534 Struck Avenue Project

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION NO. 1870-20

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Community Development Department • Planning Division
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Date: September 2021

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1.0 INITIAL STUDY/MITIGATED NEGATIVE DECLARATION NO. 1870-20

Project Title:
534 Struck Avenue Project

Reference Application Numbers:
Conditional Use Permit No. 3137-21
Major Site Plan Review No. 1039-21
Design Review No. 5028-21
Environmental Review No. 1870-20

Lead Agency:
City of Orange
300 East Chapman Avenue
Orange, CA92866

Contact Person and Telephone No.:
Robert Garcia, Senior Planner
(714) 744-7231

Project Proponent and Address:
Prologis
17777 Center Court Drive North, Suite 100
Cerritos, CA 90703

Contact Person and Telephone No.:
Maggie Xu, Director of Project Management
(310) 338-3273

Project Location:
534 Struck Avenue
Orange, CA 92867

Existing General Plan Designation:
Light Industrial Max 1.0 Floor Area Ratio (FAR), 3-story height limit

Existing Zoning Classification:
Industrial Manufacturing (M-2)

INTRODUCTION

The purpose of this Initial Study/Mitigated Negative Declaration (IS/MND) is to identify any potential environmental impacts from the implementation of the 534 Struck Avenue Project ("Project") in the City of Orange, California. According to the California Environmental Quality Act ("CEQA") Guidelines Section 15367, the City of Orange ("City") is the Lead Agency in the preparation of this IS/MND and any additional documentation required for the Project. The City has discretionary authority over the Project.

The Project entails a proposed Conditional Use Permit No. 3137-21, Major Site Plan Review No. 1039-21, and Design Review No. 5028-21. Approval of Project entitlements would allow for redevelopment of the site with a 57,900 square foot (sf) 45-foot (ft) tall Truck Terminal that includes 52,900 sf of warehouse space and 5,000 sf of office space, and a 5,400-sf maintenance building (referred to as the "Project"). The Project would provide 59 standard automobile parking stalls, 2 standard accessible parking stall, 1 12ft by 18 ft accessible parking stall, and 188 trailer parking stalls.

The redevelopment would require the demolition of the existing, 40,000 sf manufacturing facility, associated parking, and removal of an unused portion of the existing BNSF Railroad spur located on the east side of the site. Additionally, the Project would remove approximately 315 linear feet of on-street parking along Struck Avenue.

The remainder of this section provides a description of the Project's location and characteristics. Section 2 of this IS/MND includes an environmental checklist giving an overview of the potential impacts that may result from Project implementation. Section 3 elaborates on the information contained in the environmental checklist within Section 2, along with justification for the responses provided in the environmental checklist.

EXISTING SETTING

Regional Setting:

The Project site is located at 534 Struck Avenue in the City of Orange, Orange County, California. As shown in, Figure 1, *Regional Location Map*, the City of Orange is in the north-central portion of Orange County. The City of Anaheim borders the City to the north and northwest. The City of Garden Grove borders the west and the cities of Santa Ana and Tustin, and unincorporated Orange County border the City to the east and south. Interstate 5 (I-5) is located approximately 2.0 miles southwest of the Project site and State Route 57 (SR-57) is located approximately 1.26 to the west. Regional access to the site is provided by SR-57 via Katella Avenue located approximately 1.26 miles west.

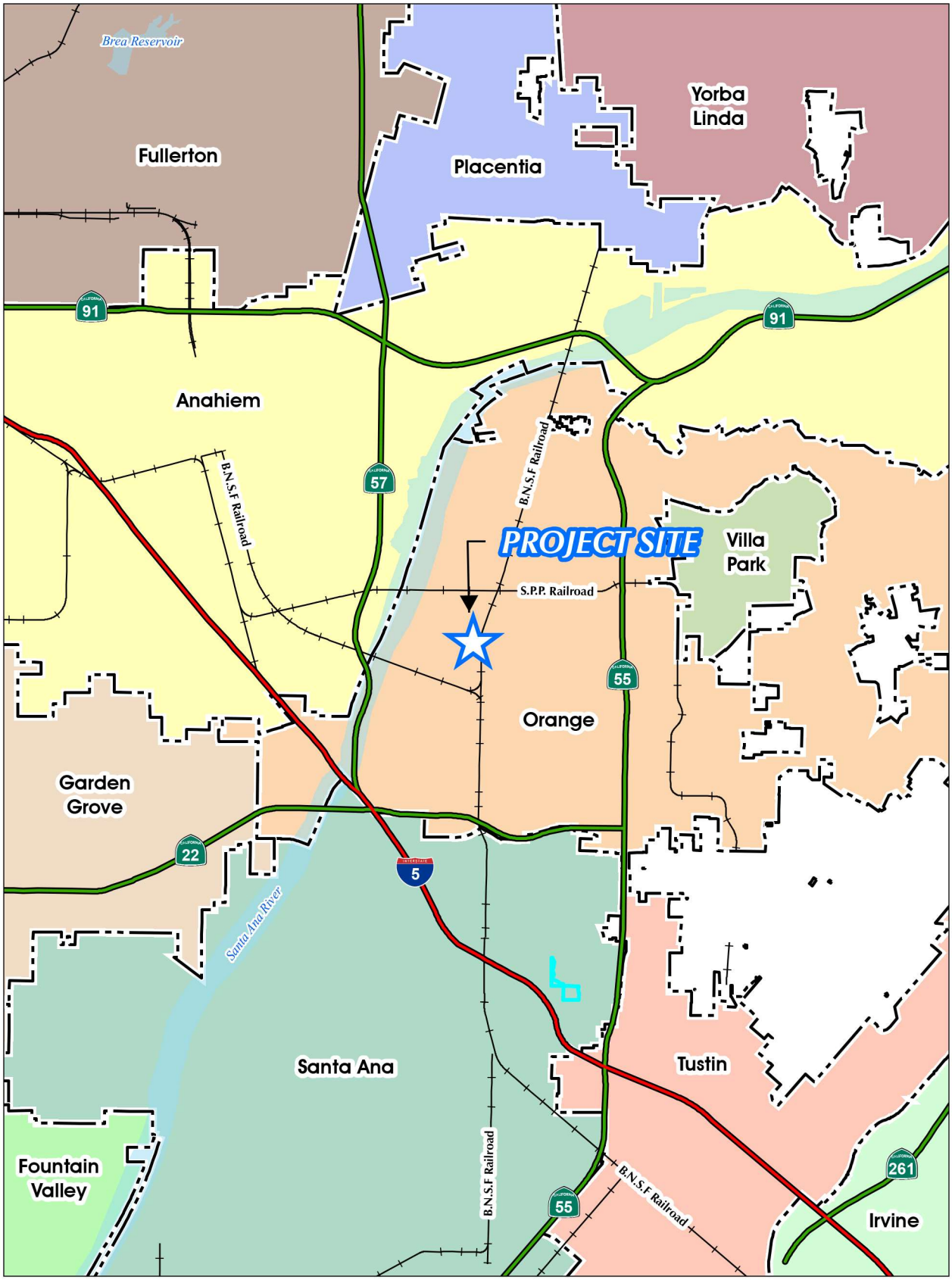
Local Setting:

As shown in Figure 2, *Local Vicinity Map*, the approximate 9.94-acre Project site (Assessor Parcel Number [APN] 375-331-04) is generally located north of Collins Avenue, east of Batavia Street, south of Struck Avenue, and west of the Burlington Northern & Santa Fe (BNSF) Railroad.

Existing Site Conditions:

Until the end of 2020 the site was occupied by Nursery Supplies, Inc., a manufacturer of plastic nursery planting pots. Site improvements consist of an approximate 40,000 square-foot concrete tilt-up building, and parking, as shown in Figure 3, *Existing Site Plan*. The Project site contains ornamental landscaping along the site's frontage at Struck Avenue.

The site is accessed via three two-way driveways along Struck Avenue. Additionally, there is a portion of the BNSF Railroad track located in eastern portion of the Project site. Nursery Supplies Inc., did not utilize this portion of the BNSF Railroad track; Nursery Supplies Inc. utilized the larger BNSF Railroad track located east of the on-site railroad track.

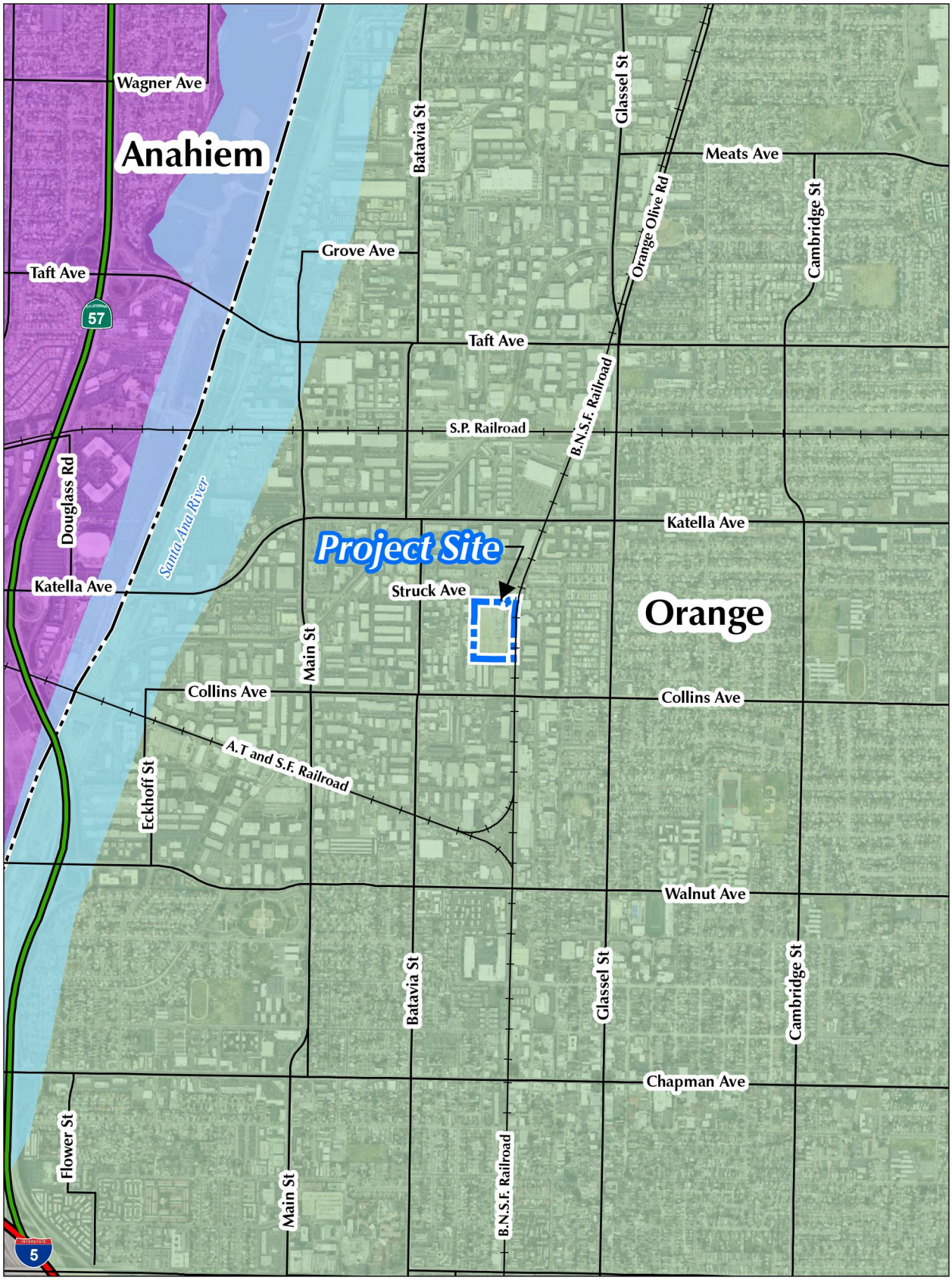


Source(s): Esri, OC Landbase (2019)

Figure 1

0 0.5 1 2 Miles

REGIONAL LOCATION MAP

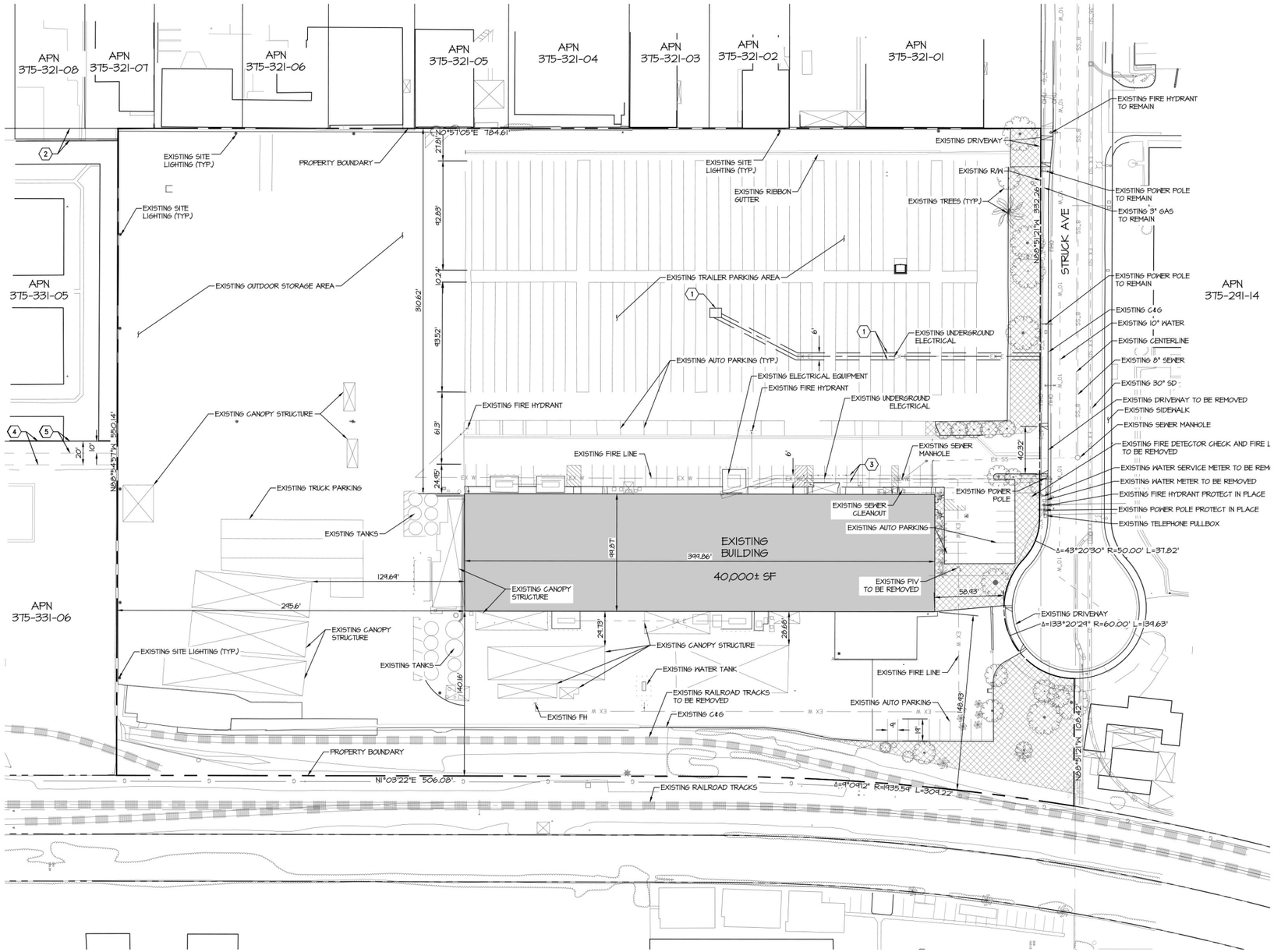


Source(s): Nearmap Imagery (2021), OC Landbase (2019)

Figure 2

0 500 1,000 2,000 Feet

LOCAL VICINITY MAP



EASEMENT TABLE

1. AN EASEMENT IN FAVOR OF SOUTHERN CALIFORNIA EDISON COMPANY FOR UNDERGROUND ELECTRICAL SUPPLY SYSTEMS AND COMMUNICATION SYSTEMS AND INCIDENTAL PURPOSES, RECORDED FEBRUARY 04, 1975 AS INSTRUMENT NO 1873, IN BOOK 11335, PAGE 31 OF OFFICIAL RECORDS. TO BE QUITCLAIMED.

2. AN EASEMENT IN FAVOR OF PLASTIC AND REALTY PROPERTIES COMPANY FOR PIPELINES, MAINS AND CONDUITS AND INCIDENTAL PURPOSES, RECORDED NOVEMBER 15, 1974 AS INSTRUMENT NO. 1304, IN BOOK 11288, PAGE 672 OF OFFICIAL RECORDS.

3. AN EASEMENT IN FAVOR OF SOUTHERN CALIFORNIA EDISON COMPANY FOR UNDERGROUND ELECTRICAL SUPPLY SYSTEMS AND COMMUNICATION SYSTEMS AND INCIDENTAL PURPOSES, RECORDED APRIL 02, 1985 AS INSTRUMENT NO. 1985-115499 OF OFFICIAL RECORDS. TO BE QUITCLAIMED.

4. A NON-EXCLUSIVE EASEMENT FOR INGRESS AND EGRESS ON AND OVER THE WESTERLY 20 FEET OF PARCEL 2 OF PARCEL MAP NO. 84-757, IN THE CITY OF ORANGE AS SHOWN ON A MAP FILED IN BOOK 194, PAGES 5 AND 6 OF PARCEL MAPS, AS SET FORTH IN THAT CERTAIN DEED AND GRANT OF EASEMENT RECORDED APRIL 05, 1985 AS INSTRUMENT NO. 85-121284 OF OFFICIAL RECORDS OF THE COUNTY OF ORANGE

5. A NON-EXCLUSIVE EASEMENT FOR THE PLACEMENT AND INSTALLATION OF UTILITIES ON, IN AND OVER THE WESTERLY 10 FEET OF PARCEL 2 OF PARCEL MAP 84-757, IN THE CITY OF ORANGE AS SHOWN ON A MAP FILED IN BOOK 194, PAGES 5 AND 6 OF PARCEL MAPS, AS SET FORTH IN THAT CERTAIN DEED AND GRANT OF EASEMENT RECORDED APRIL 05, 1985 AS INSTRUMENT NO. 85-121284 OF OFFICIAL RECORDS OF THE COUNTY OF ORANGE.

LEGEND

EXISTING LANDSCAPED AREA

NOTE:

EXISTING BUILDING, SURROUNDING ON-SITE IMPROVEMENTS, AND UNDERGROUND UTILITES TO BE DEMOLISHED.

Source(s): Albert A. Webb Associates (08-04-2021)

Figure 3

Not to Scale

EXISTING SITE PLAN

1-5

General Plan:

The Project site is designated Light Industrial in the City of Orange General Plan. The Light Industrial designation allows for the manufacturing, processing, and distribution of goods. Wholesale activities associated with industrial operations, as well as small-scale, support retail, service commercial, and office use may also be established in areas with ready access to major circulation routes. A 3-story building height limit and maximum floor area ratio of 1.0 applies within the Light Industrial designation. (Orange, 2015a)

Zoning:

According to the City of Orange Zoning Map, the site is zoned as Industrial Manufacturing (M-2) (Orange, 2016). The M-2 zone intends to provide the continuation and development of heavy manufacturing industries in a location where they are compatible with and will not adversely impact adjacent land uses. This zone classification implements the Light Industrial General Plan land use designation.

Surrounding Land Uses:

The surrounding properties possess an urban and industrial character like the Project site. Surrounding land uses are as follows:

North:

The property to the north of the Project site, on the opposite side of Struck Avenue, is designated for Public Facility uses and includes the City of Orange Public Works Department and Mary's Kitchen, a social services organization. Additionally, a future residential development project is proposed on the property immediately north of Mary's Kitchen. At the time this IS/MND was prepared, the proposed residential project was not under construction.

East:

The property to the east of the Project site, on the opposite side of the BNSF Railroad, is designated for industrial and light industrial uses. This area contains industrial buildings and a storage yard containing various vehicles and storage facilities.

South/West:

The properties to the immediate south and west are designated for light industrial uses, and include several industrial and commercial businesses.

The Project Applicant has consulted with the surrounding land owners and users and at this time none of the adjacent land owners and users have expressed any concern with respect to the proposed Project.

PROJECT DESCRIPTION

The purpose of the Project is to implement the City's vision of redeveloping underutilized parcels with intensified uses, such as truck terminal, warehousing, light industrial, manufacturing, and fulfillment center. The Project involves the demolition of the existing 40,000 square foot manufacturing facility, see Figure 3, and redevelopment of the Project site. Redevelopment of the Project site would also include the removal of the existing, unused BNSF Railroad spur located on the east side of the site.

The Project entails a proposed Conditional Use Permit No. 3137-21, Major Site Plan Review No. 1039-21, and Design Review No. 5028-21. The Project Applicant is proposing to redevelop the site with a 57,900 sf Truck Terminal, that includes 52,900 sf of warehouse space and 5,000 sf of office space, and a 5,400-sf maintenance building as shown in Figure 4, *Truck Terminal Site Plan* The proposed building would be built up to 45 ft and include 84 dock doors (cross-dock configuration). The Project would provide automobile parking stalls in excess of the requirements (47 automobile parking stalls) of the Orange Municipal Code (OMC). The Project would provide a total of 62 automobile parking stalls consisting of 59 standard parking stalls, 2 standard accessible parking stalls, and 1 12 ft by 18 ft accessible parking stall. Additionally, the Project would provide 188 trailer parking stalls. Ornamental landscaping, lighting, and walls would be installed per compliance with the OMC. The building would operate 24 hours a day, 7 days a week. It is anticipated that the facility would employ a total of 150 – 200 employees.

