addition or modification to an existing single family residence which shall continue to be used as a single family residence.
 - 2. A tenant improvement to a non-residential building with no change to the structure or facility use, in whole or in part, to a higher traffic generating use.
 - 3. Conversion of a building or facility to a lower traffic-generating use.
 - 4. Replacement of a building of the same or smaller size and use as the result of condemnation, fire, earthquake, flood or other acts of God or of the public enemy.
- B. The following categories of projects are subject to the partial application of TSIP fees:
 - 1. Additional residential units constructed or created shall be subject to the full per unit base fee rate for the new additions only, to the extent authorized by state law.
 - 2. An addition to an existing non-residential building shall be subject to the appropriate fee for the addition only.
 - 3. Construction of additional non-residential buildings shall be subject to the appropriate fee rate for the new construction only.
 - 4. A change in a building or facility use, in whole or in part, to a higher traffic-generating use, shall cause the proportionate square footage to be subject to the appropriate fee rate.

5. A change in a building or facility use, in whole or in part, to a higher traffic-generating use shall be subject to a fee equal to the difference between any fee previously paid and the fee rate for the higher traffic-generating use.
6. Temporary structures, trailers or facilities shall be subject to the appropriate base fee rate. Credit shall be given for subsequent removal to permit the construction of permanent facilities.

C. The following categories of projects are subject to special application of TSIP fees:

1. Up to twenty-five percent (25%) of the floor area of a general industrial structure facility on a parcel may be used for any combination of retail sales and/or office provided it is accessory to the permitted use established on the parcel. The general industrial fee will apply to this area. Any floor use for retail or office in excess of twenty-five (25%) shall be charged at the higher applicable fee.
2. Credit to the TSIP may be allowed for structures that are demolished and removed from a property to permit the construction of new structures or facilities, provided:
 - a. The structure was usable and could be occupied within the previous ten years of issuance of a new building permit;
 - b. The credit is limited to the amount of the TSIP fee for the replaced structure;
 - c. The credit for a replaced structure can only be taken once whether or not the full amount of credit is used;
 - d. Any increase in square footage of the new structure or facility or conversion to a higher traffic generating use shall be subject to the applicable proportionate fee as provided for in this chapter.

It shall be the property owner or applicant's responsibility to apply for this credit and document any demolitions or removals, along with evidence that the structure was usable and could be occupied within the previous ten years.

D. The following categories of projects are subject to City Traffic Engineer evaluation:

1. Special uses where the trip generation rate is substantially lower than that of the general land use category. The City Traffic Engineer may make a finding that a particular use is unique and it is inequitable to assess TSIP fees based on the general land use category. In such a case, the City Traffic Engineer shall review the fee and recommend a waiver or adjustment of the fee.
2. Improvements where the added floor area will not generate additional trip ends on a continuing basis. The City Traffic Engineer may make a finding that the

following improvements will not generate additional trips and recommend waiver or adjustment of the fee:

- a. Recreational rooms in a residential planned unit development, townhouse, condominium, etc.;
 - b. Non-manned facilities such as equipment rooms, cellular telephone stations, pumping stations, switching stations, etc.;
 - c. Open air weather protection for existing areas of use or material storage;
 - d. Support equipment such as conveyor platforms, etc.;
 - e. Parking structures;
 - f. Restroom additions to an existing facility;
 - g. Temporary trailers with a guaranteed removal date such as construction trailers, residential sales trailers, and temporary special event structures (example-Street Fair), etc.;
 - h. Outdoor lounges, patios or eating areas, provided they are accessory to and not an expansion of the permitted use established on the property and not generally available to the public.
3. Atypical uses with a disproportionate floor area square footage compared to trip ends generated. The City Traffic Engineer may make a finding that the following improvements will not generate typical trip ends compared to the floor area and recommend waiver or adjustment of the fee:
- a. Projects or facilities where the relationship between floor area and trips generated is unusually high or low.
 - b. Projects or facilities where trips may not be generated on a regular basis or schedule.
 - c. Examples include drive-in theaters, batch mix plants, auto/truck rental facilities, auction facilities, golf courses, used car lots, indoor arenas, sports and gymnastic training centers, etc. When, in the opinion of the City Traffic Engineer, individual evaluation is required, fees on these types of development shall be based on the approved base cost per trip end with the trip end established through an approved traffic impact analysis.

E. Other applications of TSIP fees are as follows:

1. Conversion of a single family residence in whole or in part to a non-residential use shall cause such conversion to be subject to the applicable fee rate.
2. Non-residential outdoor sales and related activities, dining, or manufacturing areas, even though not improved by a structure, shall be subject to the applicable TSIP fee.
3. A single fee, which represents the primary structure or facility use, shall be used to determine the required TSIP for the total structure or facility.
4. There shall be no fee exemption for projects or uses involving other governmental organizations or agencies, private schools, non-profit organizations, charitable organizations, churches, synagogues or City facilities.
5. An existing residential unit moved to a new lot shall be subject to the applicable full TSIP fee. Any TSIP fee credit shall remain with the original parcel.

15.41.050 - Disposition of TSIP Fees – Fund Created.

All fees collected under this chapter shall be promptly transferred for deposit into a special fund of the City entitled “Transportation Systems Improvement Program.” The fund shall be used only for the purposes stated in Section 15.41.010.

15.41.060 - Automatic Annual Adjustment.

The TSIP fee shall be automatically adjusted on the first day of July of each year to reflect the percentage of increase or decrease in the Construction Cost Index as published by Engineering News-Record for the timeframe since the most recent increase. The adjusted fee, if any, shall be rounded to the nearest dollar for “per unit” fees and to the nearest one tenth of a cent for “per square foot” fees. The TSIP fee will be reviewed on an annual basis to determine if development and the corresponding transportation system improvements are proceeding as projected.

15.41.070 - Amendment by Resolution.

The TSIP fees referred to herein may be revised, deleted, or otherwise amended by resolution of the City Council.

15.41.080 - Fee Adjustment Applications and Appeals.

- A. TSIP Fee Appeals. There is hereby established an appeal procedure and appeal board to evaluate differences in application of the fee per this Ordinance.
 1. Appeal of the TSIP fee shall be in writing to the City Traffic Engineer. The appeal shall clearly state the basis for the appeal and include payment of a \$350.00 administrative appeal fee. Upon receipt of the above, an appeal hearing shall be

scheduled as soon as possible, but in no event later than 30 days after receipt of the written appeal by the City.

2. The appeal board shall consist of the City Manager, the City Finance Director and the Director of Public Works or their designee. The Director of Public Works shall chair the meeting. Support staff may include representatives of the City Attorney, City Traffic Engineer and Planning Department as needed. All decisions by the appeal board are final unless further appealed to the City Council within 15 days of the issuance of a written decision by the appeal board.
- B. The City Council may, from time to time, and as the need may arise, set forth, by resolution, specific limitations which will apply to reductions, adjustments or waivers of fees which may be made pursuant to this section. In this regard, this chapter shall be considered enabling and directory.
- C. A developer may also protest the imposition of fees as provided in Government Code Section 66020.

15.41.090 - Payment.

Payment Plan. Payment of TSIP fees is normally due for non-residential development, upon issuance of a building permit and for residential development, on the date of final inspection or certificate of occupancy for each unit, whichever occurs first. Periodically, special circumstances may warrant a deferred payment or installment payment agreement so that the proposed project may proceed. The Director of Public Works, in concurrence with the Finance Director, is hereby authorized to approve such agreements when an acceptable payment guarantee, such as a time certificate of deposit, can be secured, and when it is in the public's best interest.

15.41.100 - Controlling State Law.

The provisions of this chapter and any resolution adopted pursuant hereto shall at all times be subject and subordinate to the provisions of Chapter 5 (commencing with Section 66000), Division 2, of Title 7 of the California Government Code, as the same presently exists or may hereafter be amended from time to time, to the extent the same are applicable. In the event of any conflict between the provisions of this chapter and state law, the latter shall control.

SECTION II:

If any section, subsection, clause, or provision of this Ordinance is for any reason held to be invalid or unconstitutional, such invalidity or unconstitutionality shall not affect the validity or constitutionality of the remaining portions of this Ordinance. The City Council hereby expressly declares that if would have passed this Ordinance, and each section, subsection, sentence, clause and phrase hereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases be declared invalid or unconstitutional.

SECTION III:

The City Clerk is hereby directed to certify the adoption of this Ordinance and cause a summary of the same to be published as required by law. This Ordinance shall take effect thirty (30) days from and after the date of its final passage.

ADOPTED this ____ day of _____, 2020.

Mark A. Murphy, Mayor, City of Orange

ATTEST:

Pamela Coleman, City Clerk, City of Orange

STATE OF CALIFORNIA)
COUNTY OF ORANGE)
CITY OF ORANGE)

I, PAMELA COLEMAN, City Clerk of the City of Orange, California, do hereby certify that the foregoing Ordinance was introduced at the regular meeting of the City Council held on the ____ day of _____, 2020, and thereafter at the regular meeting of said City Council duly held on the ____ day of _____, 2020, was duly passed and adopted by the following vote, to wit:

AYES: COUNCILMEMBERS:
NOES: COUNCILMEMBERS:
ABSENT: COUNCILMEMBERS:
ABSTAIN: COUNCILMEMBERS:

Pamela Coleman, City Clerk, City of Orange

RESOLUTION NO. 11270

**A RESOLUTION OF THE CITY COUNCIL OF
THE CITY OF ORANGE REPEALING
RESOLUTION NO. 10284 AND REVISING THE
TRANSPORTATION SYSTEMS IMPROVEMENT
PROGRAM FEE CATEGORIES AND RELATED
FEES**

WHEREAS, the City Council adopted Chapter 15.41 of the Orange Municipal Code to require that developers contribute their fair share of the costs of the acquisition and construction of transportation systems to meet transportation demands created by new development and to establish certain standards and formulas for the payment of a Transportation Systems Improvement Program (“TSIP”) fee; and

WHEREAS, the Orange Municipal Code provides that fees may be increased by resolution adopted by the City Council; and

WHEREAS, the TSIP fee requirements were last updated by the City in 2008; and

WHEREAS, the City contracted with a consultant to perform an analysis of the fees necessary to be charged to new development to provide the transportation system facilities required as a result of such development and also to perform an analysis of the current categories of TSIP fees; and

WHEREAS, the consultant performed this analysis and calculated the fees in compliance with the requirements of the Mitigation Fee Act (California Government Code Section 66000 et seq.) and recommended the consolidation of the three fee categories and the elimination of the program area designations; and

WHEREAS, the City Council has considered the information in the consultant’s report and the City’s staff report and has determined the fees should be adjusted to more equitably allocate new development’s fair share of the cost of new transportation facilities and to cover increased construction costs and administrative costs.

NOW, THEREFORE BE IT RESOLVED by the City Council of the City of Orange as follows:

1. The current three fee areas based on the three program area designations (Program Area “A,” Program Area “B,” and Program Area “C”) are consolidated into one single City-wide area.
2. Resolution No. 10284 is repealed and the TSIP fees are hereby adopted as set forth in Exhibit “A.”

3. The TSIP fees shall be automatically adjusted on the first day of July each year without further action of the City Council, beginning July 1, 2021, to reflect the percentage of increase or decrease in the Construction Cost Index as published by Engineering News-Record for the timeframe since the most recent increase.

ADOPTED this ____ day of _____, 2020

Mark A. Murphy, Mayor, City of Orange

ATTEST:

Pamela Coleman, City Clerk, City of Orange

I, PAMELA COLEMAN, City Clerk of the City of Orange, California, do hereby certify that the foregoing Resolution was duly and regularly adopted by the City Council of the City of Orange at a regular meeting thereof held on the ____ day of _____, 2020 by the following vote:

AYES: COUNCILMEMBERS:
NOES: COUNCILMEMBERS:
ABSENT: COUNCILMEMBERS:
ABSTAIN: COUNCILMEMBERS:

Pamela Coleman, City Clerk, City of Orange

EXHIBIT "A"

TSIP FEES

Land Use	FY 20-21 Fee	Future FY Fee
Single Family (per unit)	\$1,473.90	Prior FY + CCI Increase
Apartments/Multi Family (per unit)	\$849.37	Prior FY + CCI Increase
Hotel (per room)	\$1,293.49	Prior FY + CCI Increase
General Office (per square foot)	\$1.51	Prior FY + CCI Increase
Medical Office (per square foot)	\$5.38	Prior FY + CCI Increase
Industrial (per square foot)	\$0.77	Prior FY + CCI Increase
Retail/Commercial (per square foot)	\$3.80	Prior FY + CCI Increase
Atypical/Other (per trip end)	\$154.72	Prior FY + CCI Increase



Agenda Item

City Council

Item #: 11.3.

9/8/2020

File #: 20-116

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Gary A. Sheatz, City Attorney

1. SUBJECT

Public Hearing to consider Introduction and First Reading of an Ordinance amending sections of Title 12 (Streets, Sidewalks and Public Places), Title 16 (Subdivisions) and Title 17 (Zoning) of the Orange Municipal Code related to the Design Review Committee. Ordinance No. 13-20.

2. SUMMARY

An Ordinance amending sections of Title 12, 16 and 17 of the Orange Municipal Code to revise the duties and responsibilities of the Design Review Committee to focus on projects in historic districts and involving historic properties and effect other minor revisions.

3. RECOMMENDED ACTION

Introduce and approve Ordinance No. 13-20 for First Reading. An Ordinance of the City Council of the City of Orange Amending Title 12, Title 16 and Title 17 of the Orange Municipal Code to Update Duties and Responsibilities of the Design Review Committee Effect Other Minor Revisions.

4. FISCAL IMPACT

None.

5. STRATEGIC PLAN GOALS

Goal 4: Provide Outstanding Public Service

b: Provide facilities and services to meet customer expectations

d: Foster an environment of leadership, teamwork, and innovation

Goal 5: Recognize, Promote, and Preserve Orange's Rich Heritage

b: Expand and strengthen processes and practices related to protection and cultural resources.

6. DISCUSSION AND BACKGROUND

Background

In 1974, the City Council adopted Ordinance No. 4-74, creating a Design Review Board, later renamed the Design Review Committee (DRC). The City Council's stated intent was to promote "appropriate standards for the design of new buildings and design of structures" and the DRC was to "review all development and building projects except those exempted by resolution of the City Council." Over the past 46 years, the purview of the DRC expanded to include review of demolition permits in Old Towne, signs and sign programs, landscaping, recommendations on tentative tract

maps, variances, CUPs and all site plan reviews. Simultaneous with the expansion of DRC responsibilities, there has been an enormous expansion in the population of Orange, with its attendant development. The quantity and complexity of projects falling within the responsibilities of the DRC increased significantly. Concomitant with the increase in the number of projects requiring DRC review, the length and number of meetings needed to accomplish those tasks has also increased significantly.

Earlier in 2020, the City Council requested a thorough review of the development approval process requirements in the Orange Municipal Code with the goal of increasing the efficiency while focusing the efforts of the DRC on one of this City's most valuable resources, namely the historic districts and buildings and structures of historical significance.

Planning Commission Action

The Planning Commission conducted a hearing on the proposed Ordinance on August 17, 2020, (Attachment 3, 4). The Commission considered the entire record, including the staff report and public comments, and adopted Resolution No. PC 23-20, unanimously recommending approval to the City Council by a vote of 4-0.

Analysis

The DRC will continue to review and recommend/approve development projects in historic districts and involving buildings or structures identified as significant in the City's Historic Resources Survey. The Director of Community Development will have approval authority and/or make recommendations to the Planning Commission for projects outside of a historic district. Reorienting the DRC's focus onto historic districts and structures will concentrate their expertise on historical resources. The resulting flow for processing applications will be streamlined and result in shorter turnaround for applicants.

Summary of Amendments

The Ordinance updates the following sections of the Orange Municipal Code:

OMC 12.18.080.O - Streets, Sidewalks and Public Places - Outdoor Dining on Public Walkways - Outdoor Dining Permit Standards

- Approval of outdoor dining signage will be by the Director of Community Development in place of the DRC.

OMC 16.35.060 - Subdivisions - Vesting Tentative Maps - Filing

- Subdividers will obtain plans and drawings approval from the Director in place of the DRC.

OMC 17.08 - Zoning - General Administrative Procedures

- All design review processes will be consolidated (administrative and other) and the Director's responsibilities will reflect this change.
- DRC recommendations on CUPs and variances will be eliminated.
- DRC site plan review will be limited to historic districts.
- DRC review of other land use applications will be limited to those in historic districts or involving a building or structure listed on the City's Historical Resources Survey.
- The DRC will make a recommendation, not a final decision, on temporary uses in historic districts only.
- The Director will be able to refer other projects to the DRC in the Director's discretion.

OMC 17.10 - Zoning - Specific Administrative Procedures

- The DRC will review temporary use permits in historic districts only.
- The DRC will review Minor and Major Site Plans for historic districts only.
- For site plan review of projects in historic districts or involving historic buildings or structures, the DRC may recommend conditions relating to architectural design only.
- Description of the types of projects subject to design review will be revised to be more specific.
- Redundant language regarding CEQA review and findings in historic districts will be deleted.
- Provision for Administrative Design Review will be deleted.

OMC 17.12 - Zoning - General Regulations

- References to the Old Towne Historic District will be updated to include all historic districts.

OMC 17.13 - Zoning - Master Land Use Table

- Mandatory DRC review of CUP for minor use not associated with a historic district will be eliminated.

OMC 17.08 - Zoning - Sign Regulations

- The Director will approve sign programs for multitenant building sign programs and mixed use/major commercial centers, in place of the DRC.
- The Director will make recommendations to the Planning Commission for creative signs and murals located outside of a historic district, in place of the DRC.