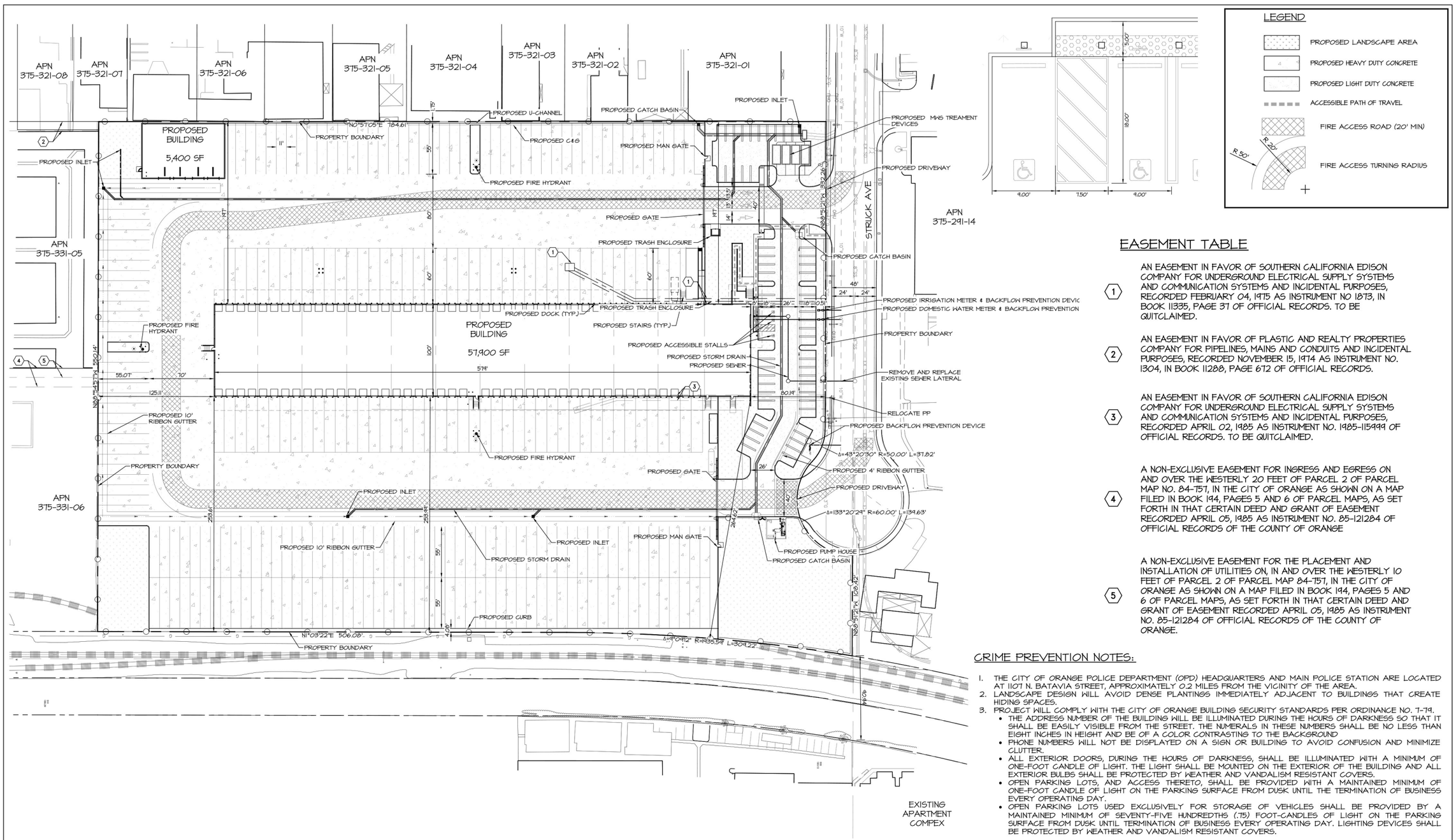
Architecture and Design Features

Development of the Truck Terminal would replace the existing building with a new modern building elevation. As shown in Figure 5, *Architectural Elevation* , the proposed building would consist of concrete tilt-up panels. The north elevation facing Struck Avenue would feature a neutral color palette consisting of grays and whites, dark green accents, and green reflective glazing. The east and west elevations consist of 84 dock doors (cross-dock configuration). The 45-foot-tall building would be setback 10 feet from Struck Avenue. A maintenance building at the southwest portion of the property would be constructed behind the facility, out of sight from public views. The final design and architectural style of the proposed buildings are subject to review and approval by the City's Design Review Committee.

Site Access

As stated, vehicular access to the site is currently provided via three two-way driveways in the northeast portion of the site along Struck Avenue.

Under the Project, vehicular access to the Project site would be provided via two driveways along the site's northern border along Struck Avenue. Emergency vehicle circulation will be provided from all site vehicular access areas.



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CRIME PREVENTION NOTES:

1. THE CITY OF ORANGE POLICE DEPARTMENT (OPD) HEADQUARTERS AND MAIN POLICE STATION ARE LOCATED AT 1107 N. BATAVIA STREET, APPROXIMATELY 0.2 MILES FROM THE VICINITY OF THE AREA.
2. LANDSCAPE DESIGN WILL AVOID DENSE PLANTINGS IMMEDIATELY ADJACENT TO BUILDINGS THAT CREATE HIDING SPACES.
3. PROJECT WILL COMPLY WITH THE CITY OF ORANGE BUILDING SECURITY STANDARDS PER ORDINANCE NO. 7-79.
   - THE ADDRESS NUMBER OF THE BUILDING WILL BE ILLUMINATED DURING THE HOURS OF DARKNESS SO THAT IT SHALL BE EASILY VISIBLE FROM THE STREET. THE NUMERALS IN THESE NUMBERS SHALL BE NO LESS THAN EIGHT INCHES IN HEIGHT AND BE OF A COLOR CONTRASTING TO THE BACKGROUND
   - PHONE NUMBERS WILL NOT BE DISPLAYED ON A SIGN OR BUILDING TO AVOID CONFUSION AND MINIMIZE CLUTTER.
   - ALL EXTERIOR DOORS, DURING THE HOURS OF DARKNESS, SHALL BE ILLUMINATED WITH A MINIMUM OF ONE-FOOT CANDLE OF LIGHT. THE LIGHT SHALL BE MOUNTED ON THE EXTERIOR OF THE BUILDING AND ALL EXTERIOR BULBS SHALL BE PROTECTED BY WEATHER AND VANDALISM RESISTANT COVERS.
   - OPEN PARKING LOTS, AND ACCESS THERETO, SHALL BE PROVIDED WITH A MAINTAINED MINIMUM OF ONE-FOOT CANDLE OF LIGHT ON THE PARKING SURFACE FROM DUSK UNTIL THE TERMINATION OF BUSINESS EVERY OPERATING DAY.
   - OPEN PARKING LOTS USED EXCLUSIVELY FOR STORAGE OF VEHICLES SHALL BE PROVIDED BY A MAINTAINED MINIMUM OF SEVENTY-FIVE HUNDREDTHS (.75) FOOT-CANDLES OF LIGHT ON THE PARKING SURFACE FROM DUSK UNTIL TERMINATION OF BUSINESS EVERY OPERATING DAY. LIGHTING DEVICES SHALL BE PROTECTED BY WEATHER AND VANDALISM RESISTANT COVERS.

Source(s): Albert A. Webb Associates (08-04-2021)

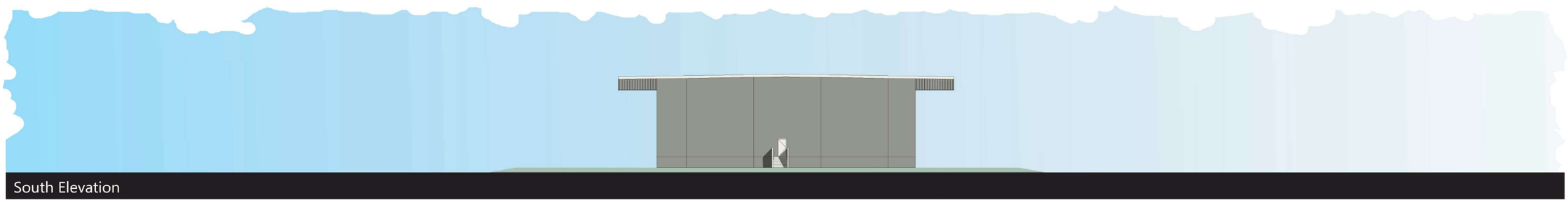
Figure 4

Not to Scale

TRUCK TERMINAL SITE PLAN

North Elevation

West Elevation



South Elevation

East Elevation

Source(s): HPA (07-13-2021)

Figure 5

Not to Scale

ARCHITECTURAL ELEVATION

Truck Trailer Routes

The proposed building would generate truck-trailer trips, and trucks would be required to utilize City-designated truck routes to and from the Project site. Truck-trailers would travel to and from the site from the SR-57 and Katella Avenue. Truck-trailer travel would be limited to:

- Truck-trailers exiting the site would travel west on Struck and turn left on Katella Avenue to access the SR-57. This would require minor median improvements to Katella Avenue west of Struck Avenue. Truck-trailers exiting the site could also travel west on Struck, turn left onto southbound Batavia Street to ultimately access the SR-57.

- Truck-trailers entering the site would exit the SR-57 at Katella eastbound, turn right at Batavia Street southbound, and turn left onto Struck Avenue eastbound.

- Truck-trailers would be prohibited from turning right onto Struck Avenue eastbound from Batavia Street, and from traveling eastbound on Katella Avenue and turning right onto Struck Avenue eastbound.

The implementation of the Project would not require widening of surrounding roadways to accommodate truck-trailer traffic.

Parking

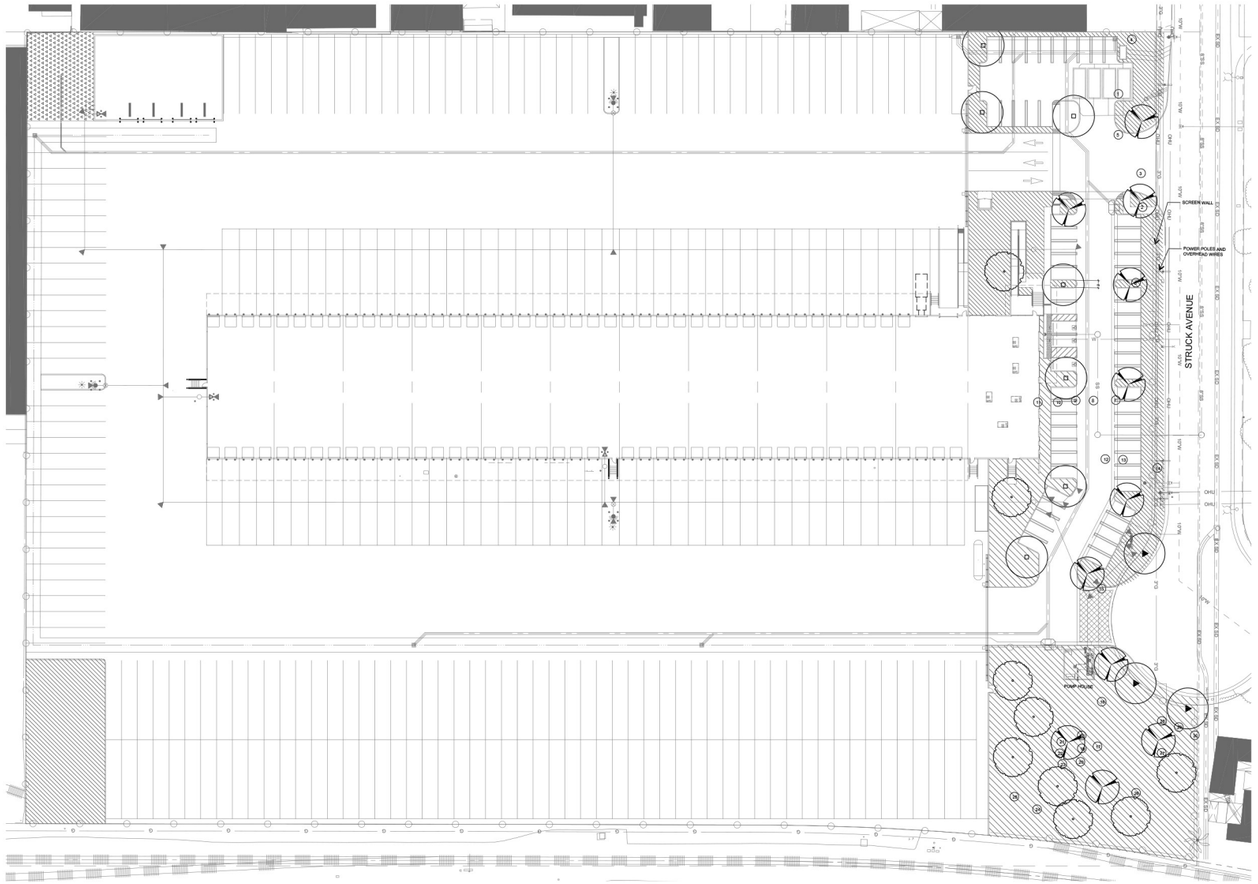
Under existing conditions, the Project site contains 70 vehicular parking stalls and 81 trailer parking stalls (a total of 151 parking stalls). The Project Applicant proposes to remove approximately 315 linear feet of on-street parking along Struck Avenue which equates to approximately 20 parking stalls (315 feet/16 feet).

According to the OMC, Chapter 17.34, *Off-Street Parking and Loading*, the Project is required to provide 47 parking stalls. The Project would construct 62 passenger car parking stalls (including 3 accessible parking spaces) and 188 trailer parking stalls (for a total of 250 parking stalls) on-site.

Landscaping, Lighting, and Walls

As depicted in Figure 6, *Conceptual Landscape Plan*, the Project Applicant will incorporate ornamental landscaping at the site's frontage along Struck Avenue. A comprehensive landscape plan will be provided for the Project, which includes a variety of new trees, shrubs, and groundcover. The Project would be required to comply with the landscape standards established in the OMC (Chapter 16.50, *Landscape Requirements*).

Exterior lighting would be installed on-site, as necessary, for safety and security. Decorative architectural lighting would also be installed to accent building entries as focal points throughout the site.



EXISTING TREES - all existing trees are to be removed due to proposed site conditions

#	Species	Trunk Diameter	Condition
1	Eucalyptus citriodora	3.5'	Healthy
2	Eucalyptus citriodora	3.5'	Healthy
3	Eucalyptus citriodora	3.5'	Healthy
4	Eucalyptus citriodora	3.5'	Healthy
5	Washingtonia robusta	40 bt	Healthy
6	Avacado	2'	Healthy
7	Cupaniopsis anacardioides	1.5'	Healthy
8	Cupaniopsis anacardioides	1.5'	Healthy
9	Cupaniopsis anacardioides	1.5'	Healthy
10	Cupaniopsis anacardioides	1.5'	Healthy
11	Cupaniopsis anacardioides	1.5'	Healthy
12	Cupaniopsis anacardioides	1.5'	Healthy
13	Cupaniopsis anacardioides	1.5'	Healthy
14	Eriobotrya japonica	1.5'	Healthy
15	Olea europaea	2.5'	Unhealthy
16	Fraxinus spp	1.5'	Healthy
17	Fraxinus spp	1.5'	Healthy
18-23	Archontophoenix cunninghamiana	15'	Healthy
24	Cupaniopsis anacardioides	1.5'	Healthy
25	Archontophoenix cunninghamiana	15'	Healthy
26	Saygrus romanzoffiana	15'	Healthy
27	Eucalyptus citriodora	3.5'	Healthy
28	Psidium guajava	10"	Healthy
29	Psidium guajava	10"	Healthy
39	Fraxinus spp	1.5'	Unhealthy

PLANTING LEGEND

TREES

SYMBOL	BOTANICAL/COMMON NAME	SIZE	QTY	WUCOLS	REMARKS
	Cinnamomum camphora Camphor Tree	24" Box	9	M	Standard
	Pinus canariensis Canary Island Pine	24" Box	3	L	Standard
	Podocarpus gracilior Fern Pine	24" Box	7	L	Standard
	Pyrus kawakami Ornamental Pear	36" Box 24" Box	4 7	L	Standard

SHRUBS

SYMBOL	BOTANICAL/COMMON NAME	SIZE	WUCOLS	SPACING
	Acca sellowiana Pineapple Guava	5 Gal	L	3' OC
	Bougainvillea spp. Bougainvillea	5 Gal	L	3' OC
	Callistemon 'Little John' Dwarf Bottle Brush	5 Gal	L	3' OC
	Cistus 'Sunset Pink' Sunset Pink Rockrose	5 Gal	L	3' OC
	Elaeagnus pungens Silverberry	5 Gal	L	4' OC
	Ligustrum j. Texanum Texas Privet	5 Gal	M	3' OC
	Rhaphiolepis i. 'Springtime' Indian Hawthorn	5 Gal	L	3' OC
	Rosmarinus o. 'Tuscan Blue' Rosemary	5 Gal	L	3' OC
	Salvia greggii Autumn Sage	5 Gal	L	3' OC
	Salvia leucantha Mexican Sage	5 Gal	L	4' OC
	Westringia fruticosa Coast Rosemary	5 Gal	L	5' OC

SYMBOL	BOTANICAL/COMMON NAME	SIZE	WUCOLS	SPACING
	Agave 'Blue Flame' Blue Flame Agave	5 Gal	L	3' OC
	Agave 'Blue Glow Blue Glow Agave	5 Gal	L	3' OC
	Agave victoria-reginae Agave	5 Gal	L	3' OC
	Aloe striata Coral Aloe	1 Gal	L	2' OC
	Dasylerion wheeleri Desert Spoon	5 Gal	L	4' OC
	Echeveria 'Ruffles' Ruffles Echeveria	5 Gal	L	1' OC
	Hesperaloe parviflora Red Yucca	5 Gal	L	3' OC
	Phormium 'Bronze Baby' New Zealand Flax	5 Gal	L	3' OC

GROUNDCOVER

SYMBOL	BOTANICAL/COMMON NAME	SIZE	SPACING	WUCOLS
	Hemerocallis hybridus-Yellow Yellow Day Lily	1 Gal	24" O.C.	M
	Lonicera j. 'Halliana' Hall's Honeysuckle	1 Gal	48" O.C.	L
	Muhlenbergia capillaris Pink Muhly	1 Gal	36" O.C.	L
	Rosa 'Flower Carpet' -Red Red Flower Carpet Rose	1 Gal	30" O.C.	L
	Rosmarinus o. 'Huntington Carpet' Prostrate Rosemary	1 Gal	48" O.C.	L
	Sesleria autumnalis Moor Grass	1 Gal	18" O.C.	M
	Trachelopspermum jasminiodes Star Jasmine	1 Gal	24" O.C.	M

GENERAL NOTES

A LANDSCAPE PLAN FOR ALL PROJECTS THAT INVOLVE NEW CONSTRUCTION OR BUILDING ADDITIONS MUST BE SUBMITTED FOR REVIEW AND APPROVAL (FOR INDIVIDUAL SINGLE-FAMILY RESIDENTIAL PROJECTS, OVER 5,000 SQUARE FEET). IF YOUR PROJECT REQUIRES A WATER QUALITY MANAGEMENT PLAN (WQMP), PLEASE ENSURE YOUR LANDSCAPE ARCHITECT AND CIVIL ENGINEER COORDINATE PLANS. PLEASE CONTACT CITY'S SENIOR LANDSCAPE COORDINATOR IN THE COMMUNITY SERVICES DEPARTMENT AT (714) 532-6464 FOR FURTHER INFORMATION.
LANDSCAPE WAS INCLUDED TO CONTROL ACCESS TO GRAFFITI PRONE WALLS.
GRAFFITI RESISTANT SURFACES AND LANDSCAPING FOR EASY MAINTENANCE.
WATER DIVISION SHALL APPROVE THE TYPE AND LOCATION OF LANDSCAPING AND FIRE SERVICE (BACKFLOW PREVENTION) DEVICE FOR PROPOSED CITY SERVICES.
PRIOR TO CITY APPROVAL OF LANDSCAPE PLANS, THE APPLICANT SHALL REVIEW THE APPROVED WATER QUALITY MANAGEMENT PLAN AND ENSURE THE PROPOSED LANDSCAPE PLANS ARE CONSISTENT WITH THE PROJECT GRADING PLANS. THE PLANS MUST SHOW ANY PROPOSED STORM WATER TREATMENT BEST MANAGEMENT PRACTICES SUCH AS BIORETENTION PLANTERS, DRYWELLS, PERMEABLE PAVERS, OR ANY OTHER PROPOSED SURFACE WATER QUALITY BMPS.

ALL ABOVE GROUND EQUIPMENT IS TO BE SUFFICIENTLY SCREENED BY PLANT MATERIAL.

ALL PARKING VISIBLE TO PUBLIC SHALL BE SCREENED WITH 3' HIGH 5 GALLON SHRUBS AT 3' OC.

Source(s): Hunter Landscape (08-04-2021)

Not to Scale

Figure 6

CONCEPTUAL LANDSCAPE PLAN

The Project Applicant would install an approximately 8-foot-high tubular steel fencing along the site's perimeter to enclose the proposed building, parking area, truck court, and loading dock area. The fence would also serve as a safety precaution to protect visitors and/or employees on-site from vandalism and theft and from traversing the BNSF Railroad track immediately east of the site.

Construction and Phasing

The Project would be developed in one phase for a duration of 11 months. Project construction activities include, but are not limited to the following:

- Demolition of existing pavements
- Demolition of existing structures
- Grading and re-compaction of on-site soils
- Grading to include pavement forming and pouring
- Installation of new utility infrastructure to support the new building
- Building construction and architectural coating.
- Concrete paving of new parking areas
- Installation of new security perimeters

As shown in Figure 7, *Proposed Grading Plan,* approximately 3,799 cubic yards of imported soil is required to balance the site. To be conservative and for purposes of the analysis of construction-related impacts, approximately 1,000 cubic yards of soil export has been assumed. Soil haul is expected to take three days. Additionally, approximately 10,905 tons of concrete and asphalt will be crushed and reused onsite. Ground disturbance will involve approximately 20 feet in depth for the water quality BMPs in the northwest corner of the Project, 12 feet for utilities, and 5 feet in depth for the remainder of the Project.

Dry Utilities and Service Systems

Plans for utilities that would serve the Project would include the provision of electricity by Southern California Edison (SCE), telecommunications facilities including telephone and fiber-optic lines by AT&T, and solid waste by CR&R Waste and Recycling Services. All new dry utility infrastructure would be installed underground and within the Project site.

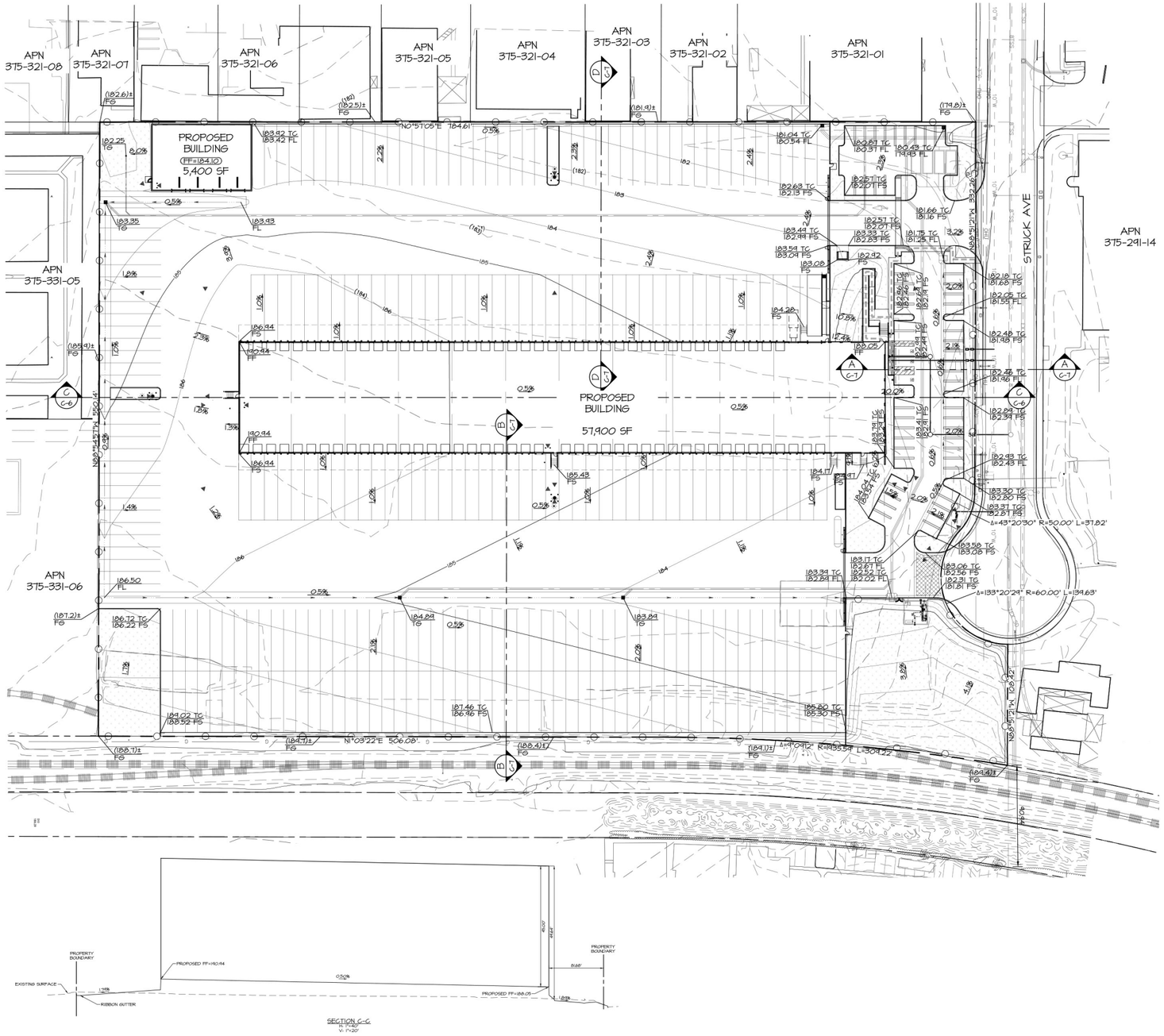
Infrastructure Improvements

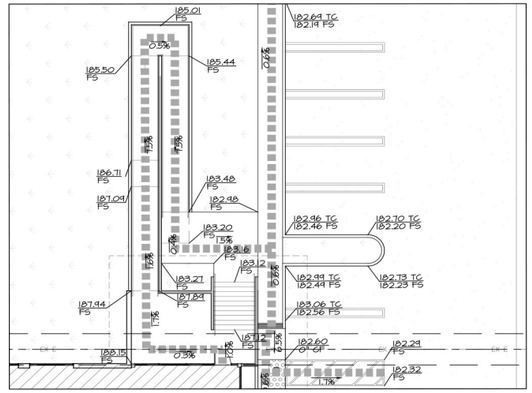
Water

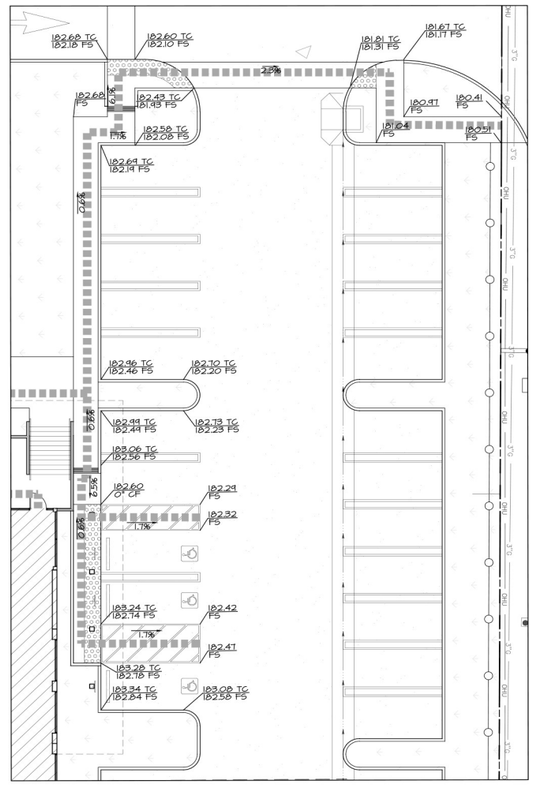
The City's Public Works Water Division provides potable water service to the Project site and would continue to do so for the Project. Potable water to the site is provided via internal water lines that connect to the existing public water 10-inch main along Struck Avenue.

Wastewater

The City's Public Works Department provides wastewater collection services to the existing manufacturing facility and would continue to do so for the Project. Wastewater collected by the







Source(s): Altber A. Webb Associates (08-04-2021)

Figure 7

Not to Scale

PROPOSED GRADING PLAN

1-13

City flows through a system of regional trunk lines to Reclamation Plant No. 1 (located within the City of Fountain Valley) and No.2 (located within the City of Huntington Beach) for treatment; the reclamation plants are owned and operated by the Orange County Sanitation District (OCSD).

The Project would include internal wastewater lines that connect to the existing public 8-inch sewer main along Struck Avenue that is operated by the City's Public Works Department. Proposed wastewater infrastructure improvements would entail trenching and exposing existing lines on-site for connection, and installing new lines, and a break-in connection to the existing mainline. No off-site sewer main construction or upsizing would be required to accommodate the Project. However, some construction may occur within Struck Avenue to make the necessary infrastructure connections. The sewer main within Struck Avenue would continue to be maintained by the City, and the proposed lateral connections and other on-site sewer lines would be maintained by the property owner.

Stormwater

Stormwater on site will emulate the existing drainage pattern and will flow from the south to the north and to the northwest corner. The Project will incorporate ribbon gutters along the proposed parking areas on both the east and west sides of the proposed building that will collect flows and deposit them into the Project's proposed on-site storm drain system. The proposed storm drain will deposit flows into the proposed outlet structure in the northwest corner of the site.

The Project also proposes biotreatment facilities to treat the site runoff. To ensure proper parking counts and drive aisle widths, the site shall implement Modular Wetland Systems to treat the full design flowrate, in compliance with the Low Impact Development (LID) best management practice (BMP) selection and sizing requirements (Webb, 2021a).

A detailed description of the proposed drainage system for the Project site is provided in the Project's Water Quality Management Plan (WQMP) (Appendix G.1) and Drainage Study (Appendix G.2).

Other Public Agencies Whose Approval is Required (Responsible or Trustee Agencies):

The City of Orange, as Lead Agency, has the discretionary authority over the Project. To Implement this Project, the Applicant would need to obtain the following permits/approval from the City:

- Adoption of the Initial Study/Mitigated Negative Declaration
- Adoption of the Mitigation Monitoring and Reporting Program
- Conditional Use Permit No. 3137-21
- Major Site Plan Review No. 1039-21
- Design Review No. 5028-21
- Environmental Review No. 1870-20
- Demolition permits for on-site structures and other improvements
- Grading and Building Permits to grade and construct the Project

The Project Applicant would need to obtain the following permits from other agencies:

- Orange County Sanitation District (OCFCD) Municipal Stormwater Permit
- South Coast Air Quality Management District – Construction-related permits (if applicable)

Scheduled Public Meetings or Hearings:

To be determined, separate noticing will be given for public hearings.

2.0 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.

- ☐ Aesthetics
- ☐ Agriculture & Forest Resources
- ☐ Air Quality
- ☒ Biological Resources
- ☒ Cultural Resources
- ☐ Energy
- ☒ Geology/Soils
- ☐ Greenhouse Gas Emissions
- ☒ Hazards & Hazardous Materials
- ☐ Hydrology/Water Quality
- ☐ Land Use/Planning
- ☐ Mineral Resources
- ☐ Noise
- ☐ Population/Housing
- ☐ Public Services
- ☐ Recreation
- ☐ Transportation
- ☒ Tribal Cultural Resources
- ☐ Utilities/Service Systems
- ☐ Wildfire
- ☒ 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. ☐

N. Morse
Signature

City of Orange
Lead Agency

Nicole Morse, Esq., Principal (on behalf of Robert Garcia)
Name, Title

September 20, 2021
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 processes, 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.

3.0 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?	☐	☐	☐	☒
(b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
(c)	In non-urbanized areas, 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?	☐	☐	☒	☐
(d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Impact Analysis

a) Have a substantial adverse effect on a scenic vista?

Significance Determination: No Impact

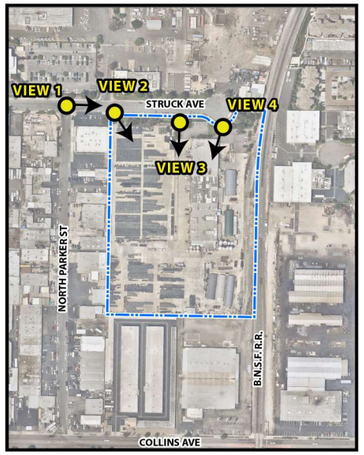
A significant impact would occur if a project were to introduce incompatible scenic elements within a field of view containing a scenic vista or substantially block views of a scenic vista. Viewsheds refer to the visual qualities of the geographical area that is defined by the horizon, topography, and other natural features that give an area its visual boundary and context, or by artificial developments that have become prominent visual components of an area.

According to the Natural Resources Element of the City's General Plan, portions of the City of Orange are characterized by scenic vistas that include hillsides, ridgelines, or open space areas that provide a unifying visual backdrop to the urban environment. The Project site is within the western portion of the City, where the topography is relatively flat, and very little open space exists. The Project site does not contain any scenic resources and there are no scenic vistas within proximity to the site (see Figure 8 through Figure 10). As shown, the Project area is within a highly urbanized industrial area. Implementation of the Project would not have an impact to a scenic vista.

Mitigation Measures: Mitigation measures are not required.

VIEW 1
North of the Project Site, along Struck Avenue, looking East

VIEW 2
Northwest corner of Project Site looking Southeast



KEY MAP

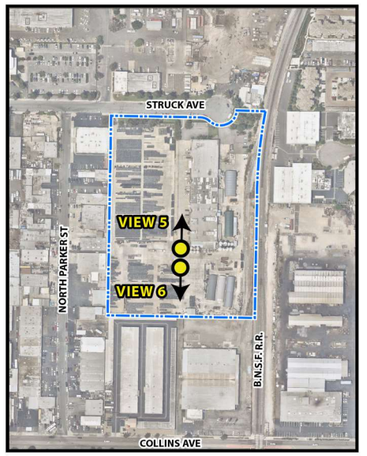
VIEW 3
North of the Project Site, along Struck Avenue, looking South

VIEW 4
North of the Project Site, along Struck Avenue, looking Southwest

Figure 8

Not to Scale

VIEWS OF THE PROJECT SITE



KEY MAP

VIEW 5
Center of Project Site looking North

VIEW 6
Center of Project Site looking South

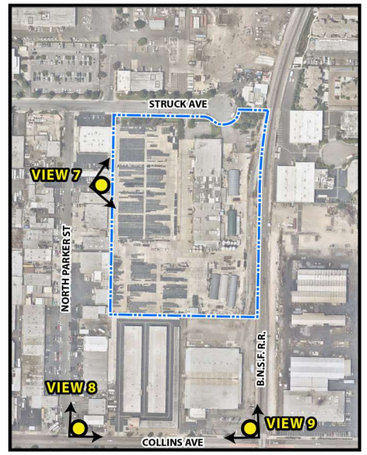
Figure 9

Not to Scale

VIEWS OF THE PROJECT SITE AND SURROUNDING AREA

VIEW 7

Western interior of Project Site looking East



KEY MAP

VIEW 8

The Parker/Collins Avenue Intersection looking Northeast

VIEW 9

The Collins Avenue/BNSF Railroad Track looking Northwest

Figure 10

Not to Scale

VIEWS OF THE SURROUNDING AREA

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Significance Determination: No Impact

Under existing conditions, the Project site does not contain any scenic resources such as, rock outcroppings, or historic buildings. The Project site contains street trees at the site's frontage along Struck Avenue. Implementation of the Project would result in the removal and replacement of street trees. The Project Applicant would be required to obtain a tree removal permit, per OMC Section 12.28.020 (*Permit-Required for Removal or Planting*).

Based on the California Department of Transportation (Caltrans) List of Eligible and Officially Designated State Scenic Highways, there are no designated or eligible State scenic highways located in proximity to the Project site (Caltrans, 2019). The nearest State designated scenic highway is a 4.2-mile portion of State Route 91 (SR-91) starting at State Route 55 (SR-55) to the city line of Anaheim located approximately 3.1 miles northeast (Google Earth, 2020). Implementation of the Project would not have the potential to substantially damage scenic resources within a State scenic highway corridor. No impacts would occur.

As shown in Figure NR-4, *Viewscape Corridors*, of the General Plan, the City identifies the visual corridors within the City limits. Figure NR-4 identifies the 4.2-mile portion of SR-91, Newport Boulevard from Crawford Canyon Road to Chapman Avenue, and Chapman Avenue to Santiago Canyon Road, a City designated scenic highway (Orange, 2015b). Due to site distance and topography, implementation of the Project would not have the potential to substantially damage scenic resources within City designated scenic corridors. No impacts would occur.

Mitigation Measures: Mitigation measures are not required.

c) In non-urbanized areas, 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?

Significance Determination: Less than Significant Impact.

As shown in Figure 8 through Figure 10, the Project site is within an urbanized area of the City. Because the Project is in an urban area, the potential impacts of the Project under this threshold are assessed based on whether the Project would conflict with applicable zoning and other regulations governing scenic quality. The Project is consistent with the City's General Plan and zoning designations for the site.

<u>City of Orange General Plan</u>

Table 1, *General Plan Consistency Analysis*, below discusses the Project's consistency with the General Plan goals related to scenic quality.

Table 1 General Plan Consistency Analysis

Goals and Policies	Project Consistency
Land Use Element	
Maximum Intensity • 1.0 Floor Area Ratio (FAR)	**Consistent.** The Project site is designated for Light Industrial uses. The Light Industrial land use designation allows for a maximum FAR of 1.0. As shown on the Project's site plans, the Project would have a maximum FAR of 0.75. Therefore, the Project would not exceed the maximum permitted FAR.
Height Limit • 3 Stories	**Consistent.** The proposed building would be single-story and constructed up to a height of 45 feet. The Project would not construct 3 stories and would therefore not exceed the permitted maximum height limit identified in the General Plan.
Policy 6.1: Ensure that new development is compatible with the style and design of established structures and the surrounding environment.	**Consistent.** The Project would redevelop the site with a modern building. The Project's proposed style and design would be compatible with the surrounding environment.

Based on the foregoing analysis, the Project would not conflict with the site's underlying zoning classification or other regulations governing scenic quality. Impacts would be less than significant.

City of Orange Municipal Code (OMC)

The Project site is zoned Industrial Manufacturing (M-2) and as such, the Project would be required to comply with the development standards established in OMC Chapter 17.20, *Industrial Districts*. The intent and purpose of Chapter 17.20 are to encourage industrial facilities and related uses while recognizing the potential for compatibility between uses through appropriate development and performance standards (Orange, 2020). Chapter 17.20 also intends to promote orderly growth and development through minimal performance standards, sustained property values, protected public safety and health, and further amenities to achieve an environment that is commensurate with prolonged future growth, development, and economic stability. Table 2, *Zoning Development Standards Consistency Analysis*, addresses the Project's consistency with applicable development standards outlined in the OMC.

Table 2 Zoning Development Standards Consistency Analysis

Applicable Development Standard	Project Consistency
Industrial Manufacturing (M-2) Zoning District	
Maximum Permitted Building Height • 45 feet	**Consistent.** The Project involves the redevelopment of the Project site with up to a 45-foot-tall building. The proposed building would not exceed the Zoning Development Standards' height limit of 45 ft. Accordingly, the Project's proposed building height would comply with the City's permitted height in the M-2 zone.
Development Setbacks • Exterior Front, Side, and Rear Yards o When adjacent to or across from an alley from a residential zone – 20 feet	**Consistent.** The Project site is located immediately south of Struck Avenue, a local street. The Project's closest setback to Struck Avenue will be approximately 80 feet. The Project site is bordered to the east, south, and west by separate parcels containing existing development. The

Applicable Development Standard	Project Consistency
○ When adjacent to an arterial street – 20 feet ○ When adjacent to a local street – 10 feet • Interior Side and Rear Yards ○ When adjacent to a separate parcel – 0 Feet	Project's interior side and rear setbacks will be greater than 0 feet.
Landscaping Requirements • Promote a comprehensive planning effort in which all design elements of a project complement each other and are compatible with their surroundings. In addition, landscape design must be suitable for the topography and coordinated with the preparation of the site grading plan.	**Consistent.** The Project would incorporate a Project-specific landscape plan, as shown in Figure 6, that is designed to be in accordance with the City's Landscape Ordinance. The Project's proposed landscaping would include drought tolerant trees, shrubs, and groundcover. Ornamental landscaping would be provided along the site's northern, eastern, and southern perimeter. Additionally, ornamental trees and shrubs are proposed along the proposed building's northern, eastern, and southern perimeter.
Screening of Mechanical Equipment • Shielded from view – All mechanical and air conditioning equipment shall be shielded and screened from view from adjacent streets and properties. The screening shall be architecturally integrated with the building. Ground-mounted equipment screening shall consist of a solid wall, solid fence, or sufficient landscaping. Otherwise, such equipment shall be enclosed in a building. • Setback Required – Mechanical equipment shall not be located in required yards or other setback areas.	**Consistent.** Roof-mounted mechanical equipment would be shielded and screened from view from the neighboring property and Struck Avenue. The proposed shielding and screening would be integrated with the building's design to seamlessly screen the mechanical equipment. The Project does not propose to locate mechanical equipment in yard or setback areas.
Trash enclosures • All developments shall be provided with trash collection areas adequately and conveniently placed throughout the development. Trash collection areas shall be screened from view on 3 sides by a 6-foot-high wall. A visually opaque, self-latching gate shall be provided.	**Consistent.** The proposed trash enclosure for the Project would screen views on 3 sides with a 6-foot-high wall and will provide a visually opaque self-latching gate to access the trash enclosure.
Undergrounding of Utilities • Utility lines shall be required to be placed underground within all commercial or professional development, planned residential development, and residential subdivisions.	**Consistent.** The Project would install new utility lines underground connecting to the existing utility mains within Struck Avenue.

Mitigation Measures: Mitigation measures are not required.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Significance Determination: Less than Significant Impact.

The Project site is currently developed with a manufacturing use (Nursery Supplies, Inc.) and is surrounded by existing industrial development. The Project site generates artificial lighting from building-mounted light fixtures. The Project site is within an urbanized area that includes several sources of artificial lighting including interior and exterior building lighting, parking lot lighting, security lighting, and street lighting along Struck Avenue. Other sources of artificial light include vehicle headlights traveling along Struck Avenue.

The Project would introduce new sources of light as necessary for security, safety, and wayfinding. The Project's proposed lighting would be similar to existing conditions; therefore, implementation of the Project would not introduce new sources of light that would substantially affect day or nighttime views in the area. Additionally, the Project's proposed lighting is required to be consistent with OMC Section 17.12.030, *Lighting*, and Section 17.20.280, *Emission of Lighting, Glare, Dust, and Heat,* which states that lighting shall be directed, controlled, screened, or shaded in a manner as not to shine directly on surrounding premises (Orange, 2020).

Glare is caused by light reflections from the pavement, vehicles, and building materials such as reflective glass and polished surfaces. During daylight hours, the amount of glare depends on the intensity and direction of sunlight. Glare can create hazards to motorists and can be a nuisance for pedestrians and other viewers. The proposed building is located at the terminus of a cul-de-sac within a buildout area and will be constructed of concrete tilt-up walls. The Project's proposed building materials would not result in potential glare impacts within the Project site or surrounding areas, and notably at the street level. Low-reflective windows would be provided at the proposed office areas. Implementation of the Project would not introduce new sources of glare that would substantially affect day or nighttime views in the area.

Mitigation Measures: Mitigation measures are not required.

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?	☐	☐	☐	☒
(b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
(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))?	☐	☐	☐	☒
(d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
(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?	☐	☐	☐	☒

Impact Analysis:

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?