Environmental

The subject Ordinance is exempt from the provisions of the California Environmental Quality Act (CEQA) per State CEQA Guidelines Sections 15060(c)(2), 15060(c)(3) and 15061(b)(3), because it will not result in a direct or reasonably foreseeable indirect physical change in the environment, because there is no possibility it will have a significant effect on the environment, and because it is not a "project" as defined in Section 15378 of the State CEQA Guidelines. As such, no further analysis is warranted or required.

7. ATTACHMENTS

- Ordinance No. 13-20 - CLEAN
- Ordinance No. 13-20 - REDLINED
- Planning Commission Staff Report and Resolution
- Draft Planning Commission Minutes 8/17/20
- Public Comments for Planning Commission meeting on 8/17/20 (not including voicemail from Tony Trabucco, OTPA, in opposition)



Agenda Item

City Council

Item #: 11.3.

9/8/2020

File #: 20-116

TO: Honorable Mayor and Members of the City Council

THRU: Rick Otto, City Manager

FROM: Gary A. Sheatz, City Attorney

1. SUBJECT

Public Hearing to consider Introduction and First Reading of an Ordinance amending sections of Title 12 (Streets, Sidewalks and Public Places), Title 16 (Subdivisions) and Title 17 (Zoning) of the Orange Municipal Code related to the Design Review Committee. Ordinance No. 13-20.

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Introduce and approve Ordinance No. 13-20 for First Reading. An Ordinance of the City Council of the City of Orange Amending Title 12, Title 16 and Title 17 of the Orange Municipal Code to Update Duties and Responsibilities of the Design Review Committee Effect Other Minor Revisions.

4. FISCAL IMPACT

None.

5. STRATEGIC PLAN GOALS

Goal 4: Provide Outstanding Public Service

b: Provide facilities and services to meet customer expectations

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maps, variances, CUPs and all site plan reviews. Simultaneous with the expansion of DRC responsibilities, there has been an enormous expansion in the population of Orange, with its attendant development. The quantity and complexity of projects falling within the responsibilities of the DRC increased significantly. Concomitant with the increase in the number of projects requiring DRC review, the length and number of meetings needed to accomplish those tasks has also increased significantly.

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- Approval of outdoor dining signage will be by the Director of Community Development in place of the DRC.

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- All design review processes will be consolidated (administrative and other) and the Director's responsibilities will reflect this change.
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The subject Ordinance is exempt from the provisions of the California Environmental Quality Act (CEQA) per State CEQA Guidelines Sections 15060(c)(2), 15060(c)(3) and 15061(b)(3), because it will not result in a direct or reasonably foreseeable indirect physical change in the environment, because there is no possibility it will have a significant effect on the environment, and because it is not a "project" as defined in Section 15378 of the State CEQA Guidelines. As such, no further analysis is warranted or required.

7. ATTACHMENTS

- Ordinance No. 13-20 - CLEAN
- Ordinance No. 13-20 - REDLINED
- Planning Commission Staff Report and Resolution
- Draft Planning Commission Minutes 8/17/20
- Public Comments for Planning Commission meeting on 8/17/20 (not including voicemail from Tony Trabucco, OTPA, in opposition)

ORDINANCE NO. 13-20

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ORANGE AMENDING TITLE 12, TITLE 16 AND TITLE 17 OF THE ORANGE MUNICIPAL CODE TO UPDATE DUTIES AND RESPONSIBILITIES OF THE DESIGN REVIEW COMMITTEE AND EFFECT OTHER MINOR REVISIONS

WHEREAS, the City of Orange Design Review Committee (formerly the Design Review Board) was established in 1974 by Ordinance No. 4-74 for the purpose of upholding community aesthetics by reviewing the architectural design of new buildings and structures; and

WHEREAS, the number and complexity of development projects in the City of Orange have greatly increased over the past 46 years; and

WHEREAS, the City wishes to increase the effectiveness of the Design Review Committee by focusing its efforts on development projects in historic districts and involving historic buildings and structures as defined.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF ORANGE DOES HEREBY ORDAIN AS FOLLOWS:

SECTION I:

This Ordinance is not a project under the California Environmental Quality Act (CEQA) per State CEQA Guidelines Section 15061(b)(3) and 15378, because it is an administrative activity undertaken by a local government, involves general City policy and procedure, and its adoption does not have the potential to result in direct or indirect physical changes to the environment

SECTION II:

Section 12.18.080.O of the Orange Municipal Code, “Streets, Sidewalks and Public Places - Outdoor Dining on Public Walkways - Outdoor Dining Permit Standards,” is hereby amended in its entirety to read as follows:

O. No signs are permitted in the outdoor dining area with the exception of a menu sign. Business names may be permitted on the valance of the awnings and/or umbrellas, as approved by the Director; however, commercial and product logos are not permitted on the valance of awnings and/or on umbrellas or in any other outdoor display.

SECTION III:

Section 16.35.060 of the Orange Municipal Code, “Subdivisions – Vesting Tentative Maps - Filing,” is hereby amended in its entirety to read as follows:

16.35.060 - Filing.

A vesting tentative map shall be filed in the same form and have the same contents, accompanying data and reports as set forth in other provisions of Title 16 for a tentative map, except as hereinafter provided:

A. Subdivider shall obtain Community Development Director preliminary approval of development prior to filing a vesting tentative map. Processing and content shall be as detailed in City's document entitled "Design Review Committee Submittal Procedure."

B. Subdivider shall obtain all necessary zone changes prior to or concurrent with filing a vesting tentative map.

C. At the time a vesting tentative map is filed it shall have printed conspicuously on its face the words: "Vesting Tentative Map."

D. At the time a vesting tentative map is filed, a subdivider shall also supply the following information:

1. Community Development Director approved plans and drawings;
2. Sewer, water, storm drain, and road details;
3. Geological studies;
4. Flood control information;
5. School impact analysis;
6. Traffic impact analysis;
7. Detailed grading plans;
8. Solar access, passive or natural heating or cooling opportunities analysis;
9. Signing program (advertising, locational, and safety signing systems);
10. Any other material considered essential to the proper evaluation of the project (e.g. open space maintenance responsibilities, provisions made for trails and/or parks and their maintenance responsibilities).

NOTE: All developments require compliance with the California Environmental Quality Act. Some of the above information may be included in reports prepared for that purpose. If so, the information requested above need only a reference to the EIR.

SECTION IV:

Table 17.08.020, "Zoning – General Administrative Procedures – Reviewing Bodies," is hereby amended in its entirety to read as follows:

Type of Procedure, Permit or Hearing	CDD	DRC	ZA	PC	CC
Zoning Ordinance Amendment	A			A	X
Zone Change	A			A	X
Conditional Use Permit	A		X(1)	X(1)	X(1)
Variance	A		X(1)	X	
Administrative Adjustment Permit			X		
Temporary Use (Non-Recurring) Permit	A	A(1)	X		

Design Review	A/X(1)	A/X(1)		X(1)	
Historic District Demolition Permit		A		X(1)	X
Site Plan Review—Minor	X	A(1)			
Site Plan Review—Major	A	A(1)		X	
Tentative Tract Map	A			A	X
General Plan Amendment	A			A	X
Environmental Documentation	A			X(1)	X(1)

SECTION V:

Section 17.08.020.B.2.c of the Orange Municipal Code, “Zoning – General Administrative Procedures – Reviewing Bodies – Planning Commission – Powers and Duties,” is hereby amended in its entirety to read as follows:

c. Authority to act upon an appeal of any order, requirement, permit, decision or determination made by an administrative or appointed official or body in the administration or enforcement of this chapter.

SECTION VI:

Section 17.08.020.D of the Orange Municipal Code, “Zoning – General Administrative Procedures – Reviewing Bodies – Design Review Committee,” is hereby amended in its entirety to read as follows:

D. Design Review Committee. The Design Review Committee (DRC) is established to uphold community aesthetics by reviewing the architectural design of projects in historic districts and any building or structure identified as a historic resource in the City’s Historic Resources Survey.

1. Purpose.

- a. To review development projects as provided herein, by considering the elements of architectural design, massing and scale, color palette, and context to ensure that projects are compatible with surrounding development and community aesthetics;
- b. To interpret and apply adopted design guidelines and standards;
- c. To assist in formulating design policy;
- d. To encourage the preservation of cultural historic resources, while allowing for orderly development.

2. Powers and Duties. The DRC shall have the authority to:

- a. Review and make recommendations to the Planning Commission and/or make final determinations, as appropriate, on Design Review for development projects in historic districts or involving a building or structure identified in the City’s Historic Resources Survey.
- b. Review and make recommendations to the Planning Commission on proposed demolitions in historic districts.

c. Review and make recommendations to the Planning Commission on Major Site Plan Review for development projects in historic districts or involving a building or structure identified in the City's Historic Resources Survey.

d. Review and make recommendations to the Community Development Director on Non-Recurring Temporary Use Permits and Minor Site Plan Review matters in historic districts or involving a building or structure identified in the City's Historic Resources Survey.

e. Review and make recommendations to the Community Development Director on other matters referred by the Director.

3. Meetings.

a. The DRC shall meet in regular session on dates and at times to be determined by resolution of the City Council. All meetings shall be open to the public, and provisions of the Brown Act shall apply.

b. Three members shall constitute a quorum. A majority vote of the quorum present shall be required for all DRC actions. Failure to achieve a majority vote of members present shall constitute a denial of the proposed action.

c. The DRC shall adopt rules and regulations for the conduct of its business consistent with this chapter.

4. Membership and Compensation. Membership and compensation of the DRC shall be as determined by resolution of the City Council.

5. Terms of Office/Officers.

a. The terms of office for each member of the DRC shall be four years and shall continue to and include June 30th of the year in which the term expires, and thereafter until a successor for the member whose term is expiring has been appointed.

b. At the first meeting after June 30th of every other year, the DRC shall select a chairman and a vice-chairman to serve two-year terms.

SECTION VII:

Section 17.08.020.E of the Orange Municipal Code, "Zoning – General Administrative Procedures – Reviewing Bodies – Community Development Director – Powers and Duties," is hereby amended in its entirety to read as follows:

E. Community Development Director. The Community Development Director, in conjunction with a staff review committee designated by the City Manager, shall review development proposals in order to ensure that yards, open space, structures, parking, loading facilities, landscaping, streets and similar uses and the development of the land remains compatible with surrounding properties reflecting the highest quality of land planning and design.

1. Powers and Duties. The Community Development Director, after consultation with a staff review committee designated by the City Manager, shall have the authority to:

a. Decide upon minor site plan applications.

b. Decide upon, or make recommendations to the Planning Commission, as appropriate, on design review applications as specified in Chapter 17.10;

c. Review and make recommendations to the Planning Commission on zoning ordinance amendments, zone changes, conditional use permits, variances, major site plans, tentative tract maps, general plan amendments and other discretionary applications as specified in Chapter 17.10;

- d. Consider minor modifications to previously approved site plans and determine whether such modifications are in substantial conformance with the approved plans;
- e. Review and make recommendations to the Planning Commission on environmental documentation and all duties defined in City environmental review guidelines.
- f. Refer matters to the Design Review Committee as appropriate.

SECTION VIII:

Section 17.08.050.A of the Orange Municipal Code, “Zoning – General Administrative Procedures – Appeals – Right of Appeal,” is hereby amended in its entirety to read as follows:

A. Right of Appeal. Any final action taken by the Community Development Director, Zoning Administrator or the Design Review Committee in the administration or enforcement of the provisions of this chapter may be appealed by any person aggrieved, or by an officer, commission or department of the City. Such appeals may be made to the Planning Commission. Any decision wherein the Planning Commission is authorized to make a final determination may be appealed to the City Council.

SECTION IX:

Section 17.10.035.C.6 of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Temporary Use Permits – Temporary Use Permit for Uses of Limited, Specific Duration (Nonrecurring) – Design Review,” is hereby amended in its entirety to read as follows:

6. Design Review. Nonrecurring temporary uses on properties located within a historic district shall require Design Review Committee review prior to Zoning Administrator approval of the temporary use permit.

SECTION X:

Section 17.10.035.E.10 of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Temporary Use Permits – Conditions of Approval,” is hereby deleted in its entirety.

SECTION XI:

Section 17.10.060.D.2 of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Site Plan Review – Minor Site Plan Review - Procedure,” is hereby amended in its entirety to read as follows:

2. Procedure. The Community Development Director shall be responsible for minor site plan review. Once an application for minor site plan review has been deemed complete, the Director shall, in conjunction with a staff review committee designated by the City Manager, and the Design Review Committee for projects in a historic district or involving a building or structure identified in the City’s Historic Resources Survey, consider and approve, approve with conditions, deny, or refer the project to the Planning Commission for final action. A continuance may be granted upon mutual consent of the applicant and the Director. Appeals from decisions by the

Director shall be made in accordance with the City appeal procedures set forth in Section 17.08.050.

SECTION XII:

Section 17.10.060.E.2 of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Site Plan Review – Major Site Plan Review - Procedure,” is hereby amended in its entirety to read as follows:

2. Procedure. The Community Development Director shall serve as the preliminary reviewing body for major site plan review. Once an application for major site plan review has been deemed complete, the Director, and the DRC for projects in a historic district or involving a building or structure identified in the City’s Historic Resources Survey, shall independently consider and make a recommendation to approve, approve with conditions, or deny the project. A continuance may be granted upon mutual consent of the applicant and Director. The recommendations shall be forwarded to the Planning Commission secretary for placement on the Commission's consent calendar, and shall be noticed as provided in Section 17.08.040. The Commission, in considering a site plan review application, shall review the recommendations of the Director. The Commission shall act to approve, approve with conditions or deny the application. A continuance may be granted upon mutual consent of the applicant and Commission. Planning Commission action shall be deemed final unless appealed in accordance with Section 17.08.050.

SECTION XIII:

Section 17.10.060.G of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Site Plan Review – Conditions of Approval,” is hereby amended in its entirety to read as follows:

G. Conditions of Approval. The Community Development Director may recommend or require reasonable conditions of approval which may include, but not be limited to those items listed below.

1. A revised site plan;
2. Modifications of building height, bulk, mass or scale;
3. Increased setbacks;
4. Division or sound walls;
5. Mitigation of potential project related environmental impacts;
6. Increased open space;
7. Screening of parking areas, trash receptacles, mechanical equipment, storage areas;
8. Increased landscaping;
9. Relocation of buildings;
10. Revised interior circulation or parking area design;
11. Off-site improvements;
12. Revised grading plan;
13. Any other changes or additions the Director feels are necessary to further the goals of the site plan review process; and

14. For a major site plan review of projects in a historic district or involving a building or structure identified in the City’s Historic Resources Survey, the Design Review Committee may recommend conditions of approval relating to architectural design in accordance with Section 17.08.020.D.

SECTION XIV:

Section 17.10.070.B of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Design Review – When Design Review is Required,” is hereby amended in its entirety to read as follows:

- B. When Design Review is Required. Design review is required for all projects listed below:
1. Projects requiring major site plan review;
 2. Signs as specified in [Chapter 17.36](#);
 3. Projects within a historic district or involving a building or structure identified in the city’s Historic Resources Survey, except where otherwise exempted by adopted design standards and/or adopted specific plan(s);
 4. External remodeling of commercial, industrial, institutional and large scale multiple family developments, except where otherwise exempted by City codes, including adopted design standards and/or adopted specific plans(s) including:
 - a. Facade renovation of the majority of a multi-family residential complex, multi-tenant commercial or industrial center, or institutional property.
 - b. Introduction of new structural architectural elements to the facade of individual in-line or freestanding pad tenants within a multi-tenant commercial or industrial center.
 - c. Projects that involve exterior remodeling of an individual freestanding commercial, industrial, or institutional building on an individual parcel that is not part of a larger center or campus, including changes in exterior building material, roof form, and window or door openings.
 5. Projects requiring minor site plan review that also involve exterior remodeling of residential, commercial, industrial, and institutional development.
 6. Infill residential development as specified in the Orange Infill Residential Design Guidelines.

SECTION XV:

Section 17.10.070.C of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Design Review – Initiation and Application,” is hereby amended in its entirety to read as follows:

C. Initiation and Application. Design review applications shall be filed in accordance with application and submittal requirements as determined by the City. Application materials may include site, building and landscape plans, photographs, colored elevations and/or renderings and color and material boards. Submittal materials shall also include information pertaining to scale, massing, streetscape, landscaping and open space. This information must be of sufficient detail to allow the reviewing body to determine the compatibility of the change to the existing structure, area, or district and that the project meets established design standards and criteria.

SECTION XVI:

Section 17.10.070.D of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Design Review – Design Review Procedure and Criteria,” is hereby amended in part to read as follows:

D. Design Review Procedure and Criteria. The reviewing body shall make a recommendation or final determination as authorized by Section 17.08.020 to approve, approve with conditions or deny a project. In making such recommendation or determination, the reviewing body shall consider adopted design standards and guidelines (where applicable), the Secretary of the Interior's Standards and Guidelines for Rehabilitation (where applicable) and the following general criteria in making a project determination:

SECTION XVII:

Section 17.10.070.E of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Design Review – Administrative Design Review,” is hereby deleted in its entirety.

SECTION XVIII:

Section 17.10.070.G of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Design Review – Findings Required,” is hereby amended in its entirety to read as follows:

F. Findings Required. The reviewing body shall make a finding that the project design upholds community aesthetics through the use of an internally consistent, integrated design theme and is consistent with all adopted specific plans, applicable design standards and their required findings.

SECTION XIX:

Section 17.12.025.B.2 of the Orange Municipal Code, “Zoning – General Regulations Applicable to All Districts – Wireless Communications Facilities – Application Procedure,” is hereby amended in part to read as follows:

2. Building- or structure-mounted stealth antennas in A-1, RO, SG, PI, OP, CP, C1, C2, C3, CR, M1 and M2 districts outside of a historic district and not on a building or structure identified in the City’s Historic Resources Survey with completely enclosed or screened support equipment may be approved administratively by Planning Division staff under the following circumstances:

SECTION XX:

Section 17.12.025.B.3 of the Orange Municipal Code, “Zoning – General Regulations Applicable to All Districts – Wireless Communications Facilities – Application Procedure,” is hereby amended in its entirety to read as follows:

3. A recommendation from the Design Review Committee will be required for building- or structure-mounted stealth antennas located within a historic district or involving a building or structure identified in the City’s Historic Resources Survey.

SECTION XXI:

Section 17.12.025.B.5 of the Orange Municipal Code, “Zoning – General Regulations Applicable to All Districts – Wireless Communications Facilities – Application Procedure,” is hereby amended in its entirety to read as follows:

5. Any owner of a wireless communication facility and any person or entity leasing property for a wireless communication facility shall provide written notification to the Community Development Director of the discontinuance of the use of a wireless communication facility for wireless communication purposes for any period longer than thirty (30) days. The notice shall state the date the use was discontinued and shall be provided within thirty-one (31) days of such discontinuance.

SECTION XXII:

Section 17.12.025.B.7 of the Orange Municipal Code, “Zoning – General Regulations Applicable to All Districts – Wireless Communications Facilities – Application Procedure,” is hereby amended in its entirety to read as follows:

7. Ground-mounted stealth facilities outside of a historic district and not on a building or structure identified in the City’s Historic Resources Survey are permitted in all A-1, RO, SG, PC, residential, commercial, industrial, and public institutional zones subject to minor site plan review provided that the installation conforms to the criteria specified in subsections C and D of this section.

SECTION XXIII:

Section 17.12.025.B.9.b of the Orange Municipal Code, “Zoning – General Regulations Applicable to All Districts – Wireless Communications Facilities – Application Procedure,” is hereby amended in its entirety to read as follows:

b. Ground-mounted stealth and all nonstealth facilities located within a historic district or involving a building or structure identified in the City’s Historic Resources Survey.

SECTION XXIV:

The Wireless Communication Facility Review Matrix in Section 17.12.025.B of the Orange Municipal Code, “Zoning – General Regulations Applicable to All Districts – Wireless Communications Facilities – Application Procedure,” is hereby amended in its entirety to read as follows:

Wireless Communication Facility Review Matrix

Zone	Stealth (Building-Mounted)	Stealth (Ground-Mounted)	Nonstealth	Co-Located (Stealth)	Co-Located (Nonstealth)
Any Historic District or Historic Building/Structure	DRC ¹	DRC/CUP	DRC/CUP ₃	SPR/DRC	DRC/CUP
Residential Districts per Chapter 17.14 and Planned Community District (residential use) per Chapter 17.26	SPR ²	SPR ²	-	SPR ²	SPR
Commercial Districts per Chapter 17.18	Staff ¹	SPR	CUP	SPR	SPR
Industrial Districts per Chapter 17.20	Staff ¹	Staff ¹	SPR	Staff ¹	SPR
Public Institution District per Chapter 17.24	Staff ¹	SPR	CUP	SPR	SPR
A1, RO, SG, and PC (nonresidential use)	Staff ¹	SPR	CUP	SPR	SPR

¹. Minor site plan review may be required depending on the location of any support equipment.

². CDD may approve facilities on institutional or quasi-institutional sites.

³. Nonstealth facilities are not permitted on residentially zoned property in a historic district or on a building or structure identified in the City’s Historic Resources Survey.

CDD = Community Development Director

CUP = Conditional Use Permit

DRC = Design Review Committee

SPR = Minor Site Plan Review

- = Not Permitted

SECTION XXV:

Section 17.13.040.II.9 of the Orange Municipal Code, “Zoning – Master Land Use Table – Special Use Regulations – Homeless Shelter – Design Review Required,” is hereby amended in its entirety to read as follows:

9. Design Review Required. Design review is required if the project meets the criteria established in Section 17.10.070. The reviewing body's discretion in requiring conditions of approval and approving homeless shelters is limited to ensuring compliance with applicable design-related standards and guidelines.

SECTION XXVI:

Section 17.13.050.Z.12 of the Orange Municipal Code, “Zoning – Master Land Use Table – Conditional Use Regulations – Hot Dog Vending Carts,” is hereby deleted in its entirety.

SECTION XXVII:

Section 17.36.060.A.1 of the Orange Municipal Code, “Zoning – Sign Regulations – Signs General – Sign Program – Multitenant Buildings,” is hereby amended in part to read as follows:

1. Multitenant Buildings. A sign program for all multitenant buildings shall be required to ensure proper design of signage and adequate identification of building tenants. Such programs shall provide for consistency in the size, color and placement of signs within a property and shall be approved by the Community Development Director.

SECTION XXVIII:

Section 17.36.060.A.3 of the Orange Municipal Code, “Zoning – Sign Regulations – Signs General – Sign Program – Mixed Use Zones and Major Commercial Centers,” is hereby amended in part to read as follows:

3. Mixed Use Zones and Major Commercial Centers. Sign programs for major commercial centers on sites which are located in the C-TR, C-R, C-2 or C-3 zones and are larger than twenty-five (25) acres, and for mixed use, multi-family residential, or multi-tenant commercial uses in the OTMU, NMU and UMU zones, regardless of the size of the site may include criteria that differ from the limitations contained in this chapter. Sign programs for major commercial centers are subject to the review and approval of a conditional use permit by the Planning Commission. Sign programs in mixed use zones are subject to review and approval by the Community Development Director. Sign programs shall be reviewed based on the following criteria:

SECTION XXIX:

Section 17.36.060.A.3.k of the Orange Municipal Code, “Zoning – Sign Regulations – Signs General – Sign Program – Mixed Use Zones and Major Commercial Centers,” is hereby amended in its entirety to read as follows:

k. Any sign program is subject to initial review and recommendation by the Community Development Director. Sign applications for individual tenants will be subject to final approval by the Director unless the sign program is specific in describing the height, width and design components of signs for each tenant space.

SECTION XXX:

Section 17.36.150.I of the Orange Municipal Code, “Zoning – Sign Regulations – Special Purpose Sign Regulations – Creative Signs,” is hereby amended in part to read as follows:

I. Creative Signs. Creative signs are allowed in the UMU zone. The intention of these provisions is to encourage signs of unique design that exhibit a high degree of imagination, inventiveness, spirit and thoughtfulness. Creatively designed signs should make a positive visual contribution to the overall image of the City, while mitigating the impacts of large, obtrusive or

unusually designed signs. Creative signs may be allowed in addition to other project identification signs allowed by this chapter subject to approval of a sign program. Creative signs, either on their own or as part of a sign program in combination with other project signage, shall be reviewed by the Community Development Director and approved by the Planning Commission. Creative signs located in a historic district shall also be reviewed by the Design Review Committee prior to Planning Commission approval. Review shall be subject to the following criteria:

SECTION XXXI:

Section 17.36.150.J of the Orange Municipal Code, “Zoning – Sign Regulations – Special Purpose Sign Regulations – Murals,” is hereby amended in part to read as follows:

J. Murals. Murals are allowed in the OTMU, NMU and UMU zones. Murals should make a positive visual contribution to the overall image of the City and may be allowed in addition to other project identification signs allowed by this chapter. Murals, either on their own or as part of a sign program in combination with other project signage, shall be reviewed by the Community Development Director and approved by the Planning Commission. Murals located in a historic district shall also be reviewed by the Design Review Committee prior to Planning Commission approval. Review shall subject to the following criteria:

SECTION XXXII:

If any section, subdivision, paragraph, sentence, clause or phrase of this Ordinance is for any reason held to be invalid or unconstitutional, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council hereby declares that it would have passed this Ordinance, and each section, subdivision, paragraph, sentence, clause and phrase thereof, irrespective of the fact that any one (or more) section, subdivision, paragraph, sentence, clause or phrase had been declared invalid or unconstitutional.

SECTION XXXIII:

The City Clerk is hereby directed to certify the adoption of this Ordinance and cause a summary of the same to be published as required by law. This Ordinance shall take effect thirty (30) days from the date of adoption.

ADOPTED this _____ day of _____, 2020.

Mark A. Murphy, Mayor, City of Orange

ATTEST:

Pamela Coleman, City Clerk, City of Orange

STATE OF CALIFORNIA)
COUNTY OF ORANGE)
CITY OF ORANGE)

I, PAMELA COLEMAN, City Clerk of the City of Orange, California, do hereby certify that the foregoing Ordinance was introduced at the regular meeting of the City Council held on the ___ day of _____, 2020, and thereafter at the regular meeting of said City Council duly held on the ___ day of _____, 2020 was duly passed and adopted by the following vote, to wit:

AYES: COUNCILMEMBERS:
NOES: COUNCILMEMBERS:
ABSENT: COUNCILMEMBERS:
ABSTAIN: COUNCILMEMBERS:

Pamela Coleman, City Clerk, City of Orange

ORDINANCE NO. 13-20

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ORANGE AMENDING TITLE 12, TITLE 16 AND TITLE 17 OF THE ORANGE MUNICIPAL CODE TO UPDATE DUTIES AND RESPONSIBILITIES OF THE DESIGN REVIEW COMMITTEE AND EFFECT OTHER MINOR REVISIONS

WHEREAS, the City of Orange Design Review Committee (formerly the Design Review Board) was established in 1974 by Ordinance No. 4-74 for the purpose of upholding community aesthetics by reviewing the architectural design of new buildings and structures; and

WHEREAS, the number and complexity of development projects in the City of Orange have greatly increased over the past 46 years; and

WHEREAS, the City wishes to increase the effectiveness of the Design Review Committee by focusing its efforts on development projects in historic districts and involving historic buildings and structures as defined.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF ORANGE DOES HEREBY ORDAIN AS FOLLOWS:

SECTION I:

This Ordinance is not a project under the California Environmental Quality Act (CEQA) per State CEQA Guidelines Section 15061(b)(3) and 15378, because it is an administrative activity undertaken by a local government, involves general City policy and procedure, and its adoption does not have the potential to result in direct or indirect physical changes to the environment

SECTION II:

Section 12.18.080.O of the Orange Municipal Code, “Streets, Sidewalks and Public Places - Outdoor Dining on Public Walkways - Outdoor Dining Permit Standards,” is hereby amended in its entirety to read as follows:

O. No signs are permitted in the outdoor dining area with the exception of a menu sign. Business names may be permitted on the valance of the awnings and/or umbrellas, as approved by the ~~Design Review Board~~ Director; however, commercial and product logos are not permitted on the valance of awnings and/or on umbrellas or in any other outdoor display.

SECTION III:

Section 16.35.060 of the Orange Municipal Code, “Subdivisions – Vesting Tentative Maps - Filing,” is hereby amended in its entirety to read as follows:

16.35.060 - Filing.

A vesting tentative map shall be filed in the same form and have the same contents, accompanying data and reports as set forth in other provisions of Title 16 for a tentative map, except as hereinafter provided:

A. Subdivider shall obtain ~~Design Review Committee~~Community Development Director preliminary approval of development prior to filing a vesting tentative map. Processing and content shall be as detailed in City's document entitled "Design Review Committee Submittal Procedure."

B. Subdivider shall obtain all necessary zone changes prior to or concurrent with filing a vesting tentative map.

C. At the time a vesting tentative map is filed it shall have printed conspicuously on its face the words: "Vesting Tentative Map."

D. At the time a vesting tentative map is filed, a subdivider shall also supply the following information:

1. ~~Design Review Committee~~Community Development Director approved plans and drawings;
2. Sewer, water, storm drain, and road details;
3. Geological studies;
4. Flood control information;
5. School impact analysis;
6. Traffic impact analysis;
7. Detailed grading plans;
8. Solar access, passive or natural heating or cooling opportunities analysis;
9. Signing program (advertising, locational, and safety signing systems);
10. Any other material considered essential to the proper evaluation of the project (~~i.e.e.g.~~; open space maintenance responsibilities, provisions made for trails and/or parks and their maintenance responsibilities).

NOTE: All developments require compliance with the California Environmental Quality Act. Some of the above information may be included in reports prepared for that purpose. If so, the information requested above ~~the need only be a~~ referenced to the ~~E.I.R.~~REIR.

SECTION IV:

Table 17.08.020, "Zoning – General Administrative Procedures – Reviewing Bodies," is hereby amended in its entirety to read as follows:

Type of Procedure, Permit or Hearing	CDD	DRC	ZA	PC	CC
Zoning Ordinance Amendment	A			A	X
Zone Change	A			A	X
Conditional Use Permit	A	A(1)	X(1)	X(1)	X(1)
Variance	A	A(1)	X(1)	X	
Administrative Adjustment Permit			X		

Temporary Use (Non-Recurring) Permit	A	A(1)	X		
Design Review	A/X(1)	A/X(1)		X(1)	
Administrative Design Review	X(1)				
Old Towne Historic District Demolition Permit		A		X(1)	X
Site Plan Review—Minor	X	A(1)			
Site Plan Review—Major	A	A(1)		X	
Tentative Tract Map	A			A	X
General Plan Amendment	A			A	X
Environmental Documentation	A			X(1)	X(1)

SECTION V:

Section 17.08.020.B.2.c of the Orange Municipal Code, “Zoning – General Administrative Procedures – Reviewing Bodies – Planning Commission – Powers and Duties,” is hereby amended in its entirety to read as follows:

c. Authority to act upon an appeal of any order, requirement, permit, decision or determination made by an administrative or appointed official or body ~~such as the Community Development Director, Zoning Administrator or Design Review Board~~ in the administration or enforcement of this chapter.

SECTION VI:

Section 17.08.020.D of the Orange Municipal Code, “Zoning – General Administrative Procedures – Reviewing Bodies – Design Review Committee,” is hereby amended in its entirety to read as follows:

D. Design Review Committee. The Design Review Committee ([DRC](#)) is established to uphold community aesthetics [by reviewing the architectural design of projects in historic districts and any building or structure identified as a historic resource in the City’s Historic Resources Survey](#). ~~Recognizing that the inclusion of specific aesthetic development standards is impracticable due to the variable nature of architectural concepts, construction materials and aesthetic goals from one time period to another and from one neighborhood to another, it is in the public interest to establish an authority for project review.~~

1. Purpose.

- a. To review development projects [as provided herein](#), by considering the elements of architectural design, massing and scale, color palette, [and](#) context, ~~landscaping and signage~~ to ensure that projects are compatible with surrounding development and community aesthetics;
- b. To interpret and apply adopted design guidelines and standards;
- c. To assist in formulating design policy;
- d. To encourage the preservation of cultural historic resources, while allowing for orderly development.

2. Powers and Duties. The ~~Design Review Committee~~DRC shall have the authority to:
 - ~~a. Make final determination on signs and sign programs in accordance with Chapter 17.36 of this code;~~
 - ~~b. Make final determination on architectural and landscaping design matters for minor site plan review applications when referred by Community Development Director;~~
 - ~~ca. Make Review and make final determination~~recommendations to the Planning Commission and/or make final determinations, as appropriate, on architectural and landscaping~~d~~Design Review matters~~for external remodeling of commercial, industrial, institutional and large scale multiple family developments projects in historic districts or involving a building or structure identified in the City's Historic Resources Survey, except for minor site plan review projects acted upon by the Community Development Director;~~
 - ~~db. Make Review and make final determination~~recommendations to the Planning Commission on architectural and landscaping design matters proposed demolitions for projects in the Old Towne Historic Districthistoric districts~~, when no Planning Commission review is otherwise required;~~
 - c. Review and make recommendations to the Planning Commission on Major Site Plan Review for development projects in historic districts or involving a building or structure identified in the City's Historic Resources Survey.
 - d. Review and make recommendations to the Community Development Director on Non-Recurring Temporary Use Permits and Minor Site Plan Review matters in historic districts or involving a building or structure identified in the City's Historic Resources Survey.
 - ~~e. Review and make recommendations to the Planning Commission on architectural and landscaping design matters for all development projects and proposed demolitions requiring Planning Commission recommendation or approval.~~
 - e. Review and make recommendations to the Community Development Director on other matters referred by the Director.
3. Meetings.
 - a. The ~~Design Review Committee~~DRC shall meet in regular session on dates and at times to be determined ~~from time to time~~ by resolution of the City Council. All meetings shall be open to the public, and provisions of the Brown Act shall apply.
 - ~~b. Committee members shall be compensated for each meeting as determined by resolution of the City Council.~~
 - eb. Three members shall constitute a quorum. A majority vote of the quorum present shall be required for all ~~Committee~~DRC actions. Failure to achieve a majority vote of members present shall constitute a denial of the proposed action.
 - c. The DRC shall adopt rules and regulations for the conduct of its business consistent with this chapter.
4. Membership and Compensation. Membership and compensation of the DRC shall be as determined by resolution of the City Council.
 - ~~a. The Design Review Committee shall consist of five members of the public. Committee members shall be persons who, as a result of their training, knowledge and experience, are qualified to analyze and interpret architectural and site planning information, including but not limited to, licensed landscape architects and architects, urban planners, engineers, and licensed general contractors. At least two of the members shall have professional experience in urban planning, architectural history or historic preservation and shall have general knowledge of architectural styles prevalent in Old Towne.~~

~~_____ b. Appointed members of the Committee shall live or work in the City and shall be appointed for four-year terms.~~

~~_____ c. Staff expertise in historic preservation and landscaping shall be available as a resource to the Committee;~~

5. ~~Officers~~ Terms of Office/Officers ~~Terms of Office.~~

a. The terms of office for each member of the DRC shall be four years and shall continue to and include June 30th of the year in which the term expires, and thereafter until a successor for the member whose term is expiring has been appointed.

b. At the first meeting after June 30th of every other year, the DRC shall select a chairman and a vice-chairman to serve two-year terms. ~~Officers shall consist of a Chairman and Vice chairman, both of whom shall be selected by the members of the Committee.~~

~~b. The terms of office for each member of the Committee shall continue to and include June 30th of the year in which the term shall expire, and thereafter until a successor for the member whose term is expiring has been appointed.~~

~~6. Rules and Regulations. The Design Review Committee shall adopt and amend, by the affirmative vote of three members, rules and regulations for the conduct of the Committee's business consistent with this chapter subject to approval by the City Council.~~

SECTION VII:

Section 17.08.020.E of the Orange Municipal Code, “Zoning – General Administrative Procedures – Reviewing Bodies – Community Development Director – Powers and Duties,” is hereby amended in its entirety to read as follows:

E. Community Development Director. The Community Development Director, in conjunction with a staff review committee designated by the City Manager, shall review development proposals in order to ensure that yards, open space, structures, parking, loading facilities, landscaping, streets and similar uses and the development of the land remains compatible with surrounding properties reflecting the highest quality of land planning and design.