Significance Determination: No Impact

According to the California Department of Conservation's (DOC) California Important Farmland Finder, the Project site is classified as "Urban and Built-Up Land" (DOC, 2016a). The "Urban and Built-Up Land" classification describes land that is occupied by structures with a building density of at least 1 unit 10 1.5 acres, or approximately 6 structures to a 10-acre parcel (DOC, 2016a). The nearest Farmland to the Project site is located approximately 0.43 miles north; this land is classified by the DOC as "Unique Farmland," which describes land that contains lesser quality soils used to produce the State's leading crops. "Unique Farmland" is usually irrigated, buy may include non-irrigated orchards or vineyards as found in some climatic zones in California. Due to the site's distance from designated Farmland, the Project would not have the potential to convert the Farmland to non-agricultural use. The

Project does not have the potential to convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use. No impacts would occur.

Mitigation Measures: Mitigation measures are not required.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Significance Determination: No Impact

The Project site is zoned as Industrial Manufacturing (M-2) (Orange, 2016). The nearest land zoned for agricultural use is located approximately 4.1 miles northeast of the Project site. As such, the Project does not have the potential to conflict with existing zoning for agricultural use. No impacts would occur.

The Williamson Act is a Statewide mechanism for the preservation of agricultural land and open space land. The Act provides a comprehensive method for local governments to protect farmland and open space by allowing lands in agricultural use to be placed under contract (agricultural preserve) between local government and landowner. The Project site is not under a Williamson Act contract. Therefore, implementation of the Project does not have the potential to conflict with an existing Williamson Act contract. No impacts would occur.

Mitigation Measures:

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))?

Significance Determination: No Impact

As previously discussed, the Project site is currently zoned as M-2. According to the City's Zoning Map, there are no lands within the City that are zoned for forest land, timberland, or timberland zoned Timberland Production (Orange, 2016). Therefore, the Project does not have the potential to conflict with existing zoning or rezoning of forest land, timberland, or timberland zoned Timberland Production. No impacts would occur.

Mitigation Measures: Mitigation measures are not required.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

Significance Determination: No Impact

As discussed under the Agricultural and Forest Resources Threshold c, the Project site is zoned M-2 and there are no lands within the City that are zoned forestland. Additionally, the Project site is developed with a light industrial use. Therefore, the Project would not result in the loss of forest land or conversion of forest land to a non-forest use. No impacts would occur.

Mitigation Measures: Mitigation measures are not required.

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?

Significance Determination: No Impact

As previously discussed under Agriculture and Forest Resources Threshold a, the Project site is located approximately 0.43 miles southwest of Unique Farmland. Additionally, the Project site is within an urbanized area of the City that contains little open space. Due to the site's distance from the Unique Farmland, the Project does not have the potential to convert Farmland to non-agricultural use. No impacts would occur.

Mitigation Measures: Mitigation measures are not required.

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?	☐	☐	☒	☐
(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?	☐	☐	☒	☐
(c)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
(d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Impact Analysis:

The analysis in this section is based on the *534 Struck Avenue Air Quality Impact Analysis City of Orange* (Air Quality Impact Analysis) report prepared by Urban Crossroads, Inc. (Urban Crossroads) dated March 31, 2021 and the *534 Struck Avenue Mobile Source Health Risk Assessment City of Orange* (HRA) prepared by Urban Crossroads dated March 31, 2021. The Air Quality Impact Analysis and HRA are provided in their entirety as Appendix A.1 and Appendix A.2, respectively, of this IS/MND.

Environmental Setting

The Project site is within the South Coast Air Basin (SCAB) within the jurisdiction of the South Coast Air Quality Management District (South Coast AQMD). Under the Air Quality Management Act, the South Coast AQMD is responsible for bringing air quality in areas under its jurisdiction into conformity with federal and State air quality standards. The SCAB is a 6,745-square mile subregion of the South Coast AQMD that includes portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County.

South Coast AQMD Regional and Local Significance Thresholds

The City of Orange utilizes the South Coast AQMD CEQA Air Quality Handbook and thresholds of significance to determine the significance of Project emissions. A Project may have a significant impact if Project emissions would exceed these air pollutions thresholds. Table 3, *South Coast AQMD Regional Thresholds of Significance*, below identifies South Coast AQMD's regional construction and operational emissions within its jurisdiction.

Table 3 South Coast AQMD Regional Thresholds of Significance

Pollutant	Regional Construction Threshold	Regional Operational Thresholds
NO_X	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
$PM_{2.5}$	55 lbs/day	55 lbs/day
SO_X	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Pb	3 lbs/day	3 lbs/day

Notes: lbs/day – Pounds Per Day, NO_X – Nitrogen Oxides, VOC – Volatile Organic Compounds, PM_{10} – Particulate Matter 10 microns in diameter or less, $PM_{2.5}$ – Particulate Matter 2.5 microns in diameter or less, SO_X – Sulfur Oxides, CO – Carbon Monoxide, Pb – Lead.
Source: (Urban Crossroads, 2021a)

The South Coast AQMD also established localized significance thresholds (LSTs) that a project can emit without contributing to an existing or new air quality standard exceedance. LSTs are defined separately for construction and operational activities and are dependent on location, project size, and distance to sensitive receptors.

Health Risk Significance Thresholds

For pollutants without defined significance standards or air contaminants not covered by the standard criteria cited above, the definition of substantial pollutant concentrations varies. For toxic air contaminants (TACs), "substantial" is taken to mean that the individual cancer risk exceeds a threshold considered a prudent risk management level. Cancer risk is expressed in terms of expected incremental incidence per million. The South Coast AQMD has established an incidence rate of 10 persons per million as the maximum acceptable incremental cancer risk due to DPM exposure from a project. This threshold serves to determine whether a given project has a potentially significant development-specific and cumulatively considerable impact.

a) Conflict with or obstruct implementation of the applicable air quality plan?

Significance Determination: Less than Significant Impact

As previously discussed, the Project site is within the SCAB. Currently, State, and federal air quality standards are exceeded in most parts of the SCAB. In response, the South Coast AQMD has adopted a

series of Air Quality Management Plans (AQMPs) to meet the State and federal ambient air quality standards. AQMPs are regularly updated to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy. It should be noted that emissions of O_3, NO_x, VOC, and CO have been decreasing in the SCAB since 1975 and are projected to continue to decrease through 2020. Additionally, the overall trends of PM_{10} and $PM_{2.5}$ in the air (not emissions) have improved since 1975 (Urban Crossroads, 2021a). The current AQMP, the 2016 AQMP, was adopted by the South Coast AQMD in March 2017 and the Project's consistency with the 2016 AQMP is discussed below. Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2, and Section 12.3 of the South Coast AQMD's CEQA Air Quality Handbook (1993). The Project's consistency with these criteria is discussed below.

Consistency Criterion No. 1: The Project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

Construction Impacts – Consistency Criterion 1

The violations that Consistency Criterion No. 1 refers to are the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS). CAAQS and NAAQS violations could occur if regional or localized significance thresholds are exceeded.

As evaluated under Air Quality Threshold b, below, the Project's regional and localized construction-source emissions would not exceed applicable regional significance threshold and LST thresholds. As such, impacts would be less than significant (Urban Crossroads, 2021a).

Operational Impacts – Consistency Criterion 1

As evaluated under Air Quality Threshold b, below, the Project would not exceed the applicable regional significance thresholds and LST thresholds for operational activity. Therefore, the Project would not conflict with the AQMP according to this criterion. Based on the preceding discussion, the Project is determined to be consistent with the first criterion.

Consistency Criterion No. 2: The Project will not exceed the assumptions in the AQMP based on the years of Project build-out phase.

The 2016 AQMP demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by cities in the district are provided to the SCAG, which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. Development consistent with the growth projections in City of Orange General Plan is consistent with the AQMP (Urban Crossroads, 2021a).

The Project proposes to convert an existing manufacturing use to a truck terminal use, which would be a similar type of industrial land use as the surrounding area and consistent with the underlying zoning and land use designations with approval of a CUP. A General Plan amendment would not be required. The number of employees generated at the site are anticipated within the growth projections and the

development would not result in an increase in population within the SCAB. Therefore, implementation of the Project would not have the potential to substantially affect demographic projections beyond what is accounted for in the current 2016 AQMP. As such, the Project is determined to be consistent with the second criterion.

AQMP Consistency Conclusion

The Project would not have the potential to result in or cause NAAQS or CAAQS violations. The Project's proposed uses are consistent with the General Plan land use designation and would not exceed the regional or localized construction and operational thresholds. Therefore, the Project is consistent with the AQMP (Urban Crossroads, 2021a).

Mitigation Measures: Mitigation measures are not required.

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?

Significance Determination: Less than Significant Impact

The Project would contribute to local and regional air pollutant emissions during its construction (short-term) and operation (long-term). However, as discussed below, Project construction and operation would not result in exceedances of South Coast AQMD daily thresholds for Project-specific impacts that could subsequently cause cumulatively considerable increases in emissions of pollutants for which the SCAB is designated as non-attainment.

Construction Impacts

The Project's construction is anticipated to take approximately 11 months. During this time, a variety of heavy-duty diesel-powered vehicles and equipment would be operated on-site. Demolition of the existing structure on-site would require an excavator, a loader, bulldozer, or another similar grading vehicle. Grading for the Project would require similar vehicles, as well as a grader. During the demolition and excavation phases, haul trucks would be utilized to transport demolished materials and any cut soils either the Olinda Alpha Landfill, Frank R. Bowerman Landfill, or the Prima Deshecha Landfill.

On October 17, 2017, the South Coast AQMD in conjunction with the California Air Pollution Control Officers Association and other California air districts, released the latest version of the California Emissions Estimator Model (CalEEMod) Version 2016.3.2. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$) and quantify applicable air quality reductions. The two most pertinent regulatory requirements that apply to the proposed Project during construction and required by South Coast AQMD Rules include Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coatings). Rule 403 prevents and reduces fugitive dust emissions by requiring best available control measures to be applied during earth moving and grading activities. Rule 1113 limits the VOC content of architectural coatings. Credit for Rules 403 and 1113 have been taken in the analysis.

Accordingly, the Project's daily regional emissions and localized emissions from construction have been estimated using South Coast AQMD's CalEEMod 2016.3.2 model, as shown in Table 4, *Regional Threshold Summary of Construction*, and Table 5, *LST Summary of Construction*, respectively. As shown in Table 4, Project construction-source emissions would not exceed the regional numerical thresholds of significance established by the South Coast AQMD for any criteria pollutant and impacts would be less than significant. Additionally, as shown in Table 5, the Project's construction-source emissions would not exceed the localized thresholds for each air pollutant established by the South Coast AQMD. The Project's unmitigated construction emissions would not exceed South Coast AQMD's LSTs for NO_x, CO, PM_{10}, or $PM_{2.5}$. Therefore, the Project's construction emission impacts would be less than significant.

Table 4 Regional Threshold Summary of Construction

Year	Emissions (lbs/day)					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Summer						
2021	38.11	40.87	43.63	0.10	10.95	5.99
Winter						
2021	38.23	40.91	43.26	0.10	10.95	5.99
Maximum Daily Emissions	**38.23**	**40.91**	**43.63**	**0.10**	**10.95**	**5.99**
South Coast AQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: (Urban Crossroads, 2021a)

Table 5 LST Summary of Construction

On-Site Emissions	Emissions (lbs/day)			
	NO_X	**CO**	**PM_{10}**	**$PM_{2.5}$**
Demolition				
Maximum Daily Emissions	**31.44**	**21.57**	**2.56**	**1.59**
South Coast AQMD Localized Threshold	183	1,253	29	8
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
Site Preparation				
Maximum Daily Emissions	**40.50**	**21.15**	**10.74**	**5.93**
South Coast AQMD Localized Threshold	183	1,253	29	8
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
Grading				
Maximum Daily Emissions	**28.53**	**20.38**	**5.73**	**2.78**
South Coast AQMD Localized Threshold	183	1,253	29	8
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**

(Urban Crossroads, 2021a)

Operational Impacts

Under existing condition, the Project site is developed with an approximately 40,000 sf manufacturing use. The estimated operation-source emissions from the existing developed are shown in Table 6, *Existing Emissions*.

Table 6 Existing Emissions

Existing Development Operational Activities	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer Scenario						
Total Maximum Daily Emissions	**1.92**	**16.01**	**11.43**	**0.08**	**4.74**	**1.45**
Winter Scenario						
Total Maximum Daily Emissions	**1.91**	**16.34**	**9.84**	**0.08**	**4.73**	**1.45**

Source: (Urban Crossroads, 2021a)

Emissions associated with the Project's operation were calculated using CalEEMod 2016.3.2. The Project's daily regional emissions and localized emissions from operation are shown in Table 7, *Summary of Peak Operational Emissions*, and Table 8, *LST Summary of Operations*, respectively. It should be noted that for Table 7 the existing development emissions were subtracted from the Project's operational emission to determine the new emissions from the Project. As shown in Table 7, the Project's daily regional emissions will not exceed any threshold of significance for any criteria pollutants and impacts would be less than significant even if the existing development emissions were not subtracted from the Project's operational emissions. Additionally, as shown in Table 8, the Project would not introduce any new major sources of air pollution and emissions would not exceed South Coast AQMD's localized significance thresholds for NO_X, CO, PM_{10}, or $PM_{2.5}$ and impacts would be less than significant.

Table 7 Summary of Peak Operational Emissions

Operational Activities – Summer Scenario	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area Source	1.46	0.00*	0.06	0.00	0.00*	0.00*
Energy Source	0.00*	0.04	0.04	0.01*	0.00*	0.00*
Mobile Source (Passenger Cars)	0.34	0.32	5.67	0.02	2.00	0.54
Mobile Source (Trucks)	0.92	31.40	8.69	0.15	5.67	1.83
On-Site Equipment Source	0.12	1.27	0.76	0.00	0.04	0.04
Total Maximum Daily Emissions	**2.84**	**33.03**	**14.92**	**0.17**	**7.71**	**2.42**
Existing Emissions	***1.92***	***16.01***	***11.43***	***0.08***	***4.74***	***1.45***
Net Emissions (Project – Existing)	**0.92**	**17.02**	**3.49**	**0.09**	**2.97**	**0.96**
South Coast AQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**
Operational Activities – Winter Scenario	**Emissions (lbs/day)**					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Area Source	1.46	0.00*	0.06	0.00	0.00*	0.0**
Energy Source	0.01*	0.04	0.04	0.00*	0.00*	0.00*
Mobile Source (Passenger Cars)	0.35	0.36	4.98	0.02	2.00	0.54
Mobile Source (Trucks)	0.85	32.02	5.77	0.15	5.65	1.82
On-Site Equipment Source	0.12	1.27	0.76	0.00	0.04	0.04
Total Maximum Daily Emissions	**2.77**	**33.69**	**11.61**	**0.17**	**7.68**	**2.40**
Existing Emissions	***1.91***	***16.34***	***9.84***	***0.08***	***4.73***	***1.45***
Net Emissions (Project – Existing)	**0.86**	**16.01**	**1.77**	**0.09**	**2.95**	**0.95**
South Coast AQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

* Rounded to the nearest hundredth decimal.

Source: (Urban Crossroads, 2021a)

Table 8 LST Summary of Operations

Operational Activity	Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	**2.93**	**1.56**	**0.43**	**0.16**
South Coast AQMD Localized Threshold	183	1,253	7	3
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**

(Urban Crossroads, 2021a)

Mitigation Measures: Mitigation measures are not required.

c) Expose sensitive receptors to substantial pollutant concentrations?

Significance Determination: Less than Significant Impact

Some people are especially sensitive to air pollution. These groups of people include children, the elderly, individuals with pre-existing respiratory or cardiovascular illness, and athletes who engage in frequent exercise. Structures that house these persons or place where they gather to exercise are defined as sensitive receptors. Figure 11, *Sensitive Receptors*, depicts the sensitive receptors located in the Project area. The receptor locations are described below:

- R1: Location R1 represents the public-institutional City of Orange Department of Public Works use at 637 W Struck Avenue, approximately 86 feet north of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receptor R1 is placed at the building façade.
- R2: Location R2 represents the existing Citrus Grove Apartment complex at 1120 North Lemon Street, approximately 130 feet east of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receptor R2 is placed at the residential building façade.
- R3: Location R3 represents Paw and Order pet boarding service at 618 West Collins Avenue, approximately 566 feet south of the Project site. Since there are no private outdoor living areas (backyards) facing the Project site, receptor R3 is placed at the building façade.
- R4: Location R4 represents Meter Tech Services & Equipment located at 1035 N. Parker Street, approximately 22 feet west of the Project site. Receptor R4 is placed at the building façade.
- R5: Location R5 represents the proposed Orange City Yard Site Affordable Housing Project, located approximately 220 feet north of the Project site. Receptor R5 is placed at the approximate location of where the future building façade is anticipated.

Construction Emissions

As discussed under the Air Quality Threshold b, the Project's construction emissions would not exceed South Coast AQMD's regional significance thresholds or LSTs. Therefore, the nearby sensitive receptors would not be exposed to substantial pollutant concentrations that would present a public health concern.

The primary toxic air contaminant (TAC) that would be generated by construction activities is diesel particulate matter (DPM), which would be released from the exhaust pipes of diesel-powered construction vehicles and equipment. According to the Project-specific HRA (Appendix A.2), given the size of the Project and the relatively small amount of construction equipment and relative short duration of construction activity, any DPM generated from construction activity would be negligible and not result in any significant health risks and no further evaluation is required.

LEGEND:

Receptor Locations

Distance from receptor to Project site boundary (in feet)

Source(s): Urban Crossroads (May 2020)

Figure 11

Not to Scale

SENSITIVE RECEPTORS

Operational Emission

As discussed under the Air Quality Threshold b, the Project's operational emissions would not exceed South Coast AQMD regional significance thresholds or LST. Under Project conditions, the primary toxic TAC that would be generated by Project operational activities is DPM.

Individual Exposure

The residential land use with the greatest potential exposure to Project DPM source emissions is Location R5, which represents the proposed Orange City Yard Affordable Housing Project, located approximately 220 feet north of the Project site. Receptor R5 is placed at the approximate location of where the future building façade is anticipated. At the maximally exposed individual receptor (MEIR), the maximum incremental cancer risk attributable to DPM source emissions is estimated at 1.03 in one million, which is less than the South Coast AQMD's significance threshold of 10 in one million. At this same location, non-cancer risks were estimated to be 0.0004, which would not exceed the applicable significance threshold of 1.0. Because all other modeled residential receptors are exposed to lesser concentrations and are located at a greater distance than the scenario analyze herein, and DPM generally dissipates with distance from the source, all other residential receptors in the vicinity of the Project would be exposed to less emissions and therefore less risk than the MEIR identified herein. As such, the Project will not cause a significant human health or cancer risk to adjacent residences (Urban Crossroads, 2021a)

Worker Exposure

The worker receptor land use with the greatest potential exposure to Project DPM source emissions is Location R4, which represents the Meter Tech Services & Equipment located at 1035 N. Parker Street, approximately 22 feet west of the Project site. Receptor R4 is placed at the building façade where a worker could remain for at least one hour. At the maximally exposed individual worker (MEIW), the maximum incremental cancer risk impact at this location is 0.23 in one million which is less than the South Coast AQMD's threshold of 10 in one million. Maximum non-cancer risks at this same location were estimated to be 0.001, which would not exceed the applicable significance threshold of 1.0. Because all other modeled worker receptors are located at a greater distance than the scenario analyze herein, and DPM dissipates with distance from the source, all other worker receptors in the vicinity of the Project would be exposed to less emissions and therefore less risk than the MEIW identified herein. As such, the Project will not cause a significant human health or cancer risk to adjacent workers (Urban Crossroads, 2021a).

CO Hotspots

An adverse CO concentration, known as a "hotspot," would occur if an exceedance of the State one-hour standard of 20 parts per million (ppm) or the 8-hour standard of 9 ppm were to occur. It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. In response, vehicle emissions standards have become increasingly stringent in the last 20 years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover

of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SCAB is now designated as attainment.

Due to the relatively small size of the Project, the Project does not have the potential to generate the volume of traffic required to generate a CO "hotspot. Therefore, CO "hotspots" are not an environmental concern for the Project and no impacts would occur.

Friant Ranch

In December 2018, in the case of *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, California Supreme Court held that an Environmental Impact Report's (EIR) air quality analysis must meaningfully connect the identified air quality impacts to the human health consequences of those impacts, or meaningfully explain why that analysis cannot be provided. As noted in the Brief of Amicus Curiae by the South Coast AQMD in the Friant Ranch case (which is incorporated into the technical report), South Coast AQMD has among the most sophisticated air quality modeling and health impact evaluation capability of any of the air districts in the State, and thus it is uniquely situated to express an opinion on how lead agencies should correlate air quality impacts with specific health outcomes.

The South Coast AQMD discusses that it is infeasible to quantify health risks caused by projects similar to the Project, due to many factors. It is necessary to have data regarding the sources and types of air toxic contaminants, location of emission points, velocity of emissions, the meteorology and topography of the area, and the location of receptors (worker and residence). Even where a health risk assessment can be prepared, however, the resulting maximum health risk value is only a calculation of risk--it does not necessarily mean anyone will contract cancer because of the Project. On the other hand, for extremely large regional projects (unlike the proposed Project), the South Coast AQMD states that it has been able to correlate potential health outcomes for very large emissions sources – as part of their rulemaking activity, specifically 6,620 lbs/day of NO_X and 89,180 lbs/day of VOC were expected to result in approximately 20 premature deaths per year and 89,947 school absences due to O_3.

The Project does not generate anywhere near 6,620 lbs/day of NO_X or 89,190 lbs/day of VOC emissions. The Project would generate 40.91 lbs/day of NO_X during construction and 33.69 lbs/day of NO_X during operations. The Project would also generate 38.23 lbs/day of VOC emissions during construction and 2.84 lbs/day of VOC emissions during operation. Therefore, the Project's emissions are not sufficiently high enough to warrant using a regional modeling program to correlate health effects on a basin-wide level and impacts would be less than significant.

Mitigation Measures: Mitigation measures are not required.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Significance Determination: Less than Significant Impact

Land uses generally associated with odor complains include: agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting operations, refineries, landfills, dairies, and

fiberglass molding facilities. The Project does not contain land uses typically associated with emitting objectionable odors. Potential odor sources associated with the Project may result from construction equipment exhaust and the application of concrete and architectural coatings during construction activities and the temporary storage of typical solid waste (refuse) associated with the Project's (long-term operational) uses. Standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant. It is expected that Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the City's solid waste regulations. The Project would also be required to comply with South Coast AQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors associated with the Project construction and operations would be less than significant and no mitigation is required (Urban Crossroads, 2021a).