1. Powers and Duties. The Community Development Director, after consultation with a staff review committee designated by the City Manager, shall have the authority to:

a. Decide upon minor site plan applications.

b. Decide upon, or make recommendations to the Planning Commission, as appropriate, on ~~administrative~~ design review applications as specified in Chapter 17.10;

c. Review and make recommendations to the Planning Commission on zoning ordinance amendments, zone changes, conditional use permits, variances, major site plans, tentative tract maps, general plan amendments and other discretionary applications as specified in Chapter 17.10;

d. Consider minor modifications to previously approved site plans and determine whether such modifications are in substantial conformance with the approved plans;

e. Review and make recommendations to the ~~City~~ Planning Commission on environmental documentation and all duties defined in City environmental review guidelines.

f. Refer matters to the Design Review Committee as appropriate.

SECTION VIII:

Section 17.08.050.A of the Orange Municipal Code, “Zoning – General Administrative Procedures – Appeals – Right of Appeal,” is hereby amended in its entirety to read as follows:

A. Right of Appeal. Any final action taken by the Community Development Director, Zoning Administrator or the Design Review Committee in the administration or enforcement of the provisions of this chapter may be appealed by any person aggrieved, or by an officer, commission or department of the City. Such appeals may be made to the Planning Commission. Any decision wherein the Planning Commission is authorized to make a final determination may be appealed to the City Council.

SECTION IX:

Section 17.10.035.C.6 of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Temporary Use Permits – Temporary Use Permit for Uses of Limited, Specific Duration (Nonrecurring) – Design Review,” is hereby amended in its entirety to read as follows:

6. Design Review. Nonrecurring temporary uses on properties located within ~~the Old Towne Historic District~~ historic district shall require ~~the approval of the~~ Design Review Committee review prior to Zoning Administrator approval ~~the establishment~~ of the temporary use permit.

SECTION X:

Section 17.10.035.E.10 of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Temporary Use Permits – Conditions of Approval,” is hereby deleted in its entirety.

~~10.—Referral to the Design Review Committee; and~~

SECTION XI:

Section 17.10.060.D.2 of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Site Plan Review – Minor Site Plan Review - Procedure,” is hereby amended in its entirety to read as follows:

2. Procedure. The Community Development Director, ~~pursuant to Section 17.08.020E,~~ shall be responsible for minor site plan review. Once an application for minor site plan review has been deemed complete, the ~~Community Development~~ Director shall, in conjunction with a staff review committee designated by the City Manager, and the Design Review Committee for projects in a historic district or involving a building or structure identified in the City’s Historic Resources Survey, consider and approve, approve with conditions, deny, or refer the project to ~~the Design Review Committee and/or~~ the Planning Commission for final action. A continuance may be granted upon mutual consent of the applicant and the ~~Community Development~~ Director. Appeals from decisions by the ~~Community Development~~ Director shall be made in accordance with the City appeal procedures set forth in Section 17.08.050.

SECTION XII:

Section 17.10.060.E.2 of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Site Plan Review – Major Site Plan Review - Procedure,” is hereby amended in its entirety to read as follows:

2. Procedure. The Community Development Director ~~and Design Review Committee~~ shall serve as the preliminary reviewing ~~bodies~~ body for major site plan review. Once an application for major site plan review has been deemed complete, ~~both~~ the Community Development Director, and the DRC for projects in a historic district or involving a building or structure identified in the City’s Historic Resources Survey, and Design Review Committee shall independently consider and make a recommendation to approve, approve with conditions, or deny the project. A continuance may be granted upon mutual consent of the applicant and ~~Community Development~~ Director. The recommendations shall be forwarded to the Planning Commission secretary for placement on the Commission's consent calendar, and shall be noticed as provided ~~for in~~ Section 17.08.040. ~~Procedures for acting on consent calendar items shall be established by the Planning Commission and shall be adopted by resolution.~~ The Commission, in considering a site plan review application, shall review the recommendations of the ~~Community Development Director and Design Review Committee~~. The Commission shall act to approve, approve with conditions or deny the application. A continuance may be granted upon mutual consent of the applicant and ~~Planning~~ Commission. Planning Commission action shall be deemed final unless ~~an appeal to the City Council is filed within fifteen (15) days of the decision~~ appealed in accordance with Section 17.08.050.

SECTION XIII:

Section 17.10.060.G of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Site Plan Review – Conditions of Approval,” is hereby amended in its entirety to read as follows:

G. Conditions of Approval. The Community Development Director may recommend or require reasonable conditions of approval which may include, but not be limited to those items listed below. ~~The Design Review Committee may recommend conditions of approval for major site plan review in accordance with Section 17.10.070(E).~~

1. A revised site plan;
2. Modifications of building height, bulk, mass or scale;
3. Increased setbacks;
4. Division or sound walls;
5. Mitigation of potential project related environmental impacts;
6. Increased open space;
7. Screening of parking areas, trash receptacles, mechanical equipment, storage areas;
8. Increased landscaping;
9. Relocation of buildings;
10. Revised interior circulation or parking area design;
11. Off-site improvements ~~;~~ ;
12. Revised grading plan; ~~or~~
13. Any other changes or additions the ~~Committee~~ Director feels are necessary to further the goals of the site plan review process; and

14. For a major site plan review of projects in a historic district or involving a building or structure identified in the City’s Historic Resources Survey, the Design Review Committee may recommend conditions of approval relating to architectural design in accordance with Section 17.08.020.D.

SECTION XIV:

Section 17.10.070.B of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Design Review – When Design Review is Required,” is hereby amended in its entirety to read as follows:

B. When Design Review is Required. Design review is required for all projects listed below:

~~1. Development projects requiring any Planning Commission or City Council approval;~~

~~21. Any projects requiring major site plan review;~~

~~32. Signs as specified in Chapter 17.36;~~

~~43. All projects within Old Towne or other historic districts or involving a building or structure identified in the city’s Historic Resources Survey as established, except where otherwise exempted by adopted design standards and/or adopted specific plan(s);~~

~~54. External remodeling of commercial, industrial, institutional and large scale multiple family developments, except where otherwise exempted by City codes, including adopted design standards and/or adopted specific plans(s) including:~~

~~a. Facade renovation of the majority of a multi-family residential complex, multi-tenant commercial or industrial center, or institutional property.~~

~~b. Introduction of new structural architectural elements to the facade of individual in-line or freestanding pad tenants within a multi-tenant commercial or industrial center where such elements project more than twelve (12) inches from any exterior wall plane.~~

~~c. Projects that involve exterior remodeling of an individual freestanding commercial, industrial, or institutional building on an individual parcel that is not part of a larger center or campus, including changes in exterior building material, roof form, and window or door openings.~~

~~65. Projects subject to requiring Minor minor Site-site Plan-plan Review-review that also involve exterior remodeling of residential, commercial, industrial, and institutional development that is visible from the public right-of-way.~~

~~6. Infill residential development as specified in the Orange Infill Residential Design Guidelines.~~

SECTION XV:

Section 17.10.070.C of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Design Review – Initiation and Application,” is hereby amended in its entirety to read as follows:

C. Initiation and Application. Design review applications shall be filed in accordance with application and submittal requirements as determined by the ~~Design Review Committee~~City. Application materials may include site, building and landscape plans, photographs, colored

elevations and/or renderings and color and material boards. Submittal materials shall also include information pertaining to scale, massing, streetscape, landscaping and open space. This information must be of sufficient detail to allow the reviewing body to determine the compatibility of the change to the existing structure, area, or district and that the project meets established design standards and criteria. ~~In addition, to comply with provisions of the California Environmental Quality Act, most projects in historic districts will require an application for environmental review in accordance with Section 17.08.0~~Submittal materials shall also include information pertaining to scale, massing, streetscape, landscaping and open space.

SECTION XVI:

Section 17.10.070.D of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Design Review – Design Review Procedure and Criteria,” is hereby amended in part to read as follows:

D. Design Review Procedure and Criteria. The ~~Design Review Committee~~reviewing body shall make a recommendation or final determination as authorized by Section 17.08.020~~(D)~~ to approve, approve with conditions or deny a project ~~at a public meeting~~. In making such recommendation or determination, the ~~Committee~~reviewing body shall consider adopted design standards and guidelines (where applicable), the Secretary of the Interior’s Standards and Guidelines for Rehabilitation (where applicable) and the following general criteria in making a project determination:

SECTION XVII:

Section 17.10.070.E of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Design Review – Administrative Design Review,” is hereby deleted in its entirety.

~~E. — Administrative Design Review.~~

~~1. — Purpose and Intent. The administrative design review process is established to allow for a simplified review process for specific types of new development, exterior building alterations, and sign modifications which the City anticipates will not adversely affect surrounding properties.~~

~~2. — Actions Eligible for Administrative Design Review. The following types of projects are eligible for Administrative Design Review:~~

~~a. — Projects subject to Minor Site Plan Review that also involve exterior remodeling of residential, commercial, industrial, and institutional development that is not visible from the public right-of-way.~~

~~b. — Projects that involve exterior remodeling of an individual free-standing commercial, industrial, or institutional building on an individual parcel that is not part of a larger center or campus, including changes in exterior building material, roof form, and window or door openings.~~

~~c. — Infill residential development as specified in the City of Orange Infill Residential Design Guidelines.~~

~~d. — Modifications to existing sign programs that involve changes in color, font style, height, width, method of illumination or sign area that are otherwise in compliance with the provisions of Section 17.36.~~

~~3. Initiation and Application. Applications for administrative design review shall be filed in accordance with submittal requirements as determined by the Community Development Director. Additional information may be requested from an applicant to allow for thorough design review of a project.~~

~~4. Procedure and Criteria. The Community Development Director, pursuant to Section 17.08.020, shall be responsible for administrative design review. Once an application for administrative design review has been deemed complete, the Community Development Director shall consider and approve, deny or refer the project to the Design Review Committee. In making such determination, the Community Development Director shall consider adopted design standards and guidelines where applicable, the general criteria set forth in Section 17.10.070.D, and the findings required in subsections 17.10.070.G.3 and 4. Appeals of decisions by the Community Development Director shall be made in accordance with the City appeal procedures set forth in Section 17.08.050. Notification of administrative design review action shall be posted at the property in a location clearly visible from the public right of way for the duration of the appeal period.~~

SECTION XVIII:

Section 17.10.070.G of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Design Review – Findings Required,” is hereby amended in its entirety to read as follows:

GF. Findings Required. The reviewing body shall make a findings that the for all projects based upon design criteria stated above. A specific finding shall be made for projects as follows:

~~1. In the Old Town Historic District, the proposed work conforms to the prescriptive standards and design criteria referenced and/or recommended by the Design Review Committee or other reviewing body for the project.~~

~~2. In any National Register Historic District, the proposed work complies with the Secretary of the Interior's standards and guidelines.~~

~~3. The project design upholds community aesthetics through the use of an internally consistent, integrated design theme and is consistent with all adopted specific plans, applicable design standards and their required findings.~~

~~4. For infill residential development, as specified in the City of Orange infill residential design guidelines, the new structure(s) or addition are compatible with the scale, massing, orientation, and articulation of the surrounding development and will preserve or enhance existing neighborhood character.~~

SECTION XIX:

Section 17.12.025.B.2 of the Orange Municipal Code, “Zoning – General Regulations Applicable to All Districts – Wireless Communications Facilities – Application Procedure,” is hereby amended in part to read as follows:

2. Building- or structure-mounted stealth antennas in A-1, RO, SG, PI, OP, CP, C1, C2, C3, CR, M1 and M2 districts outside of ~~the Old Towne Historic District~~ a historic district and not on a building or structure identified in the City’s Historic Resources Survey with completely

enclosed or screened support equipment may be approved administratively by Planning Division staff under the following circumstances:

SECTION XX:

Section 17.12.025.B.3 of the Orange Municipal Code, “Zoning – General Regulations Applicable to All Districts – Wireless Communications Facilities – Application Procedure,” is hereby amended in its entirety to read as follows:

3. A recommendation from the Design Review Committee will be required for Buildingbuilding- or structure-mounted stealth antennas located within ~~the Old Towne Historic District~~a historic district or involving a building or structure identified in the City’s Historic Resources Survey,~~or those in nonresidential districts outside of the Historic District determined by Planning Division staff not to be adequately integrated or architecturally compatible with the existing structure, must obtain approval from the Design Review Committee.~~

SECTION XXI:

Section 17.12.025.B.5 of the Orange Municipal Code, “Zoning – General Regulations Applicable to All Districts – Wireless Communications Facilities – Application Procedure,” is hereby amended in its entirety to read as follows:

5. Any owner of a wireless communication facility and any person or entity leasing property for a wireless communication facility shall provide written notification to the ~~City~~Community Development Director of the discontinuance of the use of a wireless communication facility for wireless communication purposes for any period longer than thirty (30) days. The notice shall state the date the use was discontinued ~~and shall be addressed to City of Orange, Community Development Director, 300 East Chapman Avenue, Orange, CA 92866~~ and shall be ~~placed in the United States mail~~provided within thirty-one (31) days of such discontinuance. ~~This requirement applies to all wireless communication facilities and shall appear as a condition in any conditional use permits granted for a wireless communication facility.~~

SECTION XXII:

Section 17.12.025.B.7 of the Orange Municipal Code, “Zoning – General Regulations Applicable to All Districts – Wireless Communications Facilities – Application Procedure,” is hereby amended in its entirety to read as follows:

7. Ground-mounted stealth facilities outside of ~~the Old Towne Historic District~~a historic district and not on a building or structure identified in the City’s Historic Resources Survey are permitted in all A₁, RO, SG, PC, residential, commercial, industrial, and public institutional zones subject to minor site plan review provided that the installation conforms to the criteria specified in subsections C and D of this section.

SECTION XXIII:

Section 17.12.025.B.9.b of the Orange Municipal Code, “Zoning – General Regulations Applicable to All Districts – Wireless Communications Facilities – Application Procedure,” is hereby amended in its entirety to read as follows:

b. Ground-mounted stealth and all nonstealth facilities located within ~~the Old Towne Historic District~~ a historic district or involving a building or structure identified in the City’s Historic Resources Survey.

SECTION XXIV:

The Wireless Communication Facility Review Matrix in Section 17.12.025.B of the Orange Municipal Code, “Zoning – General Regulations Applicable to All Districts – Wireless Communications Facilities – Application Procedure,” is hereby amended in its entirety to read as follows:

Wireless Communication Facility Review Matrix

Zone	Stealth (Building-Mounted)	Stealth (Ground-Mounted)	Nonstealth	Co-Located (Stealth)	Co-Located (Nonstealth)
Old Towne Historic District <u>Any Historic District or Historic Building/Structure</u>	DRC ¹	DRC/CUP	DRC/CUP ₃	SPR/DRC	DRC/CUP
Residential Districts per Chapter 17.14 and Planned Community District (residential use) per Chapter 17.26	SPR ²	SPR ²	-	SPR ²	SPR/ DRC
Commercial Districts per Chapter 17.18	Staff ¹	SPR	DRC /CUP	SPR	SPR/ DRC
Industrial Districts per Chapter 17.20	Staff ¹	Staff ¹	SPR/ DRC	Staff ¹	SPR
Public Institution District per Chapter 17.24	Staff ¹	SPR	DRC /CUP	SPR	SPR
A1, RO, SG, and PC (nonresidential use)	Staff ¹	SPR	DRC /CUP	SPR	SPR

¹. Minor site plan review may be required depending on the location of any support equipment.

². CDD may approve facilities on institutional or quasi-institutional sites.

³. Nonstealth facilities are not permitted on residentially zoned property in ~~the Old Towne Historic District~~ a historic district or on a building or structure identified in the City’s Historic Resources Survey.

CDD = Community Development Director

CUP = Conditional Use Permit

DRC = Design Review Committee

SPR = Minor Site Plan Review

- = Not Permitted

SECTION XXV:

Section 17.13.040.II.9 of the Orange Municipal Code, “Zoning – Master Land Use Table – Special Use Regulations – Homeless Shelter – Design Review Required,” is hereby amended in its entirety to read as follows:

9. Design Review Required. Design review is required if the project meets the criteria established in Section 17.10.070. ~~DRC's~~ [The reviewing body's](#) discretion in requiring conditions of approval and approving homeless shelters is limited to ensuring compliance with applicable design-related standards and guidelines.

SECTION XXVI:

Section 17.13.050.Z.12 of the Orange Municipal Code, “Zoning – Master Land Use Table – Conditional Use Regulations – Hot Dog Vending Carts,” is hereby deleted in its entirety.