No other emissions would be anticipated because of Project construction or operation. Therefore, the Project would not result in other emissions that would adversely affect a substantial number of people and impacts would be less than significant.

Mitigation Measures: Mitigation measures are not required.

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?	☐	☐	☐	☒
(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?	☐	☐	☐	☒
(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?	☐	☐	☐	☒
(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?	☐	☒	☐	☐
(e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
(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?	☐	☐	☐	☒

Impact Analysis:

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?

Significance Determination: No Impact

The City identifies significant wildlife habitat as being in the City's undeveloped hillside areas, East Orange, and park and open spaces (particularly near Santiago Creek, Santiago Oaks Regional Park, Irvine Regional Park, and Peters Canyon Regional Park) (Orange, 2015b). The Project site is in the western portion of the City and is fully developed with a manufacturing facility. Additionally, the properties surrounding the Project site are fully developed and urbanized. According to the City's General Plan Environmental Impact Report (EIR), urbanized areas provide low habitat value for sensitive species. There are no natural habitats or sensitive species on the Project site or immediately surrounding area. As such, implementation of the Project would not have the potential to have an adverse effect either directly or indirectly through habitat modifications on any species identified as a candidate, sensitive, or special status species in the local or regional plans, policies or regulation, or by the California Department of Fish and Game and Wildlife Service (Orange, 2010a). No impacts would occur.

Mitigation Measures: Mitigation measures are not required.

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?

Significance Determination: No Impact

Riparian habitats are those occurring along the banks of rivers and streams. Sensitive natural communities are natural communities that are considered rare in the region by regulatory agencies, known to provide habitat for sensitive animals or plant species or known to be important wildlife corridors. According to the City's General Plan EIR, riparian habitat and wetlands within the existing urbanized area of the City occur along the Santiago Creek (Orange, 2010a). The Project site is located approximately 1.9 miles north of the Santiago Creek and there are no other riparian habitat or other sensitive natural communities present on the Project site or within the site's vicinity (Google Earth, 2020). Therefore, implementation of the Project would not have an 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. No impacts would occur.

Mitigation Measures: Mitigation measures are not required.

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?

Significance Determination: No Impact

Wetlands are defined as land that is flooded or saturated by surface water or groundwater at a frequency and duration sufficient to support and, that normally does support, a prevalence of vegetation adapted to life in saturated soils. Wetlands include areas such as swamps, marshes, and bogs. The Project site and surrounding area are fully developed and do not contain any wetlands. The nearest wetland habitat to the Project site is at the Santiago Creek located approximately 1.9 miles south. Therefore, the implementation of the Project would not have an adverse effect on state or federally protected wetlands. No impacts would occur.

Mitigation Measures: Mitigation measures are not required.

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?

Significance Determination: Less than Significant Impact with Mitigation Incorporated

The City is characterized as mostly urbanized with low habitat value for wildlife. The City's primary functional wildlife corridors are Santiago Creek through the center of the City; the northeastern portion of the City, and the Southern California Edison (SCE) utility corridors, which link with the Santiago Oaks Park; and the preserved hillsides and ridgelines in the southeastern portion of the City that link with Peters Canyon Park (Orange, 2015a). Additionally, a significant amount of East Orange is undeveloped, including the Irvine Ranch Land Reserve (IRLR) and the Nature Reserve of Orange County established by the *Orange County Central/Coastal Natural Community Conservation Plan* (NCCP). These areas have the potential to act as wildlife corridors.

The Project site is fully developed within an urbanized setting and is located outside the identified wildlife corridors. There are no areas within the Project's vicinity which could function as a wildlife corridor or nursery site for wildlife. Therefore, implementation of the Project would not have the potential to interfere with the movement of any native resident or migratory fish or wildlife species with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. No impacts would occur.

The Project requires removal of existing ornamental trees within the northern portion of the site. These existing trees have the potential to provide suitable nesting opportunities for nesting birds. The Migratory Bird Treaty Act (MBTA) governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. To reduce the Project's potential impacts on migratory birds, the Project would implement Mitigation Measure (MM) BIO-1, which requires a pre-construction nesting bird clearance survey to determine the presence/absence, location, and status of any active nests on or adjacent to the Project site. If the nesting bird clearance survey indicates the presence

of nesting birds, MM BIO-1 requires buffers to ensure that any nesting birds are protected according to the MBTA. With the implementation of MM BIO-1, the Project's potential construction-related impacts to migratory birds would be less than significant.

Mitigation Measures:

BIO-1 In the event that vegetation and tree removal should occur between January 15 and September 15, the Project Applicant shall retain a qualified biologist to conduct a nesting bird survey no more than 3 days prior to commencement of construction activities. The biologist conducting the clearance survey shall document the negative results if no active bird nests are observed on the Project site or within the vicinity during the clearance survey with a brief letter report, submitted to the City of Orange Community Development Department prior to construction, indicating that no impacts to active bird nests would occur before construction can proceed. If an active avian nest is discovered during the pre-construction clearance survey, construction activities shall stay outside of a 200-foot buffer around the active nest. For listed and raptor species, this buffer shall be 500-feet. A biological monitor shall be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Prior to the commencement of construction activities and the issuance of any permits, results of the pre-construction survey and any subsequent monitoring shall be provided to the City of Orange Community Development Department.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Significance Determination: Less than Significant Impact

The City's participation in the NCCP is its Master Street Tree Plan and the Tree Preservation Ordinance (OMC Chapter 12.32) as the primary local measures to protect biological resources. According to the City's General Plan EIR, the Master Street Tree Plan and the Tree Preservation Ordinance are effective procedures to monitor the potential for impacts to existing trees that provide roosting and nesting habitat for native and migratory birds throughout the City. The City's Tree Ordinance restricts the removal of trees including those on private property that is deemed to be "endowed with a public interest" or may be of historical value "by virtue of their origin, size, uniqueness, and/or national or regional rarity." (Orange, 2020) Trees determined to be historic are compiled on a master list that is maintained by the Community Services Department and approved by resolution of the City Council.

The Project would result in the removal of ornamental trees. According to OMC Section 12.32.030, the Project Applicant would be required to obtain a Tree Removal Permit. According to OMC Section 12.32.060, the Project's ornamental trees are not considered Historical Trees. Therefore, the Project would not conflict with any local policies or ordinances protecting biological resources following compliance with OMC Section 12.32.030 and impacts would be less than significant.

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?

Significance Determination: No Impact

The City of Orange is subject to the NCCP. As shown on General Plan EIR Figure 5.4-2, NCCP Habitat Reserve Area, several areas within the City are designated NCCP Habitat Reserve (Orange, 2010a). According to General Plan EIR Figure 5.4-2, the Project site is not within an NCCP Habitat Reserve Area. No other approved local, regional, or State habitat conservation plans apply to the site. Therefore, implementation of the Project does not have the potential to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. No impacts would occur.

Mitigation Measures: Mitigation measures are not required.

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?	☐	☐	☐	☒
(b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
(c)	Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

This section is primarily based on the *Cultural and Paleontological Resource Letter Report for the 534 Struck Avenue Project, City of Orange, Orange County, California* (Cultural Resources Study), prepared by Duke Cultural Resources Management (Duke), Inc. dated April 30, 2021. The Project-specific Cultural Resources Study is included as Appendix B of this IS/MND.

Impact Analysis:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?

Significance Determination: No Impact

A project-related significant adverse effect would occur if a project were to adversely affect a historical resource meeting one of the definitions listed below. CEQA Guidelines Section 15064.5 defines historic resources as resources listed or determined to be eligible for listing by the Historic Resources Commission, a local register of historic resources, or the lead agency. Generally, a resource is considered "historically significant" if it meets one of the following criteria:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

- Is associated with the lives of persons important to our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of an important creative individual, or possesses high artistic values;
- Has yielded, or may be likely to yield, information important in prehistory or history.

As shown in Figure CR-2 of the City's General Plan Cultural Resource and Historic Preservation Element, the Project site is not designated as a historic resource nor is the site proposed as a historic resource. Additionally, no listed or designated historical resources are in proximity to the site; most of the resources identified are in the Old Towne Historic District and Plaza District (Orange, 2015c). Additionally, according to the cultural resource record search conducted by Duke, no cultural resources have been recorded within the Project area (Duke, 2021). However, two potential historic resources were recorded within one-half mile of the Project: P-30-176663 and P-30-159932. P-30-176663 is a portion of the BNSF Railroad located a one-half mile southwest of the Project site. This portion of the BNSF Railroad was determined ineligible for listing on the National Registry of Historic Places (NRHP) because it is currently in use and has had continual maintenance and upgrades necessary for modern rail and thus diminished the historic integrity. P-30-159932 consists of several buildings located in the Old Towne Orange Historic District and is listed on the NRHP (No. 97000617). Due to the site's location and limited physical disturbance area, implementation of the Project does not have the potential to result in a substantial adverse change to these cultural resources (Duke, 2021). No impacts would occur.

Implementation of the Project would demolish the existing structure and redevelop the site with a singular approximately 57,900 sf building and associated parking. As shown in Figure 3, the Project site is developed with an approximate 40,000 sf manufacturing facility that was constructed in approximately 1977. The northern portion of the site contains ornamental landscaping and a concrete paved parking lot and the existing structure. The southern portion of the site is concrete paved and was used to store the facility's products (planters and pots). The site's existing structures are not 50 years old and do not meet the criteria listed above and, therefore, are not considered historically significant. Therefore, redevelopment of the Project site would not impact historical resources; no impacts would occur.

Given that the Project site was previously disturbed and is not within a historic district of the City, the likelihood of encountering undiscovered historic resources throughout Project construction is considered low. No impacts would occur.

Mitigation Measures: Mitigation measures are not required.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Significance Determination: Less than Significant Impact with Mitigation Incorporated

Section 15064.5(c) of the State CEQA Guidelines defines significant archaeological resources as resources that meet the criteria for historical resources or resources that constitute unique archaeological resources, as defined in Section 21083.2 of the State CEQA Guidelines. A project-related significant

adverse effect could occur if a project were to affect archaeological resources that meet the criteria identified under Cultural Resources Threshold a.

The Project site is developed with a manufacturing facility and associated parking. As previously discussed, the Project site is within an urbanized portion of the City and is surrounded by existing industrial uses. Because the Project site is developed, the site was subject to construction and ground-disturbing activities similar to that which would occur under the Project.

Given the highly disturbed condition of the Project site and its surroundings, the potential for the Project's construction activities to affect an unidentified archaeological resource is considered low (Duke, 2021). However, while unlikely, the presence of previously undiscovered subsurface archaeological resources on the Project site remains possible, and these resources could be affected by ground-disturbing activities associated with grading and construction at the site. It is possible that subsurface disturbance would occur at levels not previously disturbed (e.g., deeper excavation) or may uncover undiscovered archaeological resources at the site. The Project would implement MM CUL-1, which provides direction for the proper recordation of previously undiscovered archaeological resources, should they be found during Project construction activities. Implementation of MM CUL-1 would ensure that the Project's potential impacts on archaeological resources less than significant.

Mitigation Measures:

CUL-1 In the event a potentially significant cultural resource is encountered during subsurface earthwork activities, all construction activities within a 100-foot radius of the find shall cease and workers should avoid altering the materials until a qualified archaeologist who meets the Secretary of Interior's Professional Qualification Standards for archaeology has evaluated the resource. The Applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Any previously undiscovered resource found during construction-related activities shall be recorded on the 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 prepare and implement a research design and archeological data recovery plan that will capture those categories of data for which the site is significant in accordance with Section 15064.5 of the State CEQA Guidelines. The archaeologist shall also 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, the South-Central Coastal Information Center, and the State Historic Preservation Office, if required.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

Significance Determination: Less than Significant Impact

The Project site and surrounding properties are developed and are not used as cemeteries. As such, human remains, including those interred outside of formal cemeteries are not anticipated to be encountered during earth removal or disturbance activities. Based on the Project-specific geotechnical investigation prepared by GeoTek, Inc. (GeoTek) titled *Geotechnical and Infiltration Evaluation Proposed Warehouse Facility*, dated March 31, 2020, the near-surface soils encountered at the 10 boring sites were undocumented fill soils. Ground disturbance will involve approximately 20 feet in depth for the water quality BMPs in the northwest corner of the Project, 12 feet for utilities, and 5 feet in depth for the remainder of the Project.

If, in the unlikely event that, human remains were uncovered during grading activities, proper treatment is required in accordance with applicable State law. California Health and Safety Code Section 7050.5 to 7055 describes the general provisions for proper treatment of human remains. Specifically, the Health and Safety Code Section 7050.5 describes the requirements if any human remains are accidentally discovered during onsite grading activities. Additionally, compliance with California Public Resources Code Section 5097.98 requires that disturbance of the site remain halted until the County Coroner can evaluate the find and notification of the Native American Heritage Commission (NAHC) if the remains are of Native American origin. The NAHC is responsible for contacting the most likely Native American descendent, for consultation. Following compliance with existing State regulations, which detail the appropriate actions necessary in the event human remains are encountered, impacts in this regard would be reduced to less than significant levels.

Mitigation Measures: Mitigation measures are not required.

	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?	☐	☐	☒	☐
(b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Impact Analysis:

The analysis in this section is based on the *534 Struck Avenue Energy Analysis City of Orange* (Energy Analysis), prepared by Urban Crossroads dated March 31, 2021. This report is provided in its entirety as Appendix C to this IS/MND.

Electricity is provided to the Project site by Southern California Edison (SCE) and natural gas is provided to the Project site by the Southern California Gas Company (SoCal Gas). Both forms of energy are provided to the Project site via existing infrastructure located beneath Struck Avenue.

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Significance Determination: Less than Significant Impact

Project Construction

During Project construction, energy would be consumed in the form of electricity associated with the conveyance of water used for dust control and, on a limited basis, power lights, electronic equipment, or other construction activities necessitating electrical power. As discussed below, construction activities including the construction of the new building, typically do not involve the consumption of natural gas. Project construction would consume energy in the form of petroleum-based fuels associated with the use of off-road construction vehicles and equipment on the Project site, construction worker travel to and from the Project site, and delivery and haul truck trips.

The Project's total electricity usage during construction, is calculated to be approximately 112,826 kilowatt hours (kWh). Construction equipment used by the Project would result in consumption of approximately 60,725 gallons of diesel fuel. Construction equipment use of fuel would not be atypical for the type of construction proposed because there are no aspects of the Project's proposed construction process that are unusual or energy-intensive, and Project construction equipment would conform to the applicable California Air Resources Board (CARB) emissions standards, acting to promote equipment fuel efficiencies. CCR Title 13, Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than 5 minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Enforcement of idling limitations is realized through periodic site inspections conducted by City building officials (Urban Crossroads, 2021c).
Construction worker trips for full construction of the Project would result in the estimated fuel consumption of 21,285 gallons of fuel. Additionally, fuel consumption from construction vendor trips (Medium-Heavy Duty Trucks [MHDT] and Heavy-Heavy Duty Trucks [HHDT]) will total approximately 237,237 gallons. City and regional commercial vendors would supply diesel fuel. Indirectly, construction energy efficiencies and energy conservation would be achieved using bulk purchases, transport and use of construction materials. The 2019 Integrated Energy Policy Report (IEPR) released by the California Energy Commission (CEC) has shown that fuel efficiencies are getting better within on and off-road vehicle engines due to more stringent government requirements. As supported by the preceding discussions, the Project's temporary construction energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary (Urban Crossroads, 2021c).

Project Operation

Transportation Energy Demands

Transportation energy demand is a function of the total VMT and estimated fuel economies of vehicles accessing the Project site. With respect to estimated VMT, and based on the trip frequency and trip length, the Project would generate an estimated 2,665,474 annual VMT along area roadways for all vehicles and approximately 273,834 gallons of fuel will be consumed from the Truck Terminal generated vehicle trips (Urban Crossroads, 2021c).

Current and future commercial vendors would provide fuel. Trip generation and VMT generated by the Project are consistent with other industrial uses of similar scale and configuration and CalEEMod. That is, the Project does not propose uses or operations that would inherently result in excessive and wasteful vehicle trips and VMT, nor associated excess and wasteful vehicle energy consumption (Urban Crossroads, 2021c).

Enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT. Location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands. In compliance with the California Green Building Standards Code, the Project would promote the use of bicycles as an alternative mean of transportation by providing short-term and/or long-term bicycle parking accommodations. Project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary and impacts would be less than significant (Urban Crossroads, 2021c).

Facility Energy Demands

The Project's operational energy demands are estimated at: 160,393 kilo-British thermal units per year (kBTU/year) of natural gas and 240,495 kWh/year of electricity (see Table 4-17, Appendix C; (Urban Crossroads, 2021c)). Natural gas would be supplied to the Project by SoCalGas; SCE would supply electricity. The Project proposes conventional industrial uses reflecting contemporary energy efficient/energy conserving designs and operational programs. Uses proposed by the Project are not inherently energy intensive, and the Project energy demands in total would be comparable to, or less than, other projects of similar scale and configuration.

Energy-saving and sustainable design features and operational programs would be incorporated into the Project, including those required by the California Green Building Standards Code (CALGreen; CCR, Title 24, Part 11). The Project would also incorporate design features and attributes promoting energy efficiency and sustainability. The Project's buildings would be designed and built to meet the standard for Leadership in Energy and Environmental Design (LEED) Silver Certification under either the 1) LEED v.4 Building Design and Construction Standards for Core and Shell Development set forth by the U.S. Green Building Council or 2) LEED pre-certified Prologis program[1]. The Project would include tractor trailer parking stalls capable of supporting future electric vehicle supply equipment (EVSE) as required by the City. Additionally, the Project would include 7 electric charging stalls for electric passenger vehicles. Additionally, the Project will be required to comply with the applicable Title 24 standards which will further ensure that the Project energy demands would not be inefficient, wasteful, or otherwise unnecessary and impacts would be less than significant.

Mitigation Measures: Mitigation measures are not required.

[1] Prologis has been designing and developing LEED-certified buildings since 2006. In 2014, Prologis partnered with the U.S. Green Building Council and M.E. Group to use the LEED Volume Program. The Program uses a prototype approach to streamline the certification process and allow builders to achieve consistency in green building improvements, while earning LEED certification faster than would be possible with individual building reviews.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Significance Determination: Less than Significant Impact

The Project is subject to California Building Code (CBC) requirements. New buildings must achieve compliance with 2019 Building and Energy Efficiency Standards and the 2019 California Green Building Standards requirements. The Project would provide for, and promote, energy efficiencies equal to or beyond those required under other applicable federal and State standards and regulations, and in so doing would meet or exceed all CBC Title 24 standards. Moreover, energy consumed by the Project's operation is calculated to be comparable to, or less than, energy consumed by other industrial uses of similar scale and intensity that are constructed and operating in California. On this basis, the Project would not result in the inefficient, wasteful, or unnecessary consumption of energy. Further, the Project would not cause or result in the need for additional energy producing facilities or energy delivery systems. (Urban Crossroads, 2021c)

Mitigation Measures: Mitigation measures are not required.

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.	☐	☐	☐	☒
	ii) Strong seismic ground shaking?	☐	☐	☒	☐
	iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
	iv) Landslides?	☐	☐	☐	☒
(b)	Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
(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?	☐	☐	☒	☐
(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?	☐	☐	☒	☐
(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?	☐	☐	☐	☒
(f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

This section is primarily based on the *Geotechnical and Infiltration Evaluation Proposed Warehouse Facility 534 Struck Avenue, Orange, Orange County, California* (Geotechnical Investigation), prepared by GeoTek, Inc. dated March 31, 2020. The Project-specific Geotechnical Investigation is included as Appendix D of this IS/MND. This section is also based on the *Cultural and Paleontological Resource*

Letter Report for the 534 Struck Avenue Project, City of Orange, Orange County, California (Cultural Resources Study), prepared by Duke Cultural Resources Management (Duke), Inc. dated April 30, 2021. The Project-specific Cultural Resources Study is included as Appendix B of this IS/MND.

Impact Analysis:

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?

Significance Determination: No Impact

Ground rupture is the visible offset of the ground surface when an earthquake rupture along a fault affects the Earth's surface. Southern California, including the City of Orange, is subject to the effects of seismic activity due to the active faults that traverse the area. Active faults are defined as those that have experienced surface displacement within Holocene time (approximately the last 11,000 years) and/or are in a State-designated Alquist-Priolo Earthquake Fault Zone. According to the Geotechnical Investigation, the Project site is not within a State of California Alquist-Priolo Earthquake Fault Zone. Additionally, the Project site is not within any other fault zone. The nearest active faults to the Project site are the San Joaquin Hills and Elsinore fault zones located approximately 7.5 miles to the south and 8.3 miles to the northeast, respectively (GeoTek, 2020a). Fault rupture would not occur on the Project site since no active faults cross the Project site. Therefore, no impacts would occur.

Mitigation Measures: Mitigation measures are not required.

ii. Strong seismic ground shaking?

Significance Determination: Less than Significant Impact

As previously stated, the Project site is located within the highly seismic Southern California region within the influence of several fault systems. The San Joaquin Hills and Elsinore fault zones located approximately 7.5 miles to the south and 8.3 miles to the northeast, respectively, of the Project site (GeoTek, 2020a). As a result, the Project would likely experience strong seismic ground shaking during its design life.

The Project's proposed building would be constructed in accordance with the 2019 California Building Code (CBC) and OMC Section 15.04.010, California Building Code Adopted by Reference, structures built for human occupancy must be designed to meet or exceed the CBC standards for earthquake resistance. The CBC includes earthquake safety standards based on a variety of factors including occupancy type, types of soils and rocks on-site, and strength of probable ground motion at the project site. In accordance with CBC requirements, a Geotechnical Investigation was prepared to determine

site-specific geologic conditions and appropriate design parameters. Nonetheless, the project would demonstrate compliance with applicable seismic-related design requirements to reduce impacts related to strong seismic ground shaking. The City of Orange Building Division would ensure incorporation of the Geotechnical Investigation's recommended design criteria as a standard condition of approval. Following compliance with the CBC, impacts concerning seismic ground shaking would be less than significant.

Mitigation Measures: Mitigation measures are not required.

iii. Seismic-related ground failure, including liquefaction?