~~12.—Decision of the Design Review Committee shall be received prior to public hearing for the conditional use permit.~~

SECTION XXVII:

Section 17.36.060.A.1 of the Orange Municipal Code, “Zoning – Sign Regulations – Signs General – Sign Program – Multitenant Buildings,” is hereby amended in part to read as follows:

1. Multitenant Buildings. A sign program for all multitenant buildings shall be required to ensure proper design of signage and adequate identification of building tenants. Such programs shall provide for consistency in the size, color and placement of signs within a property and shall be approved by the ~~Design Review Committee~~ [Community Development Director](#).

SECTION XXVIII:

Section 17.36.060.A.3 of the Orange Municipal Code, “Zoning – Sign Regulations – Signs General – Sign Program – Mixed Use Zones and Major Commercial Centers,” is hereby amended in part to read as follows:

3. Mixed Use Zones and Major Commercial Centers. Sign programs for major commercial centers on sites which are located in the C-TR, C-R, C-2 or C-3 zones and are larger than twenty-five (25) acres, and for mixed use, multi-family residential, or multi-tenant commercial uses in the OTMU, NMU and UMU zones, regardless of the size of the site may include criteria that differ from the limitations contained in this chapter. Sign programs for major commercial centers are subject to the review and approval of a conditional use permit by the Planning Commission. Sign programs in mixed use zones are subject to review and approval by the ~~Design Review Committee~~ [Community Development Director](#). Sign programs shall be reviewed based on the following criteria:

SECTION XXIX:

Section 17.36.060.A.3.k of the Orange Municipal Code, “Zoning – Sign Regulations – Signs General – Sign Program – Mixed Use Zones and Major Commercial Centers,” is hereby amended in its entirety to read as follows:

k. Any sign program is subject to initial review and recommendation by ~~Design Review Committee (DRC)~~[the Community Development Director](#). Sign applications for individual tenants will be subject to final approval by ~~DRC~~[the Director](#) unless the sign program is specific in describing the height, width and design components of signs for each tenant space.

SECTION XXX:

Section 17.36.150.I of the Orange Municipal Code, “Zoning – Sign Regulations – Special Purpose Sign Regulations – Creative Signs,” is hereby amended in part to read as follows:

I. Creative Signs. Creative signs are allowed in the UMU zone. The intention of these provisions is to encourage signs of unique design that exhibit a high degree of imagination, inventiveness, spirit and thoughtfulness. Creatively designed signs should make a positive visual contribution to the overall image of the City, while mitigating the impacts of large, obtrusive or unusually designed signs. Creative signs may be allowed in addition to other project identification signs allowed by this ~~Chapter~~[chapter](#) subject to approval of a sign program. Creative signs, either on their own or as part of a sign program in combination with other project signage, shall be reviewed by the ~~Design Review Committee~~[Community Development Director](#) and approved by the Planning Commission. [Creative signs located in a historic district shall also be reviewed by the Design Review Committee prior to Planning Commission approval. Review shall be](#) subject to the following criteria:

SECTION XXXI:

Section 17.36.150.J of the Orange Municipal Code, “Zoning – Sign Regulations – Special Purpose Sign Regulations – Murals,” is hereby amended in part to read as follows:

J. Murals. Murals are allowed in the OTMU, NMU and UMU zones. Murals should make a positive visual contribution to the overall image of the City and may be allowed in addition to other project identification signs allowed by this ~~Chapter~~[chapter](#). Murals, either on their own or as part of a sign program in combination with other project signage, shall be reviewed by the ~~Design Review Committee~~[Community Development Director](#) and approved by the Planning Commission. [Murals located in a historic district shall also be reviewed by the Design Review Committee prior to Planning Commission approval. Review shall](#) subject to the following criteria:

SECTION XXXII:

If any section, subdivision, paragraph, sentence, clause or phrase of this Ordinance is for any reason held to be invalid or unconstitutional, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council hereby declares that it would have passed this Ordinance, and each section, subdivision, paragraph, sentence, clause and phrase thereof,

irrespective of the fact that any one (or more) section, subdivision, paragraph, sentence, clause or phrase had been declared invalid or unconstitutional.

SECTION XXXIII:

The City Clerk is hereby directed to certify the adoption of this Ordinance and cause a summary of the same to be published as required by law. This Ordinance shall take effect thirty (30) days from the date of adoption.

ADOPTED this _____ day of _____, 2020.

Mark A. Murphy, Mayor, City of Orange

ATTEST:

Pamela Coleman, City Clerk, City of Orange

STATE OF CALIFORNIA)
COUNTY OF ORANGE)
CITY OF ORANGE)

I, PAMELA COLEMAN, City Clerk of the City of Orange, California, do hereby certify that the foregoing Ordinance was introduced at the regular meeting of the City Council held on the ___ day of _____, 2020, and thereafter at the regular meeting of said City Council duly held on the ___ day of _____, 2020 was duly passed and adopted by the following vote, to wit:

AYES: COUNCILMEMBERS:
NOES: COUNCILMEMBERS:
ABSENT: COUNCILMEMBERS:
ABSTAIN: COUNCILMEMBERS:

Pamela Coleman, City Clerk, City of Orange



AGENDA ITEM

PLANNING COMMISSION

August 17, 2020

TO: CHAIR SIMPSON AND MEMBERS OF PLANNING COMMISSION

THRU: Anna Pehoushek, Assistant Community Development Director *ACP*

FROM: Mary Binning, Senior Assistant City Attorney *MEB*

1. SUBJECT

Public Hearing: An Ordinance amending sections of Title 12 (Streets, Sidewalks and Public Places), Title 16 (Subdivisions) and Title 17 (Zoning) of the Orange Municipal Code related to the Design Review Committee.

2. SUMMARY

An Ordinance amending sections of Title 12, 16 and 17 of the Orange Municipal Code to revise the duties and responsibilities of the Design Review Committee to focus on projects in historic districts and involving historic properties and effect other minor revisions.

3. RECOMMENDED ACTION

Adopt Planning Commission Resolution No. 23-20 entitled:

A Resolution of the Planning Commission of the City of Orange Recommending City Council Adoption of an Ordinance Amending Titles 12, 16 and 17 of the Orange Municipal Code to Update the Duties and Responsibilities of the Design Review Committee to Focus on Projects in Historic Districts or Otherwise Involving Historic Buildings and Structures and Effecting Other Minor Revisions.

4. AUTHORIZATION GUIDELINES

Orange Municipal Code (OMC) Table 17.08.020 authorizes the Planning Commission to review and make a recommendation to the City Council on Zoning Ordinance amendments. OMC Section 17.10.020 establishes procedures by which the Planning Commission reviews ordinance amendments and makes recommendations to the City Council.

5. BACKGROUND

In 1974, the City Council adopted Ordinance No. 4-74, creating a Design Review Board, later renamed the Design Review Committee (DRC). The City Council's stated intent was to promote "appropriate standards for the design of new buildings and design of structures" and the DRC was to "review all development and building projects except those exempted by resolution of the City Council." Over the past 46 years, the purview of

the DRC expanded to include review of demolition permits in Old Towne, signs and sign programs, landscaping, recommendations on tentative tract maps, variances, CUPs and all site plan reviews. Simultaneous with the expansion of DRC responsibilities, there has been an enormous expansion in the population of Orange, with its attendant development. The quantity and complexity of projects falling within the responsibilities of the DRC increased significantly. Concomitant with the increase in the number of projects requiring DRC review, the length and number of meetings needed to accomplish those tasks has also increased significantly.

Earlier in 2020, the City Council requested a thorough review of the development approval process requirements in the Orange Municipal Code with the goal of increasing the efficiency while focusing the efforts of the DRC on one of this City's most valuable resources, namely the historic districts and buildings and structures of historical significance.

6. PROJECT DESCRIPTION

The Ordinance updates the following sections of the Orange Municipal Code:

OMC 12.18.080.O – Streets, Sidewalks and Public Places – Outdoor Dining on Public Walkways – Outdoor Dining Permit Standards

- Approval of outdoor dining signage will be by the Director of Community Development in place of the DRC.

OMC 16.35.060 – Subdivisions – Vesting Tentative Maps – Filing

- Subdividers will obtain plans and drawings approval from the Director in place of the DRC.

OMC 17.08 – Zoning – General Administrative Procedures

- All design review processes will be consolidated (administrative and other) and the Director's responsibilities will reflect this change.
- DRC recommendations on CUPs and variances will be eliminated.
- DRC site plan review will be limited to historic districts.
- DRC review of other land use applications will be limited to those in historic districts or involving a building or structure listed on the City's Historical Resources Survey.
- The DRC will make a recommendation, not a final decision, on temporary uses in historic districts only.
- The Director will be able to refer other projects to the DRC in the Director's discretion.

OMC 17.10 – Zoning – Specific Administrative Procedures

- The DRC will review temporary use permits in historic districts only.
- The DRC will review Minor and Major Site Plans for historic districts only.
- For site plan review of projects in historic districts or involving historic buildings or structures, the DRC may recommend conditions relating to architectural design only.
- Description of the types of projects subject to design review will be revised to be more specific.

- Redundant language regarding CEQA review and findings in historic districts will be deleted.
- Provision for Administrative Design Review will be deleted.

OMC 17.12 – Zoning – General Regulations

- References to the Old Towne Historic District will be updated to include all historic districts.

OMC 17.13 – Zoning – Master Land Use Table

- Mandatory DRC review of hot dog carts will be eliminated.

OMC 17.08 – Zoning – Sign Regulations

- The Director will approve sign programs for multitenant building sign programs and mixed use/major commercial centers, in place of the DRC.
- The Director will make recommendations to the Planning Commission for creative signs and murals located outside of a historic district, in place of the DRC.

7. ANALYSIS AND STATEMENT OF THE ISSUES

The DRC will continue to review and recommend/approve development projects in historic districts and involving buildings or structures identified as significant in the City’s Historic Resources Survey. The Director of Community Development will have approval authority and/or make recommendations to the Planning Commission for projects outside of a historic district. Reorienting the DRC’s focus onto historic districts and structures will concentrate their expertise on historical resources. The resulting flow for processing applications will be streamlined and result in shorter turnaround for applicants.

8. PUBLIC NOTICE

On August 6, 2020, the City published a Planning Commission Public Hearing Notice in the Orange City News newspaper. Because of the citywide applicability of the proposed Ordinance, no single property was posted. Noticing occurred on the City website and via posting at City libraries and City Hall.

9. ENVIRONMENTAL REVIEW

The subject Ordinance is exempt from the provisions of the California Environmental Quality Act (CEQA) per State CEQA Guidelines Sections 15060(c)(2), 15060(c)(3) and 15061(b)(3), because it will not result in a direct or reasonably foreseeable indirect physical change in the environment, because there is no possibility it will have a significant effect on the environment, and because it is not a "project" as defined in Section 15378 of the State CEQA Guidelines. As such, no further analysis is warranted or required.

10. ADVISORY BOARD RECOMMENDATION

The Ordinance does not involve physical development and addresses only administrative revisions to the Orange Municipal Code. Review by other staff departments or advisory boards was not required.

11. ATTACHMENTS

1. Planning Commission Resolution No. 23-20
2. Draft Ordinance Amendment (clean)
3. Draft Ordinance Amendment (redlined)

RESOLUTION NO. PC 23-20

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ORANGE RECOMMENDING CITY COUNCIL ADOPTION OF AN ORDINANCE AMENDING TITLES 12, 16 AND 17 OF THE ORANGE MUNICIPAL CODE TO UPDATE THE DUTIES AND RESPONSIBILITIES OF THE DESIGN REVIEW COMMITTEE TO FOCUS ON PROJECTS IN HISTORIC DISTRICTS OR OTHERWISE INVOLVING HISTORIC BUILDINGS AND STRUCTURES AND EFFECTING OTHER MINOR REVISIONS

APPLICANT: CITY OF ORANGE

Moved by Commissioner _____ and seconded by Commissioner _____ that the following Resolution be adopted:

WHEREAS, the City of Orange Design Review Committee (formerly the Design Review Board) was established in 1974 by Ordinance No. 4-74 for the purpose of upholding community aesthetics by reviewing the architectural design of new buildings and structures; and

WHEREAS, the number and complexity of development projects in the City of Orange have greatly increased since formation of the Design Review Committee; and

WHEREAS, the City wishes to increase the effectiveness of the Design Review Committee by focusing its efforts on development projects in historic districts and involving historic structures as defined; and

WHEREAS, this Ordinance has been reviewed for compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines, and the City's environmental procedures, and has been found to be exempt, consistent with the findings in Sections 1 and 2 of this Resolution; and

WHEREAS, the Planning Commission, having considered the proposed changes to the Orange Municipal Code contained herein at a public hearing held on August 17, 2020, including review of the staff report and having received public testimony on the item, has determined that the proposed Ordinance, as it relates to the Zoning Code, is justified and recommends approval thereof.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission recommends that the City Council approve the subject Ordinance, shown as Attachment A, attached hereto, based on the following findings:

SECTION 1 - FINDINGS

The subject Ordinance supports the General Plan Vision for Orange, and goals and policies of the Land Use and Cultural Resources & Historic Preservation Elements by providing a framework and regulation for protecting and enhancing land uses in historic districts or involving historic structures or buildings so that they will exist in harmony with their surroundings, while maintaining their historical significance.

SECTION 2 - ENVIRONMENTAL REVIEW

The subject Ordinance is exempt from the provisions of the California Environmental Quality Act (CEQA) per State CEQA Guidelines Sections 15060(c)(2), 15060(c)(3) and 15061(b)(3), because it will not result in a direct or reasonably foreseeable indirect physical change in the environment, because there is no possibility it will have a significant effect on the environment, and because it is not a "project" as defined in Section 15378 of the State CEQA Guidelines. As such, no further analysis is warranted or required.

BE IT FURTHER RESOLVED that the Planning Commission recommends that Title 17 of the Orange Municipal Code be amended as shown in Attachment A.

I hereby certify that the Planning Commission of the City of Orange adopts the foregoing resolution on _____, 2020 by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

David Simpson, Planning Commission Chair

Date

ORDINANCE NO. XX-20

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ORANGE AMENDING TITLE 12, TITLE 16 AND TITLE 17 OF THE ORANGE MUNICIPAL CODE TO UPDATE DUTIES AND RESPONSIBILITIES OF THE DESIGN REVIEW COMMITTEE AND EFFECT OTHER MINOR REVISIONS

WHEREAS, the City of Orange Design Review Committee (formerly the Design Review Board) was established in 1974 by Ordinance No. 4-74 for the purpose of upholding community aesthetics by reviewing the architectural design of new buildings and structures; and

WHEREAS, the number and complexity of development projects in the City of Orange have greatly increased over the past 46 years; and

WHEREAS, the City wishes to increase the effectiveness of the Design Review Committee by focusing its efforts on development projects in historic districts and involving historic buildings and structures as defined.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF ORANGE DOES HEREBY ORDAIN AS FOLLOWS:

SECTION I:

This Ordinance is not a project under the California Environmental Quality Act (CEQA) per State CEQA Guidelines Section 15061(b)(3) and 15378, because it is an administrative activity undertaken by a local government, involves general City policy and procedure, and its adoption does not have the potential to result in direct or indirect physical changes to the environment

SECTION II:

Section 12.18.080.O of the Orange Municipal Code, “Streets, Sidewalks and Public Places - Outdoor Dining on Public Walkways - Outdoor Dining Permit Standards,” is hereby amended in its entirety to read as follows:

O. No signs are permitted in the outdoor dining area with the exception of a menu sign. Business names may be permitted on the valance of the awnings and/or umbrellas, as approved by the Director; however, commercial and product logos are not permitted on the valance of awnings and/or on umbrellas or in any other outdoor display.

SECTION III:

Section 16.35.060 of the Orange Municipal Code, “Subdivisions – Vesting Tentative Maps - Filing,” is hereby amended in its entirety to read as follows:

16.35.060 - Filing.

A vesting tentative map shall be filed in the same form and have the same contents, accompanying data and reports as set forth in other provisions of Title 16 for a tentative map, except as hereinafter provided:

A. Subdivider shall obtain Community Development Director preliminary approval of development prior to filing a vesting tentative map. Processing and content shall be as detailed in City's document entitled "Design Review Committee Submittal Procedure."

B. Subdivider shall obtain all necessary zone changes prior to or concurrent with filing a vesting tentative map.

C. At the time a vesting tentative map is filed it shall have printed conspicuously on its face the words: "Vesting Tentative Map."

D. At the time a vesting tentative map is filed, a subdivider shall also supply the following information:

1. Community Development Director approved plans and drawings;
2. Sewer, water, storm drain, and road details;
3. Geological studies;
4. Flood control information;
5. School impact analysis;
6. Traffic impact analysis;
7. Detailed grading plans;
8. Solar access, passive or natural heating or cooling opportunities analysis;
9. Signing program (advertising, locational, and safety signing systems);
10. Any other material considered essential to the proper evaluation of the project (e.g. open space maintenance responsibilities, provisions made for trails and/or parks and their maintenance responsibilities).

NOTE: All developments require compliance with the California Environmental Quality Act. Some of the above information may be included in reports prepared for that purpose. If so, the information requested above need only a reference to the EIR.

SECTION IV:

Table 17.08.020, "Zoning – General Administrative Procedures – Reviewing Bodies," is hereby amended in its entirety to read as follows:

Type of Procedure, Permit or Hearing	CDD	DRC	ZA	PC	CC
Zoning Ordinance Amendment	A			A	X
Zone Change	A			A	X
Conditional Use Permit	A		X(1)	X(1)	X(1)
Variance	A		X(1)	X	
Administrative Adjustment Permit			X		
Temporary Use (Non-Recurring) Permit	A	A(1)	X		

Design Review	A/X(1)	A/X(1)		X(1)	
Historic District Demolition Permit		A		X(1)	X
Site Plan Review—Minor	X	A(1)			
Site Plan Review—Major	A	A(1)		X	
Tentative Tract Map	A			A	X
General Plan Amendment	A			A	X
Environmental Documentation	A			X(1)	X(1)

SECTION V:

Section 17.08.020.B.2.c of the Orange Municipal Code, “Zoning – General Administrative Procedures – Reviewing Bodies – Planning Commission – Powers and Duties,” is hereby amended in its entirety to read as follows:

c. Authority to act upon an appeal of any order, requirement, permit, decision or determination made by an administrative or appointed official or body in the administration or enforcement of this chapter.

SECTION VI:

Section 17.08.020.D of the Orange Municipal Code, “Zoning – General Administrative Procedures – Reviewing Bodies – Design Review Committee,” is hereby amended in its entirety to read as follows:

D. Design Review Committee. The Design Review Committee (DRC) is established to uphold community aesthetics by reviewing the architectural design of projects in historic districts and any building or structure identified as a historic resource in the City’s Historic Resources Survey.

1. Purpose.

- a. To review development projects as provided herein, by considering the elements of architectural design, massing and scale, color palette, and context to ensure that projects are compatible with surrounding development and community aesthetics;
- b. To interpret and apply adopted design guidelines and standards;
- c. To assist in formulating design policy;
- d. To encourage the preservation of cultural historic resources, while allowing for orderly development.

2. Powers and Duties. The DRC shall have the authority to:

- a. Review and make recommendations to the Planning Commission and/or make final determinations, as appropriate, on Design Review for development projects in historic districts or involving a building or structure identified in the City’s Historic Resources Survey.
- b. Review and make recommendations to the Planning Commission on proposed demolitions in historic districts.

c. Review and make recommendations to the Planning Commission on Major Site Plan Review for development projects in historic districts or involving a building or structure identified in the City's Historic Resources Survey.

d. Review and make recommendations to the Community Development Director on Non-Recurring Temporary Use Permits and Minor Site Plan Review matters in historic districts or involving a building or structure identified in the City's Historic Resources Survey.

e. Review and make recommendations to the Community Development Director on other matters referred by the Director.

3. Meetings.

a. The DRC shall meet in regular session on dates and at times to be determined by resolution of the City Council. All meetings shall be open to the public, and provisions of the Brown Act shall apply.

b. Three members shall constitute a quorum. A majority vote of the quorum present shall be required for all DRC actions. Failure to achieve a majority vote of members present shall constitute a denial of the proposed action.

c. The DRC shall adopt rules and regulations for the conduct of its business consistent with this chapter.

4. Membership and Compensation. Membership and compensation of the DRC shall be as determined by resolution of the City Council.

5. Terms of Office/Officers.

a. The terms of office for each member of the DRC shall be four years and shall continue to and include June 30th of the year in which the term expires, and thereafter until a successor for the member whose term is expiring has been appointed.

b. At the first meeting after June 30th of every other year, the DRC shall select a chairman and a vice-chairman to serve two-year terms.

SECTION VII:

Section 17.08.020.E of the Orange Municipal Code, "Zoning – General Administrative Procedures – Reviewing Bodies – Community Development Director – Powers and Duties," is hereby amended in its entirety to read as follows:

E. Community Development Director. The Community Development Director, in conjunction with a staff review committee designated by the City Manager, shall review development proposals in order to ensure that yards, open space, structures, parking, loading facilities, landscaping, streets and similar uses and the development of the land remains compatible with surrounding properties reflecting the highest quality of land planning and design.

1. Powers and Duties. The Community Development Director, after consultation with a staff review committee designated by the City Manager, shall have the authority to:

a. Decide upon minor site plan applications.

b. Decide upon, or make recommendations to the Planning Commission, as appropriate, on design review applications as specified in Chapter 17.10;

c. Review and make recommendations to the Planning Commission on zoning ordinance amendments, zone changes, conditional use permits, variances, major site plans, tentative tract maps, general plan amendments and other discretionary applications as specified in Chapter 17.10;

- d. Consider minor modifications to previously approved site plans and determine whether such modifications are in substantial conformance with the approved plans;
- e. Review and make recommendations to the Planning Commission on environmental documentation and all duties defined in City environmental review guidelines.
- f. Refer matters to the Design Review Committee as appropriate.

SECTION VIII:

Section 17.08.050.A of the Orange Municipal Code, “Zoning – General Administrative Procedures – Appeals – Right of Appeal,” is hereby amended in its entirety to read as follows:

A. Right of Appeal. Any final action taken by the Community Development Director, Zoning Administrator or the Design Review Committee in the administration or enforcement of the provisions of this chapter may be appealed by any person aggrieved, or by an officer, commission or department of the City. Such appeals may be made to the Planning Commission. Any decision wherein the Planning Commission is authorized to make a final determination may be appealed to the City Council.

SECTION IX:

Section 17.10.035.C.6 of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Temporary Use Permits – Temporary Use Permit for Uses of Limited, Specific Duration (Nonrecurring) – Design Review,” is hereby amended in its entirety to read as follows:

6. Design Review. Nonrecurring temporary uses on properties located within a historic district shall require Design Review Committee review prior to Zoning Administrator approval of the temporary use permit.

SECTION X:

Section 17.10.035.E.10 of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Temporary Use Permits – Conditions of Approval,” is hereby deleted in its entirety.

SECTION XI:

Section 17.10.060.D.2 of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Site Plan Review – Minor Site Plan Review - Procedure,” is hereby amended in its entirety to read as follows:

2. Procedure. The Community Development Director shall be responsible for minor site plan review. Once an application for minor site plan review has been deemed complete, the Director shall, in conjunction with a staff review committee designated by the City Manager, and the Design Review Committee for projects in a historic district or involving a building or structure identified in the City’s Historic Resources Survey, consider and approve, approve with conditions, deny, or refer the project to the Planning Commission for final action. A continuance may be granted upon mutual consent of the applicant and the Director. Appeals from decisions by the

Director shall be made in accordance with the City appeal procedures set forth in Section 17.08.050.

SECTION XII:

Section 17.10.060.E.2 of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Site Plan Review – Major Site Plan Review - Procedure,” is hereby amended in its entirety to read as follows:

2. Procedure. The Community Development Director shall serve as the preliminary reviewing body for major site plan review. Once an application for major site plan review has been deemed complete, the Director, and the DRC for projects in a historic district or involving a building or structure identified in the City’s Historic Resources Survey, shall independently consider and make a recommendation to approve, approve with conditions, or deny the project. A continuance may be granted upon mutual consent of the applicant and Director. The recommendations shall be forwarded to the Planning Commission secretary for placement on the Commission's consent calendar, and shall be noticed as provided in Section 17.08.040. The Commission, in considering a site plan review application, shall review the recommendations of the Director. The Commission shall act to approve, approve with conditions or deny the application. A continuance may be granted upon mutual consent of the applicant and Commission. Planning Commission action shall be deemed final unless appealed in accordance with Section 17.08.050.

SECTION XIII:

Section 17.10.060.G of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Site Plan Review – Conditions of Approval,” is hereby amended in its entirety to read as follows:

G. Conditions of Approval. The Community Development Director may recommend or require reasonable conditions of approval which may include, but not be limited to those items listed below.

1. A revised site plan;
2. Modifications of building height, bulk, mass or scale;
3. Increased setbacks;
4. Division or sound walls;
5. Mitigation of potential project related environmental impacts;
6. Increased open space;
7. Screening of parking areas, trash receptacles, mechanical equipment, storage areas;
8. Increased landscaping;
9. Relocation of buildings;
10. Revised interior circulation or parking area design;
11. Off-site improvements;
12. Revised grading plan;
13. Any other changes or additions the Director feels are necessary to further the goals of the site plan review process; and

14. For a major site plan review of projects in a historic district or involving a building or structure identified in the City’s Historic Resources Survey, the Design Review Committee may recommend conditions of approval relating to architectural design in accordance with Section 17.08.020.D.

SECTION XIV:

Section 17.10.070.B of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Design Review – When Design Review is Required,” is hereby amended in its entirety to read as follows:

B. When Design Review is Required. Design review is required for all projects listed below:

1. Projects requiring major site plan review;
2. Signs as specified in [Chapter 17.36](#);
3. Projects within a historic district or involving a building or structure identified in the city’s Historic Resources Survey, except where otherwise exempted by adopted design standards and/or adopted specific plan(s);
4. External remodeling of commercial, industrial, institutional and large scale multiple family developments, except where otherwise exempted by City codes, including adopted design standards and/or adopted specific plans(s) including:
 - a. Facade renovation of the majority of a multi-family residential complex, multi-tenant commercial or industrial center, or institutional property.
 - b. Introduction of new structural architectural elements to the facade of individual in-line or freestanding pad tenants within a multi-tenant commercial or industrial center.
 - c. Projects that involve exterior remodeling of an individual freestanding commercial, industrial, or institutional building on an individual parcel that is not part of a larger center or campus, including changes in exterior building material, roof form, and window or door openings.
5. Projects requiring minor site plan review that also involve exterior remodeling of residential, commercial, industrial, and institutional development.
6. Infill residential development as specified in the Orange Infill Residential Design Guidelines.

SECTION XV:

Section 17.10.070.C of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Design Review – Initiation and Application,” is hereby amended in its entirety to read as follows:

C. Initiation and Application. Design review applications shall be filed in accordance with application and submittal requirements as determined by the City. Application materials may include site, building and landscape plans, photographs, colored elevations and/or renderings and color and material boards. Submittal materials shall also include information pertaining to scale, massing, streetscape, landscaping and open space. This information must be of sufficient detail to allow the reviewing body to determine the compatibility of the change to the existing structure, area, or district and that the project meets established design standards and criteria.

SECTION XVI:

Section 17.10.070.D of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Design Review – Design Review Procedure and Criteria,” is hereby amended in part to read as follows:

D. Design Review Procedure and Criteria. The reviewing body shall make a recommendation or final determination as authorized by Section 17.08.020 to approve, approve with conditions or deny a project. In making such recommendation or determination, the reviewing body shall consider adopted design standards and guidelines (where applicable), the Secretary of the Interior's Standards and Guidelines for Rehabilitation (where applicable) and the following general criteria in making a project determination:

SECTION XVII:

Section 17.10.070.E of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Design Review – Administrative Design Review,” is hereby deleted in its entirety.

SECTION XVIII:

Section 17.10.070.G of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Design Review – Findings Required,” is hereby amended in its entirety to read as follows:

F. Findings Required. The reviewing body shall make a finding that the project design upholds community aesthetics through the use of an internally consistent, integrated design theme and is consistent with all adopted specific plans, applicable design standards and their required findings.

SECTION XIX:

Section 17.12.025.B.2 of the Orange Municipal Code, “Zoning – General Regulations Applicable to All Districts – Wireless Communications Facilities – Application Procedure,” is hereby amended in part to read as follows:

2. Building- or structure-mounted stealth antennas in A-1, RO, SG, PI, OP, CP, C1, C2, C3, CR, M1 and M2 districts outside of a historic district and not on a building or structure identified in the City’s Historic Resources Survey with completely enclosed or screened support equipment may be approved administratively by Planning Division staff under the following circumstances:

SECTION XX:

Section 17.12.025.B.3 of the Orange Municipal Code, “Zoning – General Regulations Applicable to All Districts – Wireless Communications Facilities – Application Procedure,” is hereby amended in its entirety to read as follows:

3. A recommendation from the Design Review Committee will be required for building- or structure-mounted stealth antennas located within a historic district or involving a building or structure identified in the City’s Historic Resources Survey.

SECTION XXI:

Section 17.12.025.B.5 of the Orange Municipal Code, “Zoning – General Regulations Applicable to All Districts – Wireless Communications Facilities – Application Procedure,” is hereby amended in its entirety to read as follows:

5. Any owner of a wireless communication facility and any person or entity leasing property for a wireless communication facility shall provide written notification to the Community Development Director of the discontinuance of the use of a wireless communication facility for wireless communication purposes for any period longer than thirty (30) days. The notice shall state the date the use was discontinued and shall be provided within thirty-one (31) days of such discontinuance.

SECTION XXII:

Section 17.12.025.B.7 of the Orange Municipal Code, “Zoning – General Regulations Applicable to All Districts – Wireless Communications Facilities – Application Procedure,” is hereby amended in its entirety to read as follows:

7. Ground-mounted stealth facilities outside of a historic district and not on a building or structure identified in the City’s Historic Resources Survey are permitted in all A-1, RO, SG, PC, residential, commercial, industrial, and public institutional zones subject to minor site plan review provided that the installation conforms to the criteria specified in subsections C and D of this section.

SECTION XXIII:

Section 17.12.025.B.9.b of the Orange Municipal Code, “Zoning – General Regulations Applicable to All Districts – Wireless Communications Facilities – Application Procedure,” is hereby amended in its entirety to read as follows:

b. Ground-mounted stealth and all nonstealth facilities located within a historic district or involving a building or structure identified in the City’s Historic Resources Survey.

SECTION XXIV:

The Wireless Communication Facility Review Matrix in Section 17.12.025.B of the Orange Municipal Code, “Zoning – General Regulations Applicable to All Districts – Wireless Communications Facilities – Application Procedure,” is hereby amended in its entirety to read as follows:

Wireless Communication Facility Review Matrix

Zone	Stealth (Building-Mounted)	Stealth (Ground-Mounted)	Nonstealth	Co-Located (Stealth)	Co-Located (Nonstealth)
Any Historic District or Historic Building/Structure	DRC ¹	DRC/CUP	DRC/CUP ³	SPR/DRC	DRC/CUP
Residential Districts per Chapter 17.14 and Planned Community District (residential use) per Chapter 17.26	SPR ²	SPR ²	-	SPR ²	SPR
Commercial Districts per Chapter 17.18	Staff ¹	SPR	CUP	SPR	SPR
Industrial Districts per Chapter 17.20	Staff ¹	Staff ¹	SPR	Staff ¹	SPR
Public Institution District per Chapter 17.24	Staff ¹	SPR	CUP	SPR	SPR
A1, RO, SG, and PC (nonresidential use)	Staff ¹	SPR	CUP	SPR	SPR

1. Minor site plan review may be required depending on the location of any support equipment.

2. CDD may approve facilities on institutional or quasi-institutional sites.

3. Nonstealth facilities are not permitted on residentially zoned property in a historic district or on a building or structure identified in the City’s Historic Resources Survey.

CDD = Community Development Director

CUP = Conditional Use Permit

DRC = Design Review Committee

SPR = Minor Site Plan Review

- = Not Permitted

SECTION XXV:

Section 17.13.040.II.9 of the Orange Municipal Code, “Zoning – Master Land Use Table – Special Use Regulations – Homeless Shelter – Design Review Required,” is hereby amended in its entirety to read as follows:

9. Design Review Required. Design review is required if the project meets the criteria established in Section 17.10.070. The reviewing body's discretion in requiring conditions of approval and approving homeless shelters is limited to ensuring compliance with applicable design-related standards and guidelines.

SECTION XXVI:

Section 17.13.050.Z.12 of the Orange Municipal Code, “Zoning – Master Land Use Table – Conditional Use Regulations – Hot Dog Vending Carts,” is hereby deleted in its entirety.

SECTION XXVII:

Section 17.36.060.A.1 of the Orange Municipal Code, “Zoning – Sign Regulations – Signs General – Sign Program – Multitenant Buildings,” is hereby amended in part to read as follows:

1. Multitenant Buildings. A sign program for all multitenant buildings shall be required to ensure proper design of signage and adequate identification of building tenants. Such programs shall provide for consistency in the size, color and placement of signs within a property and shall be approved by the Community Development Director.

SECTION XXVIII:

Section 17.36.060.A.3 of the Orange Municipal Code, “Zoning – Sign Regulations – Signs General – Sign Program – Mixed Use Zones and Major Commercial Centers,” is hereby amended in part to read as follows:

3. Mixed Use Zones and Major Commercial Centers. Sign programs for major commercial centers on sites which are located in the C-TR, C-R, C-2 or C-3 zones and are larger than twenty-five (25) acres, and for mixed use, multi-family residential, or multi-tenant commercial uses in the OTMU, NMU and UMU zones, regardless of the size of the site may include criteria that differ from the limitations contained in this chapter. Sign programs for major commercial centers are subject to the review and approval of a conditional use permit by the Planning Commission. Sign programs in mixed use zones are subject to review and approval by the Community Development Director. Sign programs shall be reviewed based on the following criteria:

SECTION XXIX:

Section 17.36.060.A.3.k of the Orange Municipal Code, “Zoning – Sign Regulations – Signs General – Sign Program – Mixed Use Zones and Major Commercial Centers,” is hereby amended in its entirety to read as follows:

k. Any sign program is subject to initial review and recommendation by the Community Development Director. Sign applications for individual tenants will be subject to final approval by the Director unless the sign program is specific in describing the height, width and design components of signs for each tenant space.