Significance Determination: No Impact

Seismic-related ground failure includes, but is not limited to, liquefaction. Liquefaction is a seismic phenomenon in which loose, saturated, granular soils behave similarly to fluids when subject to high-intensity seismic events. Liquefaction occurs when three general conditions coexist: 1) shallow groundwater, 2) low-density non-cohesive (granular) soils and 3) high-intensity ground motion. According to the Geotechnical Investigation and the DOC Earthquake Zones of Required Investigation Map, the Project site is not within a Liquefaction Zone (DOC, 2016b; GeoTek, 2020a). The Project does not have the potential to expose people or structures to seismic-related liquefaction. No impacts would occur.

Mitigation Measures: Mitigation measures are not required

iv. Landslides?

Significance Determination: No Impact

Seismic events can cause the soils within a slope to become unstable and slip causing a landslide. According to the DOC Earthquake Zones of Required Investigation Map, the Project site is not within a Landslide Zone (DOC, 2016b). The Project does not have the potential to expose people or structures to seismic-related landslides. No impacts would occur.

Mitigation Measures: Mitigation measures are not required.

b) Result in substantial soil erosion or the loss of topsoil?

Significance Determination: Less than Significant Impact

Erosion is the movement of rock and soil from place to place and is a natural process. Common agents of erosion in the project region include wind and flowing water. Significant erosion typically occurs on steep slopes where stormwater and high winds can carry topsoil down hillsides. Erosion can be increased greatly by earthmoving activities if erosion-control measures are not employed.

The Project site is fully developed and contains ornamental landscaping within the site's northern portion. Because the Project site is fully developed and contains very little exposed soils, erosion is occurring on the site is minimal.

Grading and earthwork activities associated with Project construction would expose soils to potential short-term erosion by wind and water. Project construction would be required to comply with the water quality management measures identified in OMC Section 7.01.050, Controls for Water Quality Management. As discussed under Hydrology and Water Quality Threshold a, the Project would be required to comply with the National Pollutant Discharge Elimination System (NPDES) program to control direct storm water discharges, which involves the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) for construction-related activities, including grading. As stated previously, the Project would also be required to demonstrate compliance with South Coast AQMD 403, which would reduce the potential for wind erosion during construction through the implementation of dust control measures. Following compliance with the established regulatory framework (i.e., OMC Chapter 7.01.050 and South Coast AQMD Rule 403), impacts during construction would be less than significant.

Long-term operational impacts related to soil erosion or loss of topsoil would be required to comply with the requirements outlined in the Project's Water Quality Management Plan (WQMP) in compliance with OMC Chapter 7.01, Water Quality and Stormwater Discharges. The Project's WQMP is included as Appendix G.1 to this IS/MND. The WQMP includes structural and non-structural best management practices (BMPs) to ensure water quality standards are upheld. Structural BMPs included in the Project's WQMP include providing storm drain signage; trash storage areas; efficient irrigation systems and landscape design; and loading docks. Non-structural BMPs, such as educational materials for property owners, tenants, and occupants; activity restriction; common area landscape management; BMP maintenance; spill contingency plant; uniform fire code implementation; common area litter control; employee training; housekeeping of loading docks, common area catch basin inspection; and street sweeping private streets and parking lots.

The BMPs identified in the Project's WQMP would reduce the Project's potential operational impacts concerning soil erosion or loss of topsoil. The Project site is within a highly urbanized area with minimal elevation changes. The Project would redevelop the Project site with a single approximately 57,900 sf building and would contain a similar amount of impervious surfaces as compared to the site's existing development. Any exposed soil would be minimal and associated with landscaping areas. Project operations would not result in substantial soil erosion or loss of topsoil during operation. Impacts would be less than significant.

Mitigation Measures: Mitigation measures are not required.

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?

Significance Determination: Less than Significant Impact

Landslide

Refer to Geology/Soils Threshold a.iv.. The Project does not have the potential to be located on a geologic unit or soil that would result in on- or off-site landslides. No impacts would occur.

Lateral Spreading

Lateral spreading is a phenomenon in which large blocks of intact, non-liquefied soil move downslope on a liquefied soil layer. Lateral spreading is a regional event. For lateral spreading to occur, the liquefiable soil zone must be laterally continuous, unconstrained laterally, and free to move along the sloping ground. The Project site's potential for lateral spreading is considered low based on the site's relatively flat topography, distance from slopes, and no potential for liquefaction. The Project does not have the potential to be located on a geologic unit or soil that would result in lateral spreading. No impacts would occur.

Subsidence/Shrinkage

Subsidence and shrinkage are primarily dependent upon the degree of compaction achieved during construction. According to the Project's Geotechnical Investigation, undocumented fill soils were encountered at depths ranging from 3 to 5 feet bgs that consist of medium dense to dense silty sand, very dense/hard clayey sand to sandy clay, clayey silt, and silty clay (GeoTek, 2020a). Older alluvial fan deposits located beneath the undocumented fill and/or the existing ground surface consists of medium dense to very dense sand and silty and clayey sands and stiff to very stuff sandy silts and sandy clays. A shrinkage factor of approximately 5 to 15 percent may be considered for undocumented fill materials requiring removal and recompaction. A shrinkage factor of approximately 0 to 10 percent may be considered for excavation and recompaction of native soils (GeoTek, 2020a). The Project would implement the recommendations identified within the Geotechnical Investigation in accordance with CBC requirements and to preclude impacts related to subsidence and shrinkage. Additionally, the City of Orange Building Division would ensure incorporation of the Geotechnical Investigation's recommended actions as a standard condition of approval to the Project's building permit. Impacts would be less than significant.

Liquefaction

Refer to Geology/Soils Threshold a.iii. Therefore, the Project does not have the potential to be located on a geologic unit or soil that would result in liquefaction. No impacts would occur.

Mitigation Measures: Mitigation measures are not required.

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?

Significance Determination: Less than Significant Impact

Expansive soils are defined as soils possessing clay particles that react to moisture changes by shrinking or swelling. According to the Project's Geotechnical Investigation, the Project's on-site near-surface soils have a very low to medium expansion potential. Recommendations for foundation construction are outlined in Section 5.3, *Design Recommendations*, of the Geotechnical Investigation. Design parameters are detailed in Section 5.3.1 of the Geotechnical Investigation (see Appendix D of this IS/MND), the City of Orange Building Division would ensure incorporation of the Geotechnical Investigation's recommended actions as a standard condition of approval to the Project's building permit. Following the implementation of the Geotechnical Investigation recommendations, impacts would be less than significant.

Mitigation Measures: Mitigation measures are not required.

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?

Significance Determination: No Impact

The Project would not involve the use of septic tanks or alternative waste water disposal systems. The Project would connect to the City's existing wastewater service, which currently provides service to the site and surrounding area. No impacts would occur.

Mitigation Measures: Mitigation measures are not required.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Significance Determination: Less than Significant Impact with Mitigation Incorporated

According to the City's General Plan EIR, Orange County has designated most of the area generally east of SR-55 as an area of paleontological resource sensitivity. However, the Project site is located 1.5 miles west of SR-55 and is developed with an existing manufacturing facility with associated parking and landscaping. There is a low potential for unique geologic features to be present on-site per the General Plan EIR. Additionally, according to the Cultural Resources Study (Appendix B), the Project site does not contain any fossil localities; however, two fossil localities located within 3 miles of the Project site were identified in similar deposits to those underlying the Project site (Duke, 2021). The presence of multiple nearby fossil localities in deposits similar to those underlying the Project site indicates a high sensitivity for paleontological resources within the Project site (Duke, 2021). Although the Project site was previously disturbed, the Project's construction activities have the potential to increase the depth of excavation and uncover unidentified paleontological resources. Therefore, in the unlikely event that Project excavation uncovers unknown paleontological resources, the Project would implement MM GEO-1 requiring all Project grading and construction efforts to halt until a paleontologist examines the site, identifies the paleontological significance of the resource, and recommends a course of action. Following the implementation of MM GEO-1, the Project would not significantly impact paleontological resources, and impacts would be less than significant.

Mitigation Measures:

GEO-1 Prior to the issuance of a grading permit, the Applicant shall provide written evidence to the Community Development Department that the Applicant has retained a qualified paleontologist to respond on an as-needed basis to address unanticipated paleontological discoveries.

In the event that paleontological resources are encountered during ground-disturbing activities, all construction activities within 100 foot vicinity of the find shall halt until the qualified paleontologist identifies the paleontological significance of the find. If determined to be significant, the fossil shall be collected and prepared to the point of identification, identified to the lowest taxonomic level possible, cataloged, and curated into the permanent collections of a museum repository. At the conclusion of curation, a report of findings shall be prepared to document the results of the monitoring program. Construction shall not resume within the vicinity until the site paleontologist states in writing that the proposed construction activities would not significantly damage paleontological resources.

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?	☐	☐	☒	☐
(b)	Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Impact Analysis:

The analysis in this section is based on the *534 Struck Avenue Greenhouse Gas Analysis City of Orange*, (GHG Analysis), prepared by Urban Crossroads dated March 31, 2021. This report is provided in its entirety as Appendix E to this IS/MND.

The Project site contains an approximately 40,000 sf manufacturing use and its related surface parking lot. Emissions associated with the existing use is estimated to be approximately 1,206.77 metric tons of total carbon dioxide equivalent (CO_2e) per year. The Project would remove the site's existing structure and redevelop the site with a 57,900 sf Truck Terminal.

The *Guidance for Greenhouse Gas Emissions Analysis (*Memo) provides guidance to the City of Orange Planning Division staff for evaluating GHG emissions analyses in CEQA documents for all non-exempt projects. Based on the Memo, the City will accept GHG analyses that use the Tier 3 quantitative thresholds recommended in the South Coast AQMD's Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans (South Coast AQMD Interim Threshold) (Urban Crossroads, 2021d)

The South Coast AQMD's adopted numerical threshold of 10,000 million metric tons of carbon dioxide equivalent ($MTCO_2e$) per year for industrial stationary source emissions is typically selected as the significance criterion. However, the City has determined that the South Coast AQMD's draft threshold

of 3,000 $MTCO_2e$ per year is more conservative and appropriate for industrial and warehouse land use development projects. The 3,000 $MTCO_2e$ threshold is based on the South Coast AQMD staff's proposed GHG screening threshold for stationary source emissions for non-industrial projects, as described in the South Coast AQMD Interim Thresholds. The screening threshold is used to determine whether impacts related to GHG are less than significant or additional analysis is required (Urban Crossroads, 2021d).

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Significance Determination: Less than Significant Impact

Project Construction

The Project's construction activities would generate carbon dioxide (CO_2) and methane (CH_4) emissions (greenhouse gases [GHGs]). Construction would occur over an 11-month period. GHG emissions from the construction phase are quantified and amortized over the life of the Project. To amortize the emissions over the life of the Project, the South Coast AQMD recommends calculating the total GHG emissions for the construction activities, dividing it by a 30-year Project life then adding that number to the annual operational phase GHG emissions. As shown in Table 9, *Amortized Annual Construction Emissions – Construction Activities*, construction emissions were amortized over a 30-year period and added to the annual operational phase GHG emissions. (Urban Crossroads, 2021d)

As shown in Table 9, Project construction is estimated to generate a total of 1,011.02 MT/yr of CO_2e; following amortization over a 30-year period the Project would generate 33.07 MT/yr of CO_2e annually.

Table 9 Amortized Annual Construction Emissions – Construction Activities

Year	Emissions (metric tons per year)			
	CO_2	CH_4	N_2O	Total CO_2e[2]
2021	1,006.66	0.17	0.00	1,011.02
Total	1,006.66	0.17	0.00	1,011.02
Amortized Construction Emissions ($MTCO_2e$)	**33.56**	**0.01**	**0.00**	**33.70**

Source: (Urban Crossroads, 2021d)

Project Operation

The Project would result in direct and indirect GHG emissions generated by related vehicle trips and operations associated with the proposed building. The operational activities associated with the Project would result in emissions of CO_2, CH_4, and N_2O from the following primary sources: area source emissions, energy source emissions, mobile source emissions, on-site cargo handling equipment emissions, water supply, treatment, and distribution, and solid waste.

[2] CalEEMod reports the most common GHGs emitted which include CO_2, CH_4, and N_2O. These GHGs are then converted into the CO_2e by multiplying the individual GHG by the GWP.

As shown in Table 10, *Project GHG Emissions*, the Project will result in total GHG emissions of approximately 2,850.67 MTCO2e/yr , or a net increase of 1,643.90 MTCO2e/yr. As shown, the Project would not exceed the South Coast AQMD's recommended numeric threshold of 3,000 $MTCO_2e$/yr. As such, Project-related emissions would not have a potential significant direct or indirect impact on GHG and climate change and impacts would be less than significant (Urban Crossroads, 2021d).

Table 10 Project GHG Emissions

Emission Source	Emissions (MT/yr)			
	CO_2	**CH_4**	**N_2O**	**Total CO_2e**
Annual construction-related emissions amortized over 30 years	33.56	0.01	0.00	33.70
Area Source	0.01	0.00*	0.00	0.02
Energy Source	85.19	0.00*	0.00*	85.51
Mobile Source (Passenger Car)	243.25	0.01*	0.00	243.42
Mobile Source (Truck)	2,331.63	0.15	0.00	2,335.50
On-Site Equipment	50.79	0.02	0.00	51.20
Waste	11.05	0.65	0.00	27.34
Water Usage	59.80	0.44	0.01	73.97
Total CO_2e (All Sources)	**2,850.67**			
Existing Emissions	***1,206.77***			
Net Emissions (Project – Existing)	**1,643.90**			

* Rounded to the nearest hundredth decimal.

Source: (Urban Crossroads, 2021d)

Mitigation Measures: Mitigation measures are not required.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Significance Determination: Less than Significant Impact

Pursuant to Section 15604.4 of the State CEQA Guidelines, a lead agency may rely on qualitative analysis or performance-based standards to determine the significance of impacts from GHG emissions. As such, the Project's consistency with SB 32 (2017 Scoping Plan) and SCAG's 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), is discussed below. Note that consistency with AB 32 and the 2008 Scoping Plan is not necessary, since the target year for AB 32 and the 2008 Scoping Plan was 2020, and the Project's buildout year is 2021. Therefore, the 2008 Scoping Plan does not apply and consistency with the 2017 Scoping Plan is relevant.

2017 Scoping Plan Consistency

The 2017 Scoping Plan Update reflects the 2030 target of a 40% reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. Table 11, *2017 Scoping Plan Consistency*, summarizes the Project's consistency with the 2017 Scoping Plan. As summarized, the Project would not conflict with any of the provisions of the Scoping Plan and in fact supports seven of the action categories.

Table 11 2017 Scoping Plan Consistency

Action	Responsible Parties	Consistency
Implement SB 350 by 2030		
Increase the Renewables Portfolio Standard to 50% of retail sales by 2030 and ensure grid reliability.	CPUC, CEC, CARB	**Consistent.** The Project would use energy from Southern California Edison (SCE). SCE has committed to diversify its portfolio of energy sources by increasing energy from wind and solar sources. The Project would not interfere with or obstruct SCE energy source diversification efforts.
Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030.		**Consistent.** The Project would be designed and constructed to implement the energy efficiency measures for new industrial developments and would include several measures designed to reduce energy consumption. The Project would not interfere with or obstruct policies or strategies to establish annual targets for statewide energy efficiency savings and demand reduction.
Reduce GHG emissions in the electricity sector through the implementation of the above measures and other actions as modeled in Integrated Resource Planning (IRP) to meet GHG emissions reductions planning targets in the IRP process. Load-serving entities and publicly- owned utilities meet GHG emissions reductions planning targets through a combination of measures as described in IRPs.		**Consistent.** The Project would be designed and constructed to implement the energy efficiency measures, where applicable by including several measures designed to reduce energy consumption. The Project includes energy efficient field lighting and fixtures that meet the current Title 24 Standards throughout the Project site and would be a modern development with energy efficient boilers, heaters, and air conditioning systems.
Implement Mobile Source Strategy (Cleaner Technology and Fuels)		
At least 1.5 million zero emission and plug-in hybrid light-duty EVs by 2025.	CARB, California State Transportation Agency (CalSTA), Strategic Growth Council (SGC), California Department of Transportation (Caltrans), CEC, OPR, Local Agencies	**Consistent.** This is a CARB Mobile Source Strategy. Vehicles that access the Project that are required to comply with the standards will comply with the Strategy. EV charging stations are required to be installed on the site per Title 24. The Project would not obstruct or interfere with CARB zero emission and plug-in hybrid light-duty electric vehicle 2025 targets.
At least 4.2 million zero emission and plug-in hybrid light-duty EVs by 2030.		**Consistent.** This is a CARB Mobile Source Strategy. Vehicles that access the Project that are required to comply with the standards will comply with the Strategy. EV charging stations are required to be installed on the site per Title 24. The Project would not obstruct

Action	Responsible Parties	Consistency
		or interfere with CARB zero emission and plug-in hybrid light-duty electric vehicle 2030 targets.
Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean cars regulations.		**Consistent.** This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean cars regulations.
Medium- and Heavy-Duty GHG Phase 2.		**Consistent.** This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to implement Medium- and Heavy-Duty GHG Phase 2 standards.
Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options. Assumed 20% of new urban buses purchased beginning in 2018 will be zero emission buses with the penetration of zero-emission technology ramped up to 100% of new sales in 2030. Also, new natural gas buses, starting in 2018, and diesel buses, starting in 2020, meet the optional heavy-duty low-NO_X standard.		**Consistent.** This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts improve transit-source emissions.
Last Mile Delivery: New regulation that would result in the use of low NO_X or cleaner engines and the deployment of increasing numbers of zero-emission trucks primarily for class 3-7 last mile delivery trucks in California. This measure assumes ZEVs comprise 2.5% of new Class 3–7 truck sales in local fleets starting in 2020, increasing to 10% in 2025 and remaining flat through 2030.		**Consistent.** This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to improve last mile delivery emissions.
Further reduce VMT through continued implementation of SB 375 and regional Sustainable Communities Strategies; forthcoming statewide implementation of SB 743; and potential additional VMT reduction strategies not specified in the Mobile Source Strategy but included in the document "Potential VMT Reduction Strategies for Discussion."		**Consistent.** This is a CARB VMT Reduction Strategy. The Project would not obstruct or interfere with CARB efforts to implement VMT reduction strategies articulated under SB 374375 and the Sustainable Communities Strategies or with implementation of SB 743 (the Project is located in a low VMT generating area and is presumed to have a less than significant VMT impact pursuant to SB 743).
Increase stringency of SB 375 Sustainable Communities Strategy (2035 targets).	CARB	**Consistent.** This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to Increase stringency of SB 375 Sustainable Communities Strategy (2035 targets).

Action	Responsible Parties	Consistency
Harmonize project performance with emissions reductions and increase competitiveness of transit and active transportation modes (e.g. via guideline documents, funding programs, project selection, etc.).	CalSTA, SGC, OPR, CARB, Governor's Office of Business and Economic Development (GO-Biz), California Infrastructure and Economic Development Bank (IBank), Department of Finance (DOF), California Transportation Commission (CTC), Caltrans	**Consistent.** The Project would not obstruct or interfere with agency efforts to harmonize transportation facility project performance with emissions reductions and increase competitiveness of transit and active transportation modes.
By 2019, develop pricing policies to support low-GHG transportation (e.g. low-emission vehicle zones for heavy duty, road user, parking pricing, transit discounts).	CalSTA, Caltrans, CTC, OPR, SGC, CARB	**Consistent.** The Project would not obstruct or interfere with agency efforts to develop pricing policies to support low-GHG transportation.
Implement California Sustainable Freight Action Plan		
Improve freight system efficiency.	CalSTA, CalEPA, CNRA, CARB, Caltrans, CEC, GO-Biz	**Consistent.** This measure would apply to all trucks accessing the Project site, this may include existing trucks or new trucks that are part of the statewide goods movement sector. The Project would not obstruct or interfere with agency efforts to Improve freight system efficiency.
Deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize both zero and near-zero emission freight vehicles and equipment powered by renewable energy by 2030.		**Consistent.** The Project would not obstruct or interfere with agency efforts to deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize both zero and near-zero emission freight vehicles and equipment powered by renewable energy by 2030.
Adopt a Low Carbon Fuel Standard with a Carbon Intensity reduction of 18%.	CARB	**Consistent.** When adopted, this measure would apply to all fuel purchased and used by the Project in the state. The Project would not obstruct or interfere with agency efforts to adopt a Low Carbon Fuel Standard with a Carbon Intensity reduction of 18%.

Action	Responsible Parties	Consistency
Implement the Short-Lived Climate Pollutant Strategy (SLPS) by 2030		
40% reduction in methane and hydrofluorocarbon emissions below 2013 levels.	CARB, CalRecycle, CDFA, California State Water Resource Control Board (SWRCB), Local Air Districts	**Consistent.** The Project would be required to comply with this measure and reduce any Project-source SLPS emissions accordingly. The Project would not obstruct or interfere agency efforts to reduce SLPS emissions.
50% reduction in black carbon emissions below 2013 levels.		
By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLCP and SB 1383.	CARB, CalRecycle, CDFA, SWRCB, Local Air Districts	**Consistent.** The Project would implement waste reduction and recycling measures consistent with State and City requirements. The Project would not obstruct or interfere agency efforts to support organic waste landfill reduction goals in the SLCP and SB 1383.
Implement the post-2020 Cap-and-Trade Program with declining annual caps.	CARB	**Consistent.** The Project would not obstruct or interfere agency efforts to implement the post-2020 Cap-and-Trade Program.
By 2018, develop Integrated Natural and Working Lands Implementation Plan to secure California's land base as a net carbon sink		
Protect land from conversion through conservation easements and other incentives.	CNRA, Departments Within CDFA, CalEPA, CARB	**Consistent.** The Project would redevelop a buildout site with no natural habitat and would not obstruct or interfere agency efforts to protect land from conversion through conservation easements and other incentives.
Increase the long-term resilience of carbon storage in the land base and enhance sequestration capacity		**Consistent.** The Project site is currently developed and does not comprise an area that would effectively provide for carbon sequestration. The Project would not obstruct or interfere with agency efforts to increase the long-term resilience of carbon storage in the land base and enhance sequestration capacity.
Utilize wood and agricultural products to increase the amount of carbon stored in the natural and built environments		**Consistent.** The Project would not obstruct or interfere agency efforts to encourage use of wood and agricultural products to increase the amount of carbon stored in the natural and built environments.
Establish scenario projections to serve as the foundation for the Implementation Plan		**Consistent.** The Project would not obstruct or interfere agency efforts to establish scenario projections to serve as the foundation for the Implementation Plan.