SECTION XXX:

Section 17.36.150.I of the Orange Municipal Code, “Zoning – Sign Regulations – Special Purpose Sign Regulations – Creative Signs,” is hereby amended in part to read as follows:

I. Creative Signs. Creative signs are allowed in the UMU zone. The intention of these provisions is to encourage signs of unique design that exhibit a high degree of imagination, inventiveness, spirit and thoughtfulness. Creatively designed signs should make a positive visual contribution to the overall image of the City, while mitigating the impacts of large, obtrusive or unusually designed signs. Creative signs may be allowed in addition to other project identification

signs allowed by this chapter subject to approval of a sign program. Creative signs, either on their own or as part of a sign program in combination with other project signage, shall be reviewed by the Community Development Director and approved by the Planning Commission. Creative signs located in a historic district shall also be reviewed by the Design Review Committee prior to Planning Commission approval. Review shall be subject to the following criteria:

SECTION XXXI:

Section 17.36.150.J of the Orange Municipal Code, “Zoning – Sign Regulations – Special Purpose Sign Regulations – Murals,” is hereby amended in part to read as follows:

J. Murals. Murals are allowed in the OTMU, NMU and UMU zones. Murals should make a positive visual contribution to the overall image of the City and may be allowed in addition to other project identification signs allowed by this chapter. Murals, either on their own or as part of a sign program in combination with other project signage, shall be reviewed by the Community Development Director and approved by the Planning Commission. Murals located in a historic district shall also be reviewed by the Design Review Committee prior to Planning Commission approval. Review shall subject to the following criteria:

SECTION XXXII:

If any section, subdivision, paragraph, sentence, clause or phrase of this Ordinance is for any reason held to be invalid or unconstitutional, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council hereby declares that it would have passed this Ordinance, and each section, subdivision, paragraph, sentence, clause and phrase thereof, irrespective of the fact that any one (or more) section, subdivision, paragraph, sentence, clause or phrase had been declared invalid or unconstitutional.

SECTION XXXIII:

The City Clerk is hereby directed to certify the adoption of this Ordinance and cause a summary of the same to be published as required by law. This Ordinance shall take effect thirty (30) days from the date of adoption.

ADOPTED this _____ day of _____, 2020.

Mark A. Murphy, Mayor, City of Orange

ATTEST:

Pamela Coleman, City Clerk, City of Orange

STATE OF CALIFORNIA)
COUNTY OF ORANGE)
CITY OF ORANGE)

I, PAMELA COLEMAN, City Clerk of the City of Orange, California, do hereby certify that the foregoing Ordinance was introduced at the regular meeting of the City Council held on the ___ day of _____, 2020, and thereafter at the regular meeting of said City Council duly held on the ___ day of _____, 2020 was duly passed and adopted by the following vote, to wit:

AYES: COUNCILMEMBERS:
NOES: COUNCILMEMBERS:
ABSENT: COUNCILMEMBERS:
ABSTAIN: COUNCILMEMBERS:

Pamela Coleman, City Clerk, City of Orange

ORDINANCE NO. XX-20

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ORANGE AMENDING TITLE 12, TITLE 16 AND TITLE 17 OF THE ORANGE MUNICIPAL CODE TO UPDATE DUTIES AND RESPONSIBILITIES OF THE DESIGN REVIEW COMMITTEE AND EFFECT OTHER MINOR REVISIONS

WHEREAS, the City of Orange Design Review Committee (formerly the Design Review Board) was established in 1974 by Ordinance No. 4-74 for the purpose of upholding community aesthetics by reviewing the architectural design of new buildings and structures; and

WHEREAS, the number and complexity of development projects in the City of Orange have greatly increased over the past 46 years; and

WHEREAS, the City wishes to increase the effectiveness of the Design Review Committee by focusing its efforts on development projects in historic districts and involving historic buildings and structures as defined.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF ORANGE DOES HEREBY ORDAIN AS FOLLOWS:

SECTION I:

This Ordinance is not a project under the California Environmental Quality Act (CEQA) per State CEQA Guidelines Section 15061(b)(3) and 15378, because it is an administrative activity undertaken by a local government, involves general City policy and procedure, and its adoption does not have the potential to result in direct or indirect physical changes to the environment

SECTION II:

Section 12.18.080.O of the Orange Municipal Code, “Streets, Sidewalks and Public Places - Outdoor Dining on Public Walkways - Outdoor Dining Permit Standards,” is hereby amended in its entirety to read as follows:

O. No signs are permitted in the outdoor dining area with the exception of a menu sign. Business names may be permitted on the valance of the awnings and/or umbrellas, as approved by the ~~Design Review Board~~ **Director**; however, commercial and product logos are not permitted on the valance of awnings and/or on umbrellas or in any other outdoor display.

SECTION III:

Section 16.35.060 of the Orange Municipal Code, “Subdivisions – Vesting Tentative Maps - Filing,” is hereby amended in its entirety to read as follows:

16.35.060 - Filing.

A vesting tentative map shall be filed in the same form and have the same contents, accompanying data and reports as set forth in other provisions of Title 16 for a tentative map, except as hereinafter provided:

A. Subdivider shall obtain ~~Design Review Committee~~Community Development Director preliminary approval of development prior to filing a vesting tentative map. Processing and content shall be as detailed in City's document entitled "Design Review Committee Submittal Procedure."

B. Subdivider shall obtain all necessary zone changes prior to or concurrent with filing a vesting tentative map.

C. At the time a vesting tentative map is filed it shall have printed conspicuously on its face the words: "Vesting Tentative Map."

D. At the time a vesting tentative map is filed, a subdivider shall also supply the following information:

1. ~~Design Review Committee~~Community Development Director approved plans and drawings;
2. Sewer, water, storm drain, and road details;
3. Geological studies;
4. Flood control information;
5. School impact analysis;
6. Traffic impact analysis;
7. Detailed grading plans;
8. Solar access, passive or natural heating or cooling opportunities analysis;
9. Signing program (advertising, locational, and safety signing systems);
10. Any other material considered essential to the proper evaluation of the project (~~i.e.e.g.;~~ open space maintenance responsibilities, provisions made for trails and/or parks and their maintenance responsibilities).

NOTE: All developments require compliance with the California Environmental Quality Act. Some of the above information may be included in reports prepared for that purpose. If so, the information requested above ~~the need only be a~~ referenced to the E.I.R/EIR.

SECTION IV:

Table 17.08.020, "Zoning – General Administrative Procedures – Reviewing Bodies," is hereby amended in its entirety to read as follows:

Type of Procedure, Permit or Hearing	CDD	DRC	ZA	PC	CC
Zoning Ordinance Amendment	A			A	X
Zone Change	A			A	X
Conditional Use Permit	A	A(1)	X(1)	X(1)	X(1)
Variance	A	A(1)	X(1)	X	
Administrative Adjustment Permit			X		

Temporary Use (Non-Recurring) Permit	<u>A</u>	<u>A(1)</u>	X		
Design Review	<u>A/X(1)</u>	A/X(1)		X(1)	
Administrative Design Review	X(1)				
Old Towne Historic District Demolition Permit		A		X(1)	X
Site Plan Review—Minor	X	<u>A(1)</u>			
Site Plan Review—Major	A	<u>A(1)</u>		X	
Tentative Tract Map	A			A	X
General Plan Amendment	A			A	X
Environmental Documentation	A			X(1)	X(1)

SECTION V:

Section 17.08.020.B.2.c of the Orange Municipal Code, “Zoning – General Administrative Procedures – Reviewing Bodies – Planning Commission – Powers and Duties,” is hereby amended in its entirety to read as follows:

c. Authority to act upon an appeal of any order, requirement, permit, decision or determination made by an administrative or appointed official or body ~~such as the Community Development Director, Zoning Administrator or Design Review Board~~ in the administration or enforcement of this chapter.

SECTION VI:

Section 17.08.020.D of the Orange Municipal Code, “Zoning – General Administrative Procedures – Reviewing Bodies – Design Review Committee,” is hereby amended in its entirety to read as follows:

D. Design Review Committee. The Design Review Committee (DRC) is established to uphold community aesthetics by reviewing the architectural design of projects in historic districts and any building or structure identified as a historic resource in the City’s Historic Resources Survey. ~~Recognizing that the inclusion of specific aesthetic development standards is impracticable due to the variable nature of architectural concepts, construction materials and aesthetic goals from one time period to another and from one neighborhood to another, it is in the public interest to establish an authority for project review.~~

1. Purpose.

- a. To review development projects as provided herein, by considering the elements of architectural design, massing and scale, color palette, and context, ~~landscaping and signage~~ to ensure that projects are compatible with surrounding development and community aesthetics;
- b. To interpret and apply adopted design guidelines and standards;
- c. To assist in formulating design policy;
- d. To encourage the preservation of cultural historic resources, while allowing for orderly development.

2. Powers and Duties. The ~~Design Review Committee~~DRC shall have the authority to:
 - ~~a. Make final determination on signs and sign programs in accordance with Chapter 17.36 of this code;~~
 - ~~b. Make final determination on architectural and landscaping design matters for minor site plan review applications when referred by Community Development Director;~~
 - ~~ca. Make Review and make final determination recommendations to the Planning Commission and/or make final determinations, as appropriate, on architectural and landscaping dDesign Review matters for external remodeling of commercial, industrial, institutional and large scale multiple family developments projects in historic districts or involving a building or structure identified in the City's Historic Resources Survey, except for minor site plan review projects acted upon by the Community Development Director;~~
 - ~~db. Make Review and make final determination recommendations to the Planning Commission on architectural and landscaping design matters proposed demolitions for projects in the Old Towne Historic Distriethistoric districts, when no Planning Commission review is otherwise required;.~~
 - c. Review and make recommendations to the Planning Commission on Major Site Plan Review for development projects in historic districts or involving a building or structure identified in the City's Historic Resources Survey.
 - d. Review and make recommendations to the Community Development Director on Non-Recurring Temporary Use Permits and Minor Site Plan Review matters in historic districts or involving a building or structure identified in the City's Historic Resources Survey.
 - ~~e. Review and make recommendations to the Planning Commission on architectural and landscaping design matters for all development projects and proposed demolitions requiring Planning Commission recommendation or approval.~~
 - e. Review and make recommendations to the Community Development Director on other matters referred by the Director.
3. Meetings.
 - a. The ~~Design Review Committee~~DRC shall meet in regular session on dates and at times to be determined ~~from time to time~~ by resolution of the City Council. All meetings shall be open to the public, and provisions of the Brown Act shall apply.
 - ~~b. Committee members shall be compensated for each meeting as determined by resolution of the City Council.~~
 - eb. Three members shall constitute a quorum. A majority vote of the quorum present shall be required for all ~~Committee~~DRC actions. Failure to achieve a majority vote of members present shall constitute a denial of the proposed action.
 - c. The DRC shall adopt rules and regulations for the conduct of its business consistent with this chapter.
4. Membership and Compensation. Membership and compensation of the DRC shall be as determined by resolution of the City Council.
 - ~~a. The Design Review Committee shall consist of five members of the public. Committee members shall be persons who, as a result of their training, knowledge and experience, are qualified to analyze and interpret architectural and site planning information, including but not limited to, licensed landscape architects and architects, urban planners, engineers, and licensed general contractors. At least two of the members shall have professional experience in urban planning, architectural history or historic preservation and shall have general knowledge of architectural styles prevalent in Old Towne.~~

~~b. Appointed members of the Committee shall live or work in the City and shall be appointed for four-year terms.~~

~~c. Staff expertise in historic preservation and landscaping shall be available as a resource to the Committee;~~

~~5. Officers Terms of Office/Officers Terms of Office.~~

~~a. The terms of office for each member of the DRC shall be four years and shall continue to and include June 30th of the year in which the term expires, and thereafter until a successor for the member whose term is expiring has been appointed.~~

~~b. At the first meeting after June 30th of every other year, the DRC shall select a chairman and a vice-chairman to serve two-year terms. Officers shall consist of a Chairman and Vice chairman, both of whom shall be selected by the members of the Committee.~~

~~b. The terms of office for each member of the Committee shall continue to and include June 30th of the year in which the term shall expire, and thereafter until a successor for the member whose term is expiring has been appointed.~~

~~6. Rules and Regulations. The Design Review Committee shall adopt and amend, by the affirmative vote of three members, rules and regulations for the conduct of the Committee's business consistent with this chapter subject to approval by the City Council.~~

SECTION VII:

Section 17.08.020.E of the Orange Municipal Code, “Zoning – General Administrative Procedures – Reviewing Bodies – Community Development Director – Powers and Duties,” is hereby amended in its entirety to read as follows:

E. Community Development Director. The Community Development Director, in conjunction with a staff review committee designated by the City Manager, shall review development proposals in order to ensure that yards, open space, structures, parking, loading facilities, landscaping, streets and similar uses and the development of the land remains compatible with surrounding properties reflecting the highest quality of land planning and design.

1. Powers and Duties. The Community Development Director, after consultation with a staff review committee designated by the City Manager, shall have the authority to:

a. Decide upon minor site plan applications.

b. Decide upon, or make recommendations to the Planning Commission, as appropriate, on administrative design review applications as specified in Chapter 17.10;

c. Review and make recommendations to the Planning Commission on zoning ordinance amendments, zone changes, conditional use permits, variances, major site plans, tentative tract maps, general plan amendments and other discretionary applications as specified in Chapter 17.10;

d. Consider minor modifications to previously approved site plans and determine whether such modifications are in substantial conformance with the approved plans;

e. Review and make recommendations to the ~~City~~ Planning Commission on environmental documentation and all duties defined in City environmental review guidelines.

f. Refer matters to the Design Review Committee as appropriate.

SECTION VIII:

Section 17.08.050.A of the Orange Municipal Code, “Zoning – General Administrative Procedures – Appeals – Right of Appeal,” is hereby amended in its entirety to read as follows:

A. Right of Appeal. Any final action taken by the Community Development Director, Zoning Administrator or the Design Review Committee in the administration or enforcement of the provisions of this chapter may be appealed by any person aggrieved, or by an officer, commission or department of the City. Such appeals may be made to the Planning Commission. Any decision wherein the Planning Commission is authorized to make a final determination may be appealed to the City Council.

SECTION IX:

Section 17.10.035.C.6 of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Temporary Use Permits – Temporary Use Permit for Uses of Limited, Specific Duration (Nonrecurring) – Design Review,” is hereby amended in its entirety to read as follows:

6. Design Review. Nonrecurring temporary uses on properties located within ~~the Old Towne Historic District~~ historic district shall require ~~the approval of the~~ Design Review Committee review prior to Zoning Administrator approval ~~the establishment~~ of the temporary use permit.

SECTION X:

Section 17.10.035.E.10 of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Temporary Use Permits – Conditions of Approval,” is hereby deleted in its entirety.

~~10.—Referral to the Design Review Committee; and~~

SECTION XI:

Section 17.10.060.D.2 of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Site Plan Review – Minor Site Plan Review - Procedure,” is hereby amended in its entirety to read as follows:

2. Procedure. The Community Development Director, ~~pursuant to Section 17.08.020E,~~ shall be responsible for minor site plan review. Once an application for minor site plan review has been deemed complete, the ~~Community Development~~ Director shall, in conjunction with a staff review committee designated by the City Manager, and the Design Review Committee for projects in a historic district or involving a building or structure identified in the City’s Historic Resources Survey, consider and approve, approve with conditions, deny, or refer the project to ~~the Design Review Committee and/or~~ the Planning Commission for final action. A continuance may be granted upon mutual consent of the applicant and the ~~Community Development~~ Director. Appeals from decisions by the ~~Community Development~~ Director shall be made in accordance with the City appeal procedures set forth in Section 17.08.050.

SECTION XII:

Section 17.10.060.E.2 of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Site Plan Review – Major Site Plan Review - Procedure,” is hereby amended in its entirety to read as follows:

2. Procedure. ~~The~~ Community Development Director ~~and Design Review Committee~~ shall serve as the preliminary reviewing ~~bodies~~ body for major site plan review. Once an application for major site plan review has been deemed complete, ~~both~~ the ~~Community Development~~ Director, ~~and the DRC for projects in a historic district or involving a building or structure identified in the City’s Historic Resources Survey, and Design Review Committee~~ shall independently consider and make a recommendation to approve, approve with conditions, or deny the project. A continuance may be granted upon mutual consent of the applicant and ~~Community Development~~ Director. The recommendations shall be forwarded to the Planning Commission secretary for placement on the Commission's consent calendar, and shall be noticed as provided ~~for in Section 17.08.040. Procedures for acting on consent calendar items shall be established by the Planning Commission and shall be adopted by resolution.~~ The Commission, in considering a site plan review application, shall review the recommendations of the ~~Community Development Director and Design Review Committee~~. The Commission shall act to approve, approve with conditions or deny the application. A continuance may be granted upon mutual consent of the applicant and ~~Planning~~ Commission. Planning Commission action shall be deemed final unless ~~an appeal to the City Council is filed within fifteen (15) days of the decision~~ appealed in accordance with Section 17.08.050.

SECTION XIII:

Section 17.10.060.G of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Site Plan Review – Conditions of Approval,” is hereby amended in its entirety to read as follows:

G. Conditions of Approval. The Community Development Director may recommend or require reasonable conditions of approval which may include, but not be limited to those items listed below. ~~The Design Review Committee may recommend conditions of approval for major site plan review in accordance with Section 17.10.070(E).~~

1. A revised site plan;
2. Modifications of building height, bulk, mass or scale;
3. Increased setbacks;
4. Division or sound walls;
5. Mitigation of potential project related environmental impacts;
6. Increased open space;
7. Screening of parking areas, trash receptacles, mechanical equipment, storage areas;
8. Increased landscaping;
9. Relocation of buildings;
10. Revised interior circulation or parking area design;
11. Off-site improvements ~~;~~ ;
12. Revised grading plan; ~~or~~
13. Any other changes or additions the ~~Committee~~ Director feels are necessary to further the goals of the site plan review process; and

14. For a major site plan review of projects in a historic district or involving a building or structure identified in the City’s Historic Resources Survey, the Design Review Committee may recommend conditions of approval relating to architectural design in accordance with Section 17.08.020.D.