Action	Responsible Parties	Consistency
Establish a carbon accounting framework for natural and working lands as described in SB 859 by 2018	CARB	**Consistent.** The Project would not obstruct or interfere agency efforts to establish a carbon accounting framework for natural and working lands as described in SB 859 by 2018.
Implement Forest Carbon Plan	CNRA, California Department of Forestry and Fire Protection (CAL FIRE), CalEPA and Departments Within	**Consistent.** The Project would not obstruct or interfere agency efforts to implement the Forest Carbon Plan.
Identify and expand funding and financing mechanisms to support GHG reductions across all sectors.	State Agencies & Local Agencies	**Consistent.** The Project would not obstruct or interfere with agency efforts to identify and expand funding and financing mechanisms to support GHG reductions across all sectors.

Source: (Urban Crossroads, 2021d)

As shown above, the Project would not conflict with any of the 2017 Scoping Plan actions as the Project would comply with any applicable adopted regulations. Further, recent studies show that the State's existing and proposed regulatory framework will allow the State to reduce its GHG emissions level to 40% below 1990 levels by 2030 and impacts would be less than significant (Urban Crossroads, 2021d).

Connect SoCal Consistency

The analysis below assesses the Project's consistency with South Coast AQMD's adopted 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) titled *Connect SoCal*. *Connect SoCal* retains the same purpose as the previously adopted 2016-2040 RTP/SCS in focusing and providing an integrated approach for accommodating projected population growth, household and employment growth, and transportation needs in the SCAG region by the year 2045. Similar to the previously adopted RTP/SCS plans, the projected regional development pattern under the adopted 2020-2045 RTP/SCS would reduce per capita vehicular-travel-related GHG emissions and achieve the GHG reduction per capita targets for the SCAG region. Similar to the 2016-2040 RTP/SCS, vehicle miles travelled (VMT) associated with heavy duty trucks involved in goods movement is outside the purview of the adopted *Connect SoCal* plan, which primarily focuses on VMT associated with passenger vehicles. Under the adopted *Connect SoCal* plan, the focus remains on improving freight mobility in the region and transitioning to near-zero and zero-emissions technology. The *Connect SoCal* plan is largely based on local growth forecasts from local government; therefore, a project is consistent with the *Connect SoCal* plan, in part, if it is consistent with the population, housing, and employment assumptions and smart growth policies that were used in the formation of the AQMP.

The Project Applicant would redevelop the Project site with a single, approximately 57,900 sf Truck Terminal building permitted within the M-2 zone with adoption of a CUP, and would provide frontage

improvements along Struck Avenue. Because the Project involves redevelopment of the site with a permitted use, the *Connect SoCal* plan's growth assumptions for the City accommodate the proposed use on the Project site. Development of the Project would also be consistent with the smart growth policies of the *Connect SoCal* plan to increase employment density within proximity to high quality transit areas (HQTAs). According to SCAG, the Project site is within an HQTAs (SCAG, 2020b). Overall, it is anticipated that development of the Project would not interfere with SCAG's ability to implement the regional strategies outlined in the adopted *Connect SoCal* plan and impacts would be less than significant.

Mitigation Measures: Mitigation measures are not required.

	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?	☐	☒	☐	☐
(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?	☐	☐	☒	☐
(c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
(d)	Be located on a site which is included on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
(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?	☐	☐	☐	☒
(f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
(g)	Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

This section is primarily based on the *Phase I Environmental Site Assessment Assessor's Parcel Number (APN) 375-331-04* (Phase I ESA), prepared by GeoTek, Inc (GeoTek) dated March 31, 2020, *Limited Phase II Environmental Site Assessment 534 Struck Avenue, Orange, Orange County California 92867* (Phase II ESA), prepared by GeoTek dated June 30, 2020, *Soil Management Plan Proposed Industrial Development 534 West Struck Avenue, Orange, California* (SMP), prepared by Ramboll US Corporation (Ramboll) dated August 12, 2020. The Project-specific Phase I ESA, Phase II ESA, and SMP are included as Appendix F.1, F.2, and F.3 of this IS/MND.

Impact Analysis:

a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?

Significance Determination: Less than Significant With Mitigation Incorporated.

A significant impact may occur if a project would involve the use or disposal of hazardous materials as part of its routine operations, or would have the potential to generate toxic or otherwise hazardous emissions that could adversely affect sensitive receptors. The Project Applicant proposes to redevelop the Project site with a building that has the potential to store hazardous materials during the future building user's daily operations.

Project Construction

General Construction Hazardous Waste

Heavy equipment (e.g., dozers, excavators, tractors) would operate on the subject property during construction of the Project. Heavy equipment is typically fueled and maintained by petroleum-based substances such as diesel fuel, gasoline, oil, and hydraulic fluid, which is considered hazardous if improperly stored or handled. Also, materials such as paints, adhesives, solvents, and other substances typically used in building construction would be located on the Project site during construction. Improper use, storage, or transportation of hazardous materials can result in accidental releases or spills, potentially posing health risks to workers, the public, and the environment. This is a standard risk on all construction sites, and there would be no greater risk for improper handling, transportation, or spills associated with the proposed Project than would occur on any other similar construction site. Construction contractors would be required to comply with all applicable federal, State, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related materials, including but not limited requirements imposed by the EPA, California Department of Toxic Substances Control (DTSC), South Coast AQMD, and Santa Ana Regional Water Quality Control Board (RWQCB). With mandatory compliance with applicable hazardous materials regulations, the Project would not create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials during the construction phase. Impacts would be less than significant.

Impacted Soils

Construction activities required to develop the Project site would involve the disturbance of on-site soils. There is the potential for the discovery of contamination during these activities due to past reported evidence of soil contamination and underground storage tanks.

The Project site was previously occupied by Nursing Supplies, Inc. a manufacturer of plastic nursery planting pots. The site has reported past evidence of soil contamination and underground storage tanks. Additionally, the site has reported compliance violations from the County of Orange Health Care Agency – Environmental Health regarding spill control and secondary containment for bulk storage containers on site. The site was "cleaned" of contaminated soils approximately 34 years ago (GeoTek, 2020b). During the field visit conducted as part of the Phase I ESA on March 5, 2020, visual evidence of hazardous substances and wastes were observed. Current observed conditions at the site indicate generally poor housekeeping and documentation regarding hazardous materials and wastes (GeoTek, 2020b). Based on the historic recognized environmental condition and on-site conditions, the Phase I ESA recommended additional soil sampling to ensure the site has been cleaned prior to construction.

A limited Phase II ESA was prepared to conduct soil and soil vapor sampling consistent with the recommendations of the Phase I ESA. A site reconnaissance was performed on May 20, 2020 by a geologist from GeoTek. The Phase II field investigation commenced on May 26, 2020 and was completed on May 27, 2020 (GeoTek, 2020c). GeoTek advanced 16 exploratory borings (Borings B-1 through B-16) at the Project site within the parking/driving areas. The boring locations are depicted on Figure 12, *Boring Location Map*.

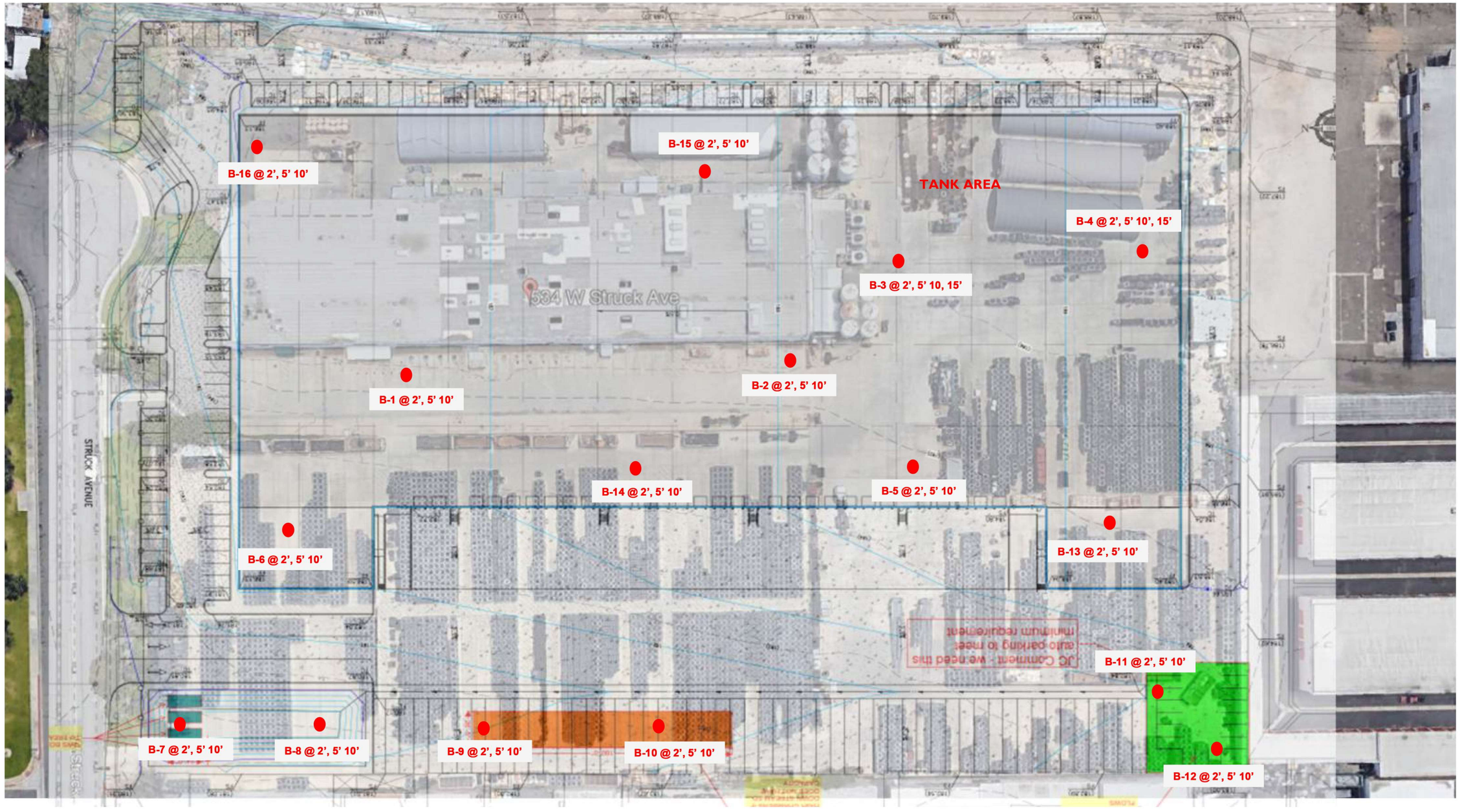
Boring B-1, B-2, and B-5 through B-16 were drilled to an approximate depth of 10 feet below existing grades. Borings B-3 and B-4 were drilled within the approximate location of the previous underground storage tanks and were drilled to an approximate depth of 15 feet below existing grades (GeoTek, 2020c). Detectable quantities of the VOC constituents freon 113; 1,1,1-trichloroethene; dichlorodifluoromethane; trichlorofluoromethane; trichloroethene; and tetrachloroethene were detected from all borings. VOC concentrations for the constituents trichloroethene and tetrachloroethene were detected above screening levels for industrial air in two of the 16 borings, which include B-11 and B-12. These two borings are in the southwest corner, within the proposed parking area and/or stormwater disposal area of the Project site. (GeoTek, 2020c). Therefore, contaminated soils encountered during construction could pose a health risk to workers and the general public during removal, handling, and transport.

Contaminated soils would be removed and disposed of offsite in accordance with all applicable regulatory guidelines which include:

- **South Coast AQMD Rule 1166 requirements:** The rule requires monitoring of soils contaminated with VOCs during excavation or grading. A Rule 1166 permit must be obtained from South Coast AQMD prior to the start of work. Field monitoring will be conducted as required under Rule 1166 and soils will be monitored for VOCs in accordance with the South Coast AQMD Executive Officer. In the event that VOC detections reach or exceed 50 parts per million, further grading or excavation activities would be conducted in accordance with Rule 1166 to minimize releases of VOCs to air. Monitoring and record keeping would be submitted to the South Coast AQMD.

- **South Coast AQMD Rule 403:** Best available dust control measures and monitoring for fugitive dust would be conducted in accordance with South Coast AQMD's Rule 403. In order to minimize exposure of on-site grading workers to dust and minimize dust from migrating off-site, various dust control measures would be implemented, including: spraying water on soil, limiting vehicle speeds on site to 5 miles per hour or less, controlling excavation activities, cleaning up track-outs at the end of each work day, minimizing drop heights during vehicle loading, and covering exposed stockpiles.

- **SWRCB General Construction Permit:** A SWPPP for construction would need to be in place prior to the start of grading. A SWPPP requires the incorporation of best management practices to control sediment, erosion, and hazardous materials contamination of runoff during construction and prevent contaminants from reaching receiving water bodies.



Source(s): Geotek (10-06-2020)

Figure 12

Not to Scale

BORING LOCATION MAP

- **Certification.** Contractors performing work directly involving impacted soil will be required to possess an active California State contractor's license with a Hazardous Substances Removal certification.

Soil Management Plan

The Project's Phase I and Phase II ESA identified environmental concerns related to the historical widespread chemical use, storage, and disposal operations/practices at the site, which resulted in soil contamination that was the subject of prior remedial actions. The facility historically maintained numerous USTs and discrepancies reportedly exist as to the number and type of USTs and their decommissioning/removal status. There are no known USTs currently at the site.

As discussed, there is a potential for the Project site to contain impacted soil or other subsurface features (pits, sumps, clarifies, or USTs) that may need to be appropriately and expeditiously managed due to additional agency oversight and/or any permitting necessary to properly abandon such features. In order to ensure public and worker safety, an SMP was prepared (Appendix F.3) to provide procedures for efficiently managing potentially-impacted soils and/or USTs during site preparation activities. During earthwork activities the grading contractor is required to follow the SMP in areas of potentially impacted soil. Contractors must follow the applicable California Department of Health and Safety Administration (Cal/OSHA) regulations for construction safety in California Code of Regulations (CCR) Title 8, Sections 1500-1938. Contractor employees involved in remediation activities must be HAZWOPER-trained personnel. SMP Section 3, includes several requirements including but not limited to dust control and storm water runoff control measures; procedures and notification protocols for managing impacted soils; engineering controls to limit vapor emissions, toxic air contaminants, and visibly contaminated/odorous soils; and permitting procedures for removal of inadvertent discovery of subsurface features (i.e., USTs, sumps, pits, clarifiers). Additionally, the SMP outlines the soil sample methodology, applicable performance standards, characterization, and proper disposal. SMP, Section 4 establishes excavation and soil removal procedures. SMP, Section 5 describes construction BMPs to reduce or prevent the discharge of pollutants from construction activities, which include but are not limited to, keeping spill kits on-site, checking all equipment for leaks and repair leaking equipment properly, limit fugitive dust during excavation, protecting storm drains, and scheduling excavation work for dry weather periods when possible. A comprehensive list of the Project's construction BMPs is provided in Appendix F.3 (Ramboll, 2020).

Implementation of MM HAZ-1 would ensure compliance with the SMP, which would reduce potential impacts related to routine transport, use, or disposal of contaminated or potentially contaminated soils to less than significant.

Demolition

A recognized environmental condition (REC) is defined by the American Society for Testing Materials (ASTM) as, "the presence or likely presence of any hazardous substances or petroleum products in, on, or at the property: 1) due to a release to the environment; 2) under conditions indicative of a release to the environment, or 3) under conditions that pose a material threat of a future release to the environment."

The use of asbestos-containing materials (ACM, a known carcinogen) and lead-based paint (LBP) (a known toxic), both of which are considered hazardous materials, was a common building construction prior to 1978 and may be present in the existing building. All proposed demolition activities would be required to comply with all applicable federal, State, and local hazardous materials regulation, which includes mandatory provisions for the safe removal, transport, and disposal of ACMs and lead paint. South Coast AQMD Rule 1403 (Asbestos Emissions) and Title 17 of the California Code of Regulations (CCR), Division 1, Chapter 8: *Accreditation, Certification, and Work Practices for Lead-Based Paint and Lead Hazards* applies.

South Coast AQMD Rule 1403 establishes survey requirements, notification, and work practice requirements to prevent asbestos emissions from emanating during building renovation and demolition activities. Assuming that ACMs are present in the existing structure located on-site, then Rule 1403 requires notification of the South Coast AQMD prior to commencing any demolition activities. Rule 1403 also sets forth specific procedures for the removal of asbestos and requires that an on-site representative trained in the requirements of Rule 1403 be present during the stripping, removing, handling, or disturbing of ACM. Mandatory compliance with the provisions of Rule 1403 would ensure that construction-related grading, clearing, and demolition activities do not expose construction workers or nearby sensitive receptors to significant health risks associated with ACMs. Because future development on the Project site would be required to comply with AQMD Rule 1403 during demolition activities, impacts due to asbestos would be less than significant.

Title 17, CCR, Division 1, Chapter 8: Accreditation, Certification and Work Practices for Lead-Based Paint and Lead Hazards, defines and regulates lead-based paint. Any detectable amount of lead is regulated. During the demolition of the existing manufacturing building, there is a potential for exposing construction workers to health hazards associated with lead. The Project would be required to comply with Title 17, CCR, Division 1, Chapter 8, which includes requirements such as employer-provided training, air monitoring, protective clothing, respirators, and handwashing facilities. Mandatory compliance with these requirements would ensure that construction workers and the public are not exposed to significant LBP health hazards or upset during demolition and/or during transport of demolition waste to an appropriate disposal facility and would ensure that impacts related to LBP remain less than significant. Accordingly, neither ACMs nor lead paint are determined to be a significant hazard on the Project site.

Project Operation

As previously mentioned, the Project would be occupied with a truck terminal use and it is possible that hazardous materials could be used during the future building user's daily operations. State and federal Community-Right-to-Know laws allow public access to information about the amounts and types of chemicals in use at local businesses. Laws also are in place that requires businesses to plan and prepare for possible chemical emergencies. The City follows the County's Hazardous Materials Inspection and Enforcement Plan (Orange, 2010b). To prevent accidents, and ensure proper handling, routine inspections are conducted at businesses within the City that store, use, or handle hazardous materials. The City concentrates the production of hazardous materials within its industrial area, separated from residential areas, educational uses, and institutional facilities. The City also identifies businesses transporting, manufacturing, using, and storing hazardous chemicals, and requires such businesses to

exercise caution and to mitigate potential negative effects on surrounding land uses prior to obtaining business licenses. Additionally, any business handling at any one time, greater than 500 pounds of solid, 55 gallons of liquid, or 200 cubic feet of gaseous hazardous material, is required, under Assembly Bill 2185 (AB 2185), to file a Hazardous Materials Business Emergency Plan (HMBEP). An HMBEP is a written set of procedures and information created to help minimize the effects and extent of a release or threatened release of hazardous material. The HMBEP intends to satisfy federal and State Community Right-To-Know laws and to provide detailed information for use by emergency responders.

If businesses that use or store hazardous materials occupy the Project, the business owners and operators would be required to comply with all applicable federal, State, and local regulations to ensure proper use, storage, use, emission, and disposal of hazardous substances (as described above). With mandatory regulatory compliance, the Project is not expected to pose a significant hazard to the public or the environment through the routine transport, use, storage, emission, or disposal of hazardous materials. Impacts would be less than significant.

Mitigation Measure:

HAZ-1 The Project Contractor shall adhere to the protocols and performance standards stipulated in the SMP (Appendix F.3). Contractors working at the site follow all applicable Cal/OSHA regulations for construction safety. A Completion Report shall be prepared at the conclusion of grading activities. The report shall document field monitoring activities and visual observations made during grading/excavations, as well as soil sampling locations and results. The report shall include a description of the location of impacted soil encountered, actions taken to characterize and mitigate impacts, confirmation soil sampling results, and disposition of any excavated soil. In addition, the report shall include a description of encountered subsurface structures and steps to remove and close such structures. The report shall be reviewed and approved by the City of Orange Community Development Director, prior to issuance of building permits.

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?

Significance Determination: Less than Significant Impact

During Project construction, there is a possibility of accidental release of hazardous substances such as petroleum-based fuels or hydraulic fluid used for construction equipment. The level of risk associated with the accidental release of hazardous substances is not considered significant due to the small volume and low concentration of hazardous materials utilized during construction. The construction contractor would be required to use standard construction controls and safety procedures that would avoid and minimize the potential for accidental release of such that any materials released are appropriately contained and remediated as required by local, State, and federal law.

Construction

The proposed Project would comply with the requirements of applicable laws and regulations governing upsets and accidents including the requirements of the hazardous materials disclosure program, the California Accidental Release Prevention Program, the hazardous materials release response plans and inventory program, and California Health and Safety Code Section 25500. Additionally, strict adherence to the City of Orange emergency response plan requirements would be required through the duration of the Project construction phase.

These requirements would ensure that all potentially hazardous materials are handled in an appropriate manner and would minimize the potential for upset and accident conditions. For example, all spills or leakage of petroleum products during construction activities are required to be immediately contained, the hazardous material identified, and the material remediated in compliance with applicable state and local regulations for the cleanup and disposal of that contaminant. All contaminated waste would be required to be collected and disposed of at an appropriately licensed disposal or treatment facility. Therefore, this impact is considered less than significant.

Operation

Regulatory requirements pertaining to upsets and accidents following during the construction phase would also be implemented during the operational phase. For the operational phase, both the federal government and the State of California require that the proposed Project files a hazardous materials business plan. These requirements would ensure that all potentially hazardous materials are handled in an appropriate manner and would minimize the potential for safety impacts. With mandatory regulatory compliance, the Project would not increase the potential for accident conditions which could result in the release of hazardous materials into the environment. Impacts would be less than significant.