SECTION XIV:

Section 17.10.070.B of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Design Review – When Design Review is Required,” is hereby amended in its entirety to read as follows:

B. When Design Review is Required. Design review is required for all projects listed below:

~~1. Development projects requiring any Planning Commission or City Council approval;~~

~~21. Any projects requiring major site plan review;~~

~~32. Signs as specified in Chapter 17.36;~~

~~43. All projects within Old Towne or other historic districts or involving a building or structure identified in the city’s Historic Resources Survey as established, except where otherwise exempted by adopted design standards and/or adopted specific plan(s);~~

~~54. External remodeling of commercial, industrial, institutional and large scale multiple family developments, except where otherwise exempted by City codes, including adopted design standards and/or adopted specific plans(s) including:~~

~~a. Facade renovation of the majority of a multi-family residential complex, multi-tenant commercial or industrial center, or institutional property.~~

~~b. Introduction of new structural architectural elements to the facade of individual in-line or freestanding pad tenants within a multi-tenant commercial or industrial center where such elements project more than twelve (12) inches from any exterior wall plane.~~

~~c. Projects that involve exterior remodeling of an individual freestanding commercial, industrial, or institutional building on an individual parcel that is not part of a larger center or campus, including changes in exterior building material, roof form, and window or door openings.~~

~~65. Projects subject to requiring Minor minor Site-site Plan-plan Review-review that also involve exterior remodeling of residential, commercial, industrial, and institutional development that is visible from the public right-of-way.~~

~~6. Infill residential development as specified in the Orange Infill Residential Design Guidelines.~~

SECTION XV:

Section 17.10.070.C of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Design Review – Initiation and Application,” is hereby amended in its entirety to read as follows:

C. Initiation and Application. Design review applications shall be filed in accordance with application and submittal requirements as determined by the ~~Design Review Committee~~City. Application materials may include site, building and landscape plans, photographs, colored

elevations and/or renderings and color and material boards. Submittal materials shall also include information pertaining to scale, massing, streetscape, landscaping and open space. This information must be of sufficient detail to allow the reviewing body to determine the compatibility of the change to the existing structure, area, or district and that the project meets established design standards and criteria. ~~In addition, to comply with provisions of the California Environmental Quality Act, most projects in historic districts will require an application for environmental review in accordance with Section 17.08.0~~Submittal materials shall also include information pertaining to scale, massing, streetscape, landscaping and open space.

SECTION XVI:

Section 17.10.070.D of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Design Review – Design Review Procedure and Criteria,” is hereby amended in part to read as follows:

D. Design Review Procedure and Criteria. The ~~Design Review Committee~~reviewing body shall make a recommendation or final determination as authorized by Section 17.08.020~~(D)~~ to approve, approve with conditions or deny a project ~~at a public meeting~~. In making such recommendation or determination, the ~~Committee~~reviewing body shall consider adopted design standards and guidelines (where applicable), the Secretary of the Interior's Standards and Guidelines for Rehabilitation (where applicable) and the following general criteria in making a project determination:

SECTION XVII:

Section 17.10.070.E of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Design Review – Administrative Design Review,” is hereby deleted in its entirety.

~~E. Administrative Design Review.~~

~~1. Purpose and Intent. The administrative design review process is established to allow for a simplified review process for specific types of new development, exterior building alterations, and sign modifications which the City anticipates will not adversely affect surrounding properties.~~

~~2. Actions Eligible for Administrative Design Review. The following types of projects are eligible for Administrative Design Review:~~

~~a. Projects subject to Minor Site Plan Review that also involve exterior remodeling of residential, commercial, industrial, and institutional development that is not visible from the public right-of-way.~~

~~b. Projects that involve exterior remodeling of an individual free-standing commercial, industrial, or institutional building on an individual parcel that is not part of a larger center or campus, including changes in exterior building material, roof form, and window or door openings.~~

~~c. Infill residential development as specified in the City of Orange Infill Residential Design Guidelines.~~

~~d. Modifications to existing sign programs that involve changes in color, font style, height, width, method of illumination or sign area that are otherwise in compliance with the provisions of Section 17.36.~~

~~3. Initiation and Application. Applications for administrative design review shall be filed in accordance with submittal requirements as determined by the Community Development Director. Additional information may be requested from an applicant to allow for thorough design review of a project.~~

~~4. Procedure and Criteria. The Community Development Director, pursuant to Section 17.08.020, shall be responsible for administrative design review. Once an application for administrative design review has been deemed complete, the Community Development Director shall consider and approve, deny or refer the project to the Design Review Committee. In making such determination, the Community Development Director shall consider adopted design standards and guidelines where applicable, the general criteria set forth in Section 17.10.070.D, and the findings required in subsections 17.10.070.G.3 and 4. Appeals of decisions by the Community Development Director shall be made in accordance with the City appeal procedures set forth in Section 17.08.050. Notification of administrative design review action shall be posted at the property in a location clearly visible from the public right of way for the duration of the appeal period.~~

SECTION XVIII:

Section 17.10.070.G of the Orange Municipal Code, “Zoning – Specific Administrative Procedures – Design Review – Findings Required,” is hereby amended in its entirety to read as follows:

~~GF. Findings Required. The reviewing body shall make a findings that the for all projects based upon design criteria stated above. A specific finding shall be made for projects as follows:~~

~~1. In the Old Town Historic District, the proposed work conforms to the prescriptive standards and design criteria referenced and/or recommended by the Design Review Committee or other reviewing body for the project.~~

~~2. In any National Register Historic District, the proposed work complies with the Secretary of the Interior's standards and guidelines.~~

~~3. The project design upholds community aesthetics through the use of an internally consistent, integrated design theme and is consistent with all adopted specific plans, applicable design standards and their required findings.~~

~~4. For infill residential development, as specified in the City of Orange infill residential design guidelines, the new structure(s) or addition are compatible with the scale, massing, orientation, and articulation of the surrounding development and will preserve or enhance existing neighborhood character.~~

SECTION XIX:

Section 17.12.025.B.2 of the Orange Municipal Code, “Zoning – General Regulations Applicable to All Districts – Wireless Communications Facilities – Application Procedure,” is hereby amended in part to read as follows:

2. Building- or structure-mounted stealth antennas in A-1, RO, SG, PI, OP, CP, C1, C2, C3, CR, M1 and M2 districts outside of ~~the Old Towne Historic District~~ a historic district and not on a building or structure identified in the City’s Historic Resources Survey with completely

enclosed or screened support equipment may be approved administratively by Planning Division staff under the following circumstances:

SECTION XX:

Section 17.12.025.B.3 of the Orange Municipal Code, “Zoning – General Regulations Applicable to All Districts – Wireless Communications Facilities – Application Procedure,” is hereby amended in its entirety to read as follows:

3. ~~A recommendation from the Design Review Committee will be required for Buildingbuilding- or structure-mounted stealth antennas located within the Old Towne Historic Distrieta historic district or involving a building or structure identified in the City’s Historic Resources Survey, or those in nonresidential districts outside of the Historic District determined by Planning Division staff not to be adequately integrated or architecturally compatible with the existing structure, must obtain approval from the Design Review Committee.~~

SECTION XXI:

Section 17.12.025.B.5 of the Orange Municipal Code, “Zoning – General Regulations Applicable to All Districts – Wireless Communications Facilities – Application Procedure,” is hereby amended in its entirety to read as follows:

5. Any owner of a wireless communication facility and any person or entity leasing property for a wireless communication facility shall provide written notification to the ~~City Community Development Director~~ of the discontinuance of the use of a wireless communication facility for wireless communication purposes for any period longer than thirty (30) days. The notice shall state the date the use was discontinued ~~and shall be addressed to City of Orange, Community Development Director, 300 East Chapman Avenue, Orange, CA 92866~~ and shall be ~~placed in the United States mailprovided~~ within thirty-one (31) days of such discontinuance. ~~This requirement applies to all wireless communication facilities and shall appear as a condition in any conditional use permits granted for a wireless communication facility.~~

SECTION XXII:

Section 17.12.025.B.7 of the Orange Municipal Code, “Zoning – General Regulations Applicable to All Districts – Wireless Communications Facilities – Application Procedure,” is hereby amended in its entirety to read as follows:

7. Ground-mounted stealth facilities outside of ~~the Old Towne Historic Distrieta historic district~~ and not on a building or structure identified in the City’s Historic Resources Survey are permitted in all A₁, RO, SG, PC, residential, commercial, industrial, and public institutional zones subject to minor site plan review provided that the installation conforms to the criteria specified in subsections C and D of this section.

SECTION XXIII:

Section 17.12.025.B.9.b of the Orange Municipal Code, “Zoning – General Regulations Applicable to All Districts – Wireless Communications Facilities – Application Procedure,” is hereby amended in its entirety to read as follows:

b. Ground-mounted stealth and all nonstealth facilities located within ~~the Old Towne Historic District~~ a historic district or involving a building or structure identified in the City’s Historic Resources Survey.

SECTION XXIV:

The Wireless Communication Facility Review Matrix in Section 17.12.025.B of the Orange Municipal Code, “Zoning – General Regulations Applicable to All Districts – Wireless Communications Facilities – Application Procedure,” is hereby amended in its entirety to read as follows:

Wireless Communication Facility Review Matrix

Zone	Stealth (Building-Mounted)	Stealth (Ground-Mounted)	Nonstealth	Co-Located (Stealth)	Co-Located (Nonstealth)
Old Towne Historic District <u>Any Historic District or Historic Building/Structure</u>	DRC ¹	DRC/CUP	DRC/CUP ₃	SPR/DRC	DRC/CUP
Residential Districts per Chapter 17.14 and Planned Community District (residential use) per Chapter 17.26	SPR ²	SPR ²	-	SPR ²	SPR/ DRC
Commercial Districts per Chapter 17.18	Staff ¹	SPR	DRC /CUP	SPR	SPR/ DRC
Industrial Districts per Chapter 17.20	Staff ¹	Staff ¹	SPR/ DRC	Staff ¹	SPR
Public Institution District per Chapter 17.24	Staff ¹	SPR	DRC /CUP	SPR	SPR
A1, RO, SG, and PC (nonresidential use)	Staff ¹	SPR	DRC /CUP	SPR	SPR

¹. Minor site plan review may be required depending on the location of any support equipment.

². CDD may approve facilities on institutional or quasi-institutional sites.

³. Nonstealth facilities are not permitted on residentially zoned property in ~~the Old Towne Historic District~~ a historic district or on a building or structure identified in the City’s Historic Resources Survey.

CDD = Community Development Director

CUP = Conditional Use Permit

DRC = Design Review Committee

SPR = Minor Site Plan Review

- = Not Permitted

SECTION XXV:

Section 17.13.040.II.9 of the Orange Municipal Code, “Zoning – Master Land Use Table – Special Use Regulations – Homeless Shelter – Design Review Required,” is hereby amended in its entirety to read as follows:

9. Design Review Required. Design review is required if the project meets the criteria established in Section 17.10.070. ~~DRC's~~ The reviewing body's discretion in requiring conditions of approval and approving homeless shelters is limited to ensuring compliance with applicable design-related standards and guidelines.

SECTION XXVI:

Section 17.13.050.Z.12 of the Orange Municipal Code, “Zoning – Master Land Use Table – Conditional Use Regulations – Hot Dog Vending Carts,” is hereby deleted in its entirety.

~~12.—Decision of the Design Review Committee shall be received prior to public hearing for the conditional use permit.~~

SECTION XXVII:

Section 17.36.060.A.1 of the Orange Municipal Code, “Zoning – Sign Regulations – Signs General – Sign Program – Multitenant Buildings,” is hereby amended in part to read as follows:

1. Multitenant Buildings. A sign program for all multitenant buildings shall be required to ensure proper design of signage and adequate identification of building tenants. Such programs shall provide for consistency in the size, color and placement of signs within a property and shall be approved by the ~~Design Review Committee~~Community Development Director.

SECTION XXVIII:

Section 17.36.060.A.3 of the Orange Municipal Code, “Zoning – Sign Regulations – Signs General – Sign Program – Mixed Use Zones and Major Commercial Centers,” is hereby amended in part to read as follows:

3. Mixed Use Zones and Major Commercial Centers. Sign programs for major commercial centers on sites which are located in the C-TR, C-R, C-2 or C-3 zones and are larger than twenty-five (25) acres, and for mixed use, multi-family residential, or multi-tenant commercial uses in the OTMU, NMU and UMU zones, regardless of the size of the site may include criteria that differ from the limitations contained in this chapter. Sign programs for major commercial centers are subject to the review and approval of a conditional use permit by the Planning Commission. Sign programs in mixed use zones are subject to review and approval by the ~~Design Review Committee~~Community Development Director. Sign programs shall be reviewed based on the following criteria:

SECTION XXIX:

Section 17.36.060.A.3.k of the Orange Municipal Code, “Zoning – Sign Regulations – Signs General – Sign Program – Mixed Use Zones and Major Commercial Centers,” is hereby amended in its entirety to read as follows:

k. Any sign program is subject to initial review and recommendation by ~~Design Review Committee (DRC)~~the Community Development Director. Sign applications for individual tenants will be subject to final approval by ~~DRC~~the Director unless the sign program is specific in describing the height, width and design components of signs for each tenant space.

SECTION XXX:

Section 17.36.150.I of the Orange Municipal Code, “Zoning – Sign Regulations – Special Purpose Sign Regulations – Creative Signs,” is hereby amended in part to read as follows:

I. Creative Signs. Creative signs are allowed in the UMU zone. The intention of these provisions is to encourage signs of unique design that exhibit a high degree of imagination, inventiveness, spirit and thoughtfulness. Creatively designed signs should make a positive visual contribution to the overall image of the City, while mitigating the impacts of large, obtrusive or unusually designed signs. Creative signs may be allowed in addition to other project identification signs allowed by this ~~Chapter~~chapter subject to approval of a sign program. Creative signs, either on their own or as part of a sign program in combination with other project signage, shall be reviewed by the ~~Design Review Committee~~Community Development Director and approved by the Planning Commission. Creative signs located in a historic district shall also be reviewed by the Design Review Committee prior to Planning Commission approval. Review shall be subject to the following criteria:

SECTION XXXI:

Section 17.36.150.J of the Orange Municipal Code, “Zoning – Sign Regulations – Special Purpose Sign Regulations – Murals,” is hereby amended in part to read as follows:

J. Murals. Murals are allowed in the OTMU, NMU and UMU zones. Murals should make a positive visual contribution to the overall image of the City and may be allowed in addition to other project identification signs allowed by this ~~Chapter~~chapter. Murals, either on their own or as part of a sign program in combination with other project signage, shall be reviewed by the ~~Design Review Committee~~Community Development Director and approved by the Planning Commission. Murals located in a historic district shall also be reviewed by the Design Review Committee prior to Planning Commission approval. Review shall subject to the following criteria:

SECTION XXXII:

If any section, subdivision, paragraph, sentence, clause or phrase of this Ordinance is for any reason held to be invalid or unconstitutional, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council hereby declares that it would have passed this Ordinance, and each section, subdivision, paragraph, sentence, clause and phrase thereof,

irrespective of the fact that any one (or more) section, subdivision, paragraph, sentence, clause or phrase had been declared invalid or unconstitutional.

SECTION XXXIII:

The City Clerk is hereby directed to certify the adoption of this Ordinance and cause a summary of the same to be published as required by law. This Ordinance shall take effect thirty (30) days from the date of adoption.

ADOPTED this _____ day of _____, 2020.

Mark A. Murphy, Mayor, City of Orange

ATTEST:

Pamela Coleman, City Clerk, City of Orange

STATE OF CALIFORNIA)
COUNTY OF ORANGE)
CITY OF ORANGE)

I, PAMELA COLEMAN, City Clerk of the City of Orange, California, do hereby certify that the foregoing Ordinance was introduced at the regular meeting of the City Council held on the ___ day of _____, 2020, and thereafter at the regular meeting of said City Council duly held on the ___ day of _____, 2020 was duly passed and adopted by the following vote, to wit:

AYES: COUNCILMEMBERS:
NOES: COUNCILMEMBERS:
ABSENT: COUNCILMEMBERS:
ABSTAIN: COUNCILMEMBERS:

Pamela Coleman, City Clerk, City of Orange

From: paulabb@juno.com
Sent: Monday, August 17, 2020 4:05 PM
To: PCpubliccomment
Subject: Fw: DRC comments

Dear Chairman Simpson and Commissioners,

I am in support of staff recommendation related to item 3.3 An Ordinance amending sections of Title 12, Title 16, and Title 17 of the Orange Municipal Code, related to the Design Review Committee.

As a active member of the Orange community and a Board Member of Orange Senior Housing, I believe these amendments will provide for necessary streamlining of the development process in our city. DRC is a valuable asset for the protection of historic preservation. However, the DRC is too often a duplicative processor, adding more time, effort and financial resources to those trying to do business in our city.

The Planning Commission and Director of Community Development are the appropriate bodies in which to place the planning and zoning review for the City of Orange. Please approve the item before you.

Paul Abbondante
Treasurer
Orange Senior Housing

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From: Gary Frazier <acaciagary@aol.com>
Sent: Monday, August 17, 2020 3:05 PM
To: PCpubliccomment
Subject: Fwd: Support Item 3.3

Dear Chairman Simpson and Commissioners,

I am in support of staff recommendation related to item 3.3 "An Ordinance amending sections of Title 12, Title 16, and Title 17 of the Orange Municipal Code, related to the Design Review Committee".

As a active member of the Orange community, and the real estate development consultant to Orange-based developer Orange Senior Housing, I believe these amendments will provide for necessary streamlining of the development process in our city. DRC is a valuable asset for the protection of historic preservation. However, the DRC is too often a duplicative processor, adding more time, effort and financial resources to those trying to do business in our city.

The Planning Commission and Director of Community Development are the appropriate bodies in which to place the planning and zoning review for the City of Orange. Please approve the item before you.

Gary L Frazier dba Acacia Housing Advisors

6445 Joshua Tree Ave

Orange CA 92867-2460

Tele 714-282-8388