Mitigation Measures: Mitigation measures are not required.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Significance Determination: No Impact

The closest existing schools to the Project site are California Elementary School and Yorba Middle School located approximately 0.78 miles east of the Project site. Implementation of the Project would not have the potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 miles of an existing or proposed school. No impacts would occur.

Mitigation Measures: Mitigation measures are not required.

d) Be located on a site which is included on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Significance Determination: Less than Significant Impact

The Project site appears on the EnviroStor database sites; however, this listing represents a historic REC at the Site. A historic REC refers to a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority (EDR, 2016). The status of the site is listed as "refer: other agency" and no further action (NFA) was recommended for the site as "remediation of soil was completed by Orange County." With the consideration of the absence of reported violations, spills, or releases, the Project site is not considered to be a REC (GeoTek, 2020b). Therefore, the Project would not create a significant hazard to the public or environment and impacts would be less than significant.

Mitigation Measures: Mitigation measures are not required.

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?

Significance Determination: No Impact

The closest airport to the Project site is the Fullerton Municipal Airport located approximately 8.0 miles northwest. The Project site is not within an airport land use plan or within 2 miles of a public airport or public use airport. Implementation of the Project would not result in a safety hazard or excessive noise for people residing or working within the Project area. No impacts would occur.

Mitigation Measures: Mitigation measures are not required.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Significance Determination: Less than Significant Impact

The City has an adopted emergency plan that establishes emergency preparedness and emergency response procedures for both peacetime and wartime disasters. The plan is termed an "Emergency Operations Plan," prepared in accordance with the State Office of Emergency Services guidelines for multi-hazard functional planning. The plan consists of 3 parts 1) a basic plan; 2) specific functions and duties of response agencies; 3) a directory of emergency response resources. The City's plan concentrates on specific agency response for any type of disaster.

All City arterials are recognized as primary emergency response routes. Additionally, non-arterials can be secondary emergency response routes. If current emergency vehicle access does not meet response standards, traffic calming efforts should not further degrade response times. The City's Emergency Operations Plan does not indicate evacuation routes for emergencies adjacent to the Project site. The routes of escape from disaster-stricken areas would depend on the scale and scope of the disaster.

As shown in Figure PS-4 of the City's General Plan Public Safety Element, Katella Avenue is the closest designated evacuation corridor in the City to the Project site. The Project is not anticipated to affect access to Katella Avenue during construction, and would not require road closures or otherwise impact the functionality of this, or other designated evacuation corridors.

Additionally, the Project would not affect emergency access. The Project is required to comply with applicable fire codes established by the Orange County Fire Authority (OCFA). The Project would be required to go through the City's development review and permitting process and would be required to incorporate all appliable design and safety standards and regulations in the California Fire Code and the OMC. Incorporation of applicable design and safety standards and regulations would ensure that the Project's development does not interfere with the provision of local emergency services.

Based on the foregoing, the implementation of the Project would not impair the implementation of or physically interfere with the City's Emergency Operation Plan, the General Plan Public Safety Element, or any other emergency response plan. Impacts would be less than significant.

Mitigation Measures: Mitigation measures are not required.

g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?

Significance Determination: No Impact

The Project site is fully developed and is within a completely urbanized area that is void of any wildland areas. Additionally, according to the California Department of Forestry and Fire Protection (CalFire), the Project site is not within a very high fire hazard severity zone. Implementation of the Project would not expose people or structures to a significant risk involving wildland fires. No impacts would occur.

Mitigation Measures: Mitigation measures are not required.

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?	☐	☐	☒	☐
(b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
(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:				
	(i) result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
	(ii) increase the rate or amount of surface runoff in a manner which would result in flooding in- or off-site;	☐	☐	☒	☐
	(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	☐	☐	☒	☐
	(iv) impede or redirect flood flows?	☐	☐	☐	☒
(d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
(e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒
(f)	Potentially impact stormwater runoff from construction activities?	☐	☐	☒	☐
(g)	Potentially impact stormwater runoff from post-construction activities?	☐	☐	☒	☐
(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?	☐	☐	☒	☐
(i)	Result in the potential for discharge of stormwater to affect the beneficial uses of the receiving waters?	☐	☐	☒	☐
(j)	Create the potential for significant changes in the flow velocity or volume of stormwater runoff to cause environmental harm?	☐	☐	☒	☐
(k)	Create significant increases in erosion of the project site or surrounding areas?	☐	☐	☒	☐

This section is primarily based on the 2) *Preliminary Water Quality Management Plan For 534 Struck Ave Redevelopment Project* (WQMP), prepared by Albert A. Webb Associates (Webb) dated February 2021; and 2) *534 W. Struck Avenue Redevelopment Project Orange, California Preliminary Drainage Study* (Drainage Study), prepared by Webb dated February 2021. The Project-specific Preliminary WQMPs and Drainage Studies are included as Appendices G.1 and G.2 of this IS/MND.

Impact Analysis:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Significance Determination: Less than Significant Impact

As part of Section 402 of the Clean Water Act, the U.S. Environmental Protection Agency (EPA) has established regulations under the NPDES program to control direct storm water discharges. In California, the State Water Resources Control Board (SWRCB) administers the NPDES permitting program and is responsible for developing NPDES permitting requirements. The NPDES program regulates industrial pollutant discharges, which include construction activities. The SWRCB works in coordination with the Regional Water Quality Control Boards (RWQCB) to preserve, protect, enhance, and restore water quality. The City of Orange, including the Project site, is within the jurisdiction of the Santa Ana RWQCB.

Construction Impacts

The Project may result in water quality impacts during short-term construction activities. The grading/excavation required for project implementation would result in exposed soils that may be subject to wind and water erosion. Although erosion occurs naturally in the environment, improperly managed construction activities can lead to substantially accelerated rates of erosion that are considered detrimental to the environment. As such, short-term water quality impacts have the potential to occur during construction of the Project in the absence of any protective or avoidance measures.

The SWRCB adopted the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit). The Construction General Permit is required for all projects that include construction activities, such as clearing, soil stockpiling, grading, and/or excavation that disturb at least one (1) acre of total land area. Additionally, the Project would be required to comply with the Santa Ana RWQCB's Santa Ana River Basin Water Quality Control Program. Compliance with the Construction General Permit and the Santa Ana River Basin Water Quality Control Program involves the preparation and implementation of a SWPPP for construction-related activities, including grading. The purpose of the SWPPP is to identify the 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.

The Project would be required to comply with the City's Stormwater Local Implementation Plan (LIP) (Orange, 2011). The LIP requires all private and public construction projects to implement and be protected by an effective combination of erosion and sediment controls and waste and materials management BMPs, such as source control BMPs (e.g. site planning and landscaping, use of pervious pavement), structural BMPs (e.g. protection from rain, secondary containment, etc.), and treatment control BMPs (e.g. constructed wetlands and vegetative swales), to prevent discharges into the storm drain system or watercourses. Table A-8.3 of the LIP provides a comprehensive list of designated

construction BMPs (Orange, 2011). The minimum requirements for all construction sites include erosion and sediment control, and waste and materials management control (Table A-8.2 of the LIP), which would be implemented during the Project's construction phase (Orange, 2011). Additionally, the Project would be required to comply with Chapter 7.01, *Water Quality and Stormwater Discharges*, of the OMC. This chapter includes conditions and requirements related to the control of urban pollutants to stormwater runoff.

Mandatory compliance with the SWPPP, the City's LIP, and Chapter 7.01 of the OMC would ensure that the Project does not violate any water quality standards or waste discharge requirements during construction activities. Impacts would be less than significant.

Post Construction-Impacts

The Project Applicant would redevelop with Project site with a building up to 57,900 sf and associated parking and landscaping. The anticipated pollutants to be generated at the Project site include: suspended solids and sediments, nutrients and pesticides (from the proposed landscaping), heavy metals (from truck-trailers both active and stored), oil and grease, toxic organic compounds (TOCs), pathogens (bacteria/virus), and trash and debris (from all vehicular traffic). From these anticipated pollutants, only pathogens (bacteria/virus) are listed as impaired on the Clean Water Act's Section 303(d) list (Webb, 2020a). Receiving waters for the Project site include: Collins Channel, Santa Ana River Reach 1, and Santa Ana River Reach 2. The Santa Ana Reach 2 provides the following beneficial uses:

- Agricultural Supply
- Groundwater Recharge
- Water Contact Recreation
- Non-Contact Water Recreation
- Warm Freshwater Habitat
- Wildlife Habitat
- Rare, Threatened, or Endangered Species

The Stormwater Program's specific water pollutant control elements are documented in the Drainage Area Management Plan (DAMP). The DAMP satisfies the NPDES permit conditions to reduce pollutant discharges to the maximum extent practicable for the protection of water quality at receiving water bodies and the support of designated beneficial uses. The DAMP contains guidance on both structural and non-structural BMPs for meeting these goals. With implementation of the DAMP requirements, as required by OMC Chapter 7.01 the Project would be required to prepare a WQMP in accordance with the requirements of the NPDES permit.

The Project Applicant has prepared a WQMP, which includes non-structural BMPs, such as educational materials for property owners, tenants, and occupants; activity restriction; common area landscape management; BMP maintenance; spill contingency plant; uniform fire code implementation; common area litter control; employee training; housekeeping of loading docks, common area catch basin inspection; and street sweeping private streets and parking lots. Structural BMPs included in the Project's WQMP include providing storm drain signage; trash storage areas; efficient irrigation systems and landscape design; and loading docks (Webb, 2021a).

In addition to the WQMP, the NPDES program also requires certain land uses, including the industrial land use proposed by the Project, to prepare a SWPPP for operational activities and to implement a long-term water quality sampling and monitoring program, unless an exemption is granted. Because the permit is dependent upon the operational activities of the building and the tenants are not known at this time, details of the SWPPP (including BMPs) or potential exemption to the SWPPP operational activities requirement cannot be determined at this time. However, based on the requirements of the NPDES Industrial General Permit, the Project's mandatory compliance with all applicable regulations would further reduce potential water quality impacts during long-term operation. It should be noted that under existing conditions, flows generated from the site drain to Struck Avenue unmitigated and untreated. Implementation of the Project would have a beneficial impact on water quality because it would capture all on-site flows and treat flows prior to being discharged into the City's storm drainage system.

Based on the foregoing analysis, the Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality or result in potential discharge of stormwater to affect beneficial uses of receiving waters. Impacts would be less than significant.

Mitigation Measures: Mitigation measures are not required.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Significance Determination: Less than Significant Impact

According to the Project's Geotechnical Investigation, groundwater was not encountered at the Project site during subsurface investigations to the maximum depth explored (30 feet bgs) (GeoTek, 2020a). Implementation of the Project would not include the construction of a potable groundwater well and no potable groundwater wells are located on-site. The City of Orange would provide potable water services to the Project. Most of the City's water comes from 2 sources: groundwater from the Lower Santa Ana River Groundwater Basin and imported water purchased from the Metropolitan Water District of Southern California (MWD).

Groundwater Supply

According to the City's 2015 Urban Water Management Plan (UWMP), the City's water resources have adequate supply to serve the Project site in addition to past, present, and future commitments under normal year, single dry year, and multiple dry years through the year 2040. Additionally, the Project does not propose a General Plan Amendment to modify the site's land use designation, and the proposed uses are already anticipated in the City's General Plan and UWMP. Based on the foregoing analysis, the Project would not have the potential to substantially decrease groundwater supplies. Impacts would be less than significant.

Groundwater Recharge

Under existing conditions, approximately 89 percent of the Project site contains impervious surfaces that provides little opportunity for infiltration. The Project would create similar impervious surface conditions, increasing the Project site's impervious surface coverage to 91 percent (Webb, 2020a). Therefore, redevelopment of the site would not substantially interfere with groundwater recharge.

Additionally, as shown in Figure N-2 of the City General Plan Natural Resources Element, groundwater recharge facilities for the Lower Santa Ana River Groundwater Basin include the Santa Ana River and Santiago Creek. The Project site is located approximately 0.87 miles east of the Santa Ana River and approximately 1.9 miles north of the Santiago Creek. Implementation of the Project would not have the potential to interfere with groundwater recharge. Impacts would be less than significant.

Mitigation Measures: Mitigation measures are not required.

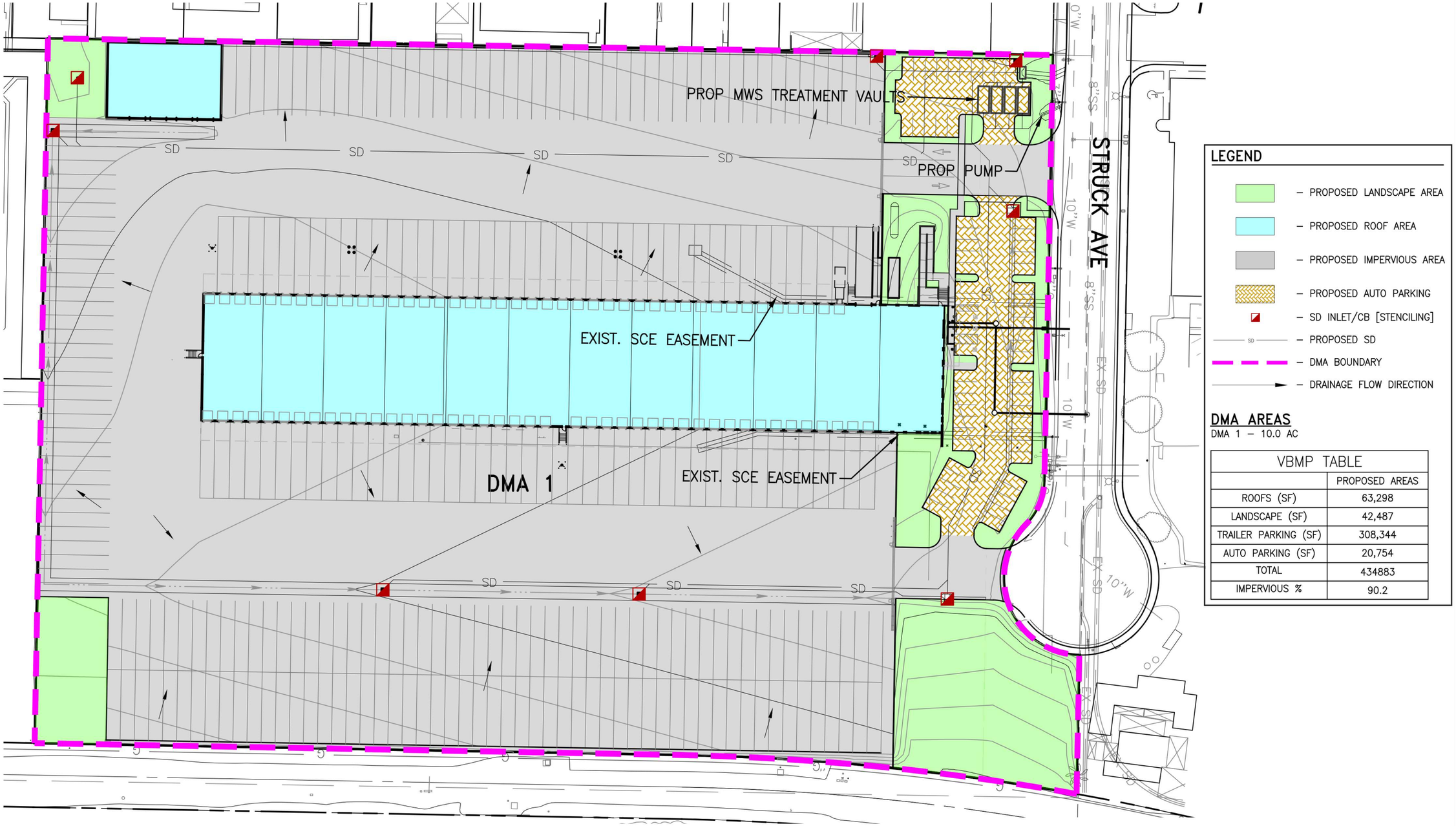
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

Under existing conditions, the Project site does not contain a stream or river; therefore, the Project does not have to potential to alter the course of a stream or river. No impacts would occur in this regard.

On-Site Storm Drain Facilities

Under existing conditions, the Project site slopes down at approximately 1 percent grade to the west. The existing drainage pattern for the site is characterized by draining south to north and east to west. Most of the site flows drain to a ribbon gutter located on the western side of the site that conveys flows off-site to Struck Avenue without mitigation or treatment. The eastern portion of the site, including the existing railroad track, drains south to north along an existing curb and gutter. All flows from the eastern portion of the site also drain north towards Struck Avenue. Flows exiting the site are captured in a set of catch basins located at the Struck Avenue/Batavia Street intersection. From this catch basin flows are conveyed into an existing 33-inch storm drain, which transitions to a 36-inch storm drain just west of the site to Collins Channel and ultimately the Santa Ana River.

Under Project conditions, as shown in Figure 13, *Water Quality Management Plan* , the site would contain one DMA (DMA 1). Although the Project would increase the amount of impervious surface coverage by 2 percent (increase from 89 to 91 percent), the Project would maintain the existing drainage pattern by draining flows from south to north, to the northwest corner. The Project would incorporate (curb and gutter or ribbon) gutters, storm drain pipes, and outlet structure with a BioClean modular wetland system (MWS). The MWS will utilize horizontal flow and incorporates a pretreatment chamber that includes separation and re-filter cartridges. In this chamber, sediment and hydrocarbons are removed from runoff before entering the biofiltration chamber. The Project's proposed ribbon gutters would be located within the parking areas located east and west of the proposed building. Inlets along the ribbon gutters will collect and deposit flows into the Project's proposed storm drain system and into the proposed outlet structure located within the northwestern portion of the site. The Project storm drain



Source(s): Albert A. Webb Associates (02-10-2021)

Figure 13

Not to Scale

lines would be located throughout the site and are designed to convey 100-year peak flow rates. The starting water surface elevation for the storm drain shall be the 100-year ponding limit within the onsite basin.

The proposed outlet structure receives approximately 33.4 cubic feet per second (cfs) of onsite flows from the proposed Line A, Line B, and Line C.

- Line A is proposed along the eastern and northern portion of the proposed site. Line A conveys approximately 21.3 cfs of total runoff towards the proposed outlet structure. The proposed line will collect flows draining through the ribbon gutter along the eastern trailer parking stalls and northern auto parking areas before discharging into Line B. Proposed laterals along Line A are proposed at various drainage inlets. The hydraulic model for Line A will be included with the final engineering design. At this time, the preliminary storm drain sizing has been taken from the rational method normal depth calculations.

- Line B is proposed near the northwestern portion of the proposed site. The proposed line will collect flows generated by the areas west of the proposed building that are conveyed along the curb and gutter. A lateral is also provided near the end of the line to allow for flows within the auto parking stalls in the northwest corner of the site to be collected. Line A and Line C also confluence with Line B before discharging into the proposed outlet structure. Line B conveys the total site runoff of approximately 33.4 cfs of runoff generated onsite. The hydraulic model for Line B will be included with the final engineering design. At this time, the preliminary storm drain sizing has been taken from the rational method normal depth calculations.

- Line C is proposed along the western portion of the site. Flows captured near the southern boundary of the site are conveyed north within Line C. The proposed Line C conveys approximately 4.9 cfs of runoff towards Line B. The hydraulic model for Line C will be included with the final engineering design. At this time, the preliminary storm drain sizing has been taken from the rational method normal depth calculations.

Off-Site Storm Drain Facilities

The existing storm drain adjacent to the Project site in Struck Avenue is a 33-inch RCP. This pipe transitions into a 36-inch RCP west of the site where a lateral connection exists to convey flows from the City Corporation Yard north of the site. The 36-inch RCP continues to the intersection of Batavia Avenue. At this location, a set of catch basins pick up the street flow from Struck Avenue and the adjacent building sites, including the existing drainage of the Project site. As with existing conditions, flows from the site would continue to flow to the existing catch basin at the Struck Avenue/Batavia Street intersection. The existing storm drain lines were sized to accommodate 10-year storm event flows and to accept flows from the surrounding properties in their developed conditions.

The storm drain design would convey flows through an under-sidewalk drain onto Struck Avenue to mimic the existing conditions, and there would be no connection to the existing 33-inch RCP storm drain line (see Appendix G.2).

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:

i) Result in substantial erosion or siltation on- or off-site?

Significance Determination: Less than Significant Impact

As discussed above, the Project would increase the amount of impervious surface coverage on the Project site from 89 percent to 91 percent. However, the Project would maintain the site's existing drainage pattern. Therefore, the Project would not substantially alter the site's drainage pattern in such a way that would result in substantial erosion or siltation on- or off-site. Additionally, the Project would construct an integrated storm drain system on site with BMPs to minimize the amount of waterborne pollutants carried from the Project site. The Project's proposed BMPs are enforced by the Project's WQMP and are highly effective at removing sediment from stormwater runoff flows. Therefore, stormwater runoff leaving the Project site would not carry substantial amounts of sediment. Because there are no exposed soils at the Project site's discharge points, there is no potential for the Project's stormwater runoff to result in erosion as it leaves the Project site. Impacts would be less than significant.

Mitigation Measures: Mitigation measures are not required.

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:

ii) Increase the rate or amount of surface runoff in a manner which would result in flooding in- or off-site?

Under existing conditions, peak stormwater runoff flows are discharged into the existing storm drain line beneath Struck Avenue, which is designed to accept the 10-year peak flows from the Project site and surrounding developments.

As shown in Table 12, *Project Peak Flows*, implementation of the project would reduce peak flows discharging from the Project site. As such, the Project proposed drainage improvements would not result in on-site or off-site flooding. Impacts would be less than significant.

Table 12 Project Peak Flows

	Existing Conditions		Project Conditions	
Storm Event	**Peak Flow (cfs)**	**Tc (min)**	**Peak Flow (cfs)**	**Tc (min)**
2-Year 24 hour	12.2	12.35	11.9	9.90
10-Year 24 hour	22.9	11.54	21.7	9.54
100-Year 24 hour	35.8	11.00	33.4	9.34
AF = acre-feet Tc = cubic feet per second				

Source: Webb, 2021b (Table 4)

Additionally, as shown in Table 13, *Basin Routing – 100-Year Peak Flows*, the Project's proposed detention basin would throttle 100-year storm event peak flows down to 10-year peak flows. As such, the Project proposed drainage improvements would not result in on-site or off-site flooding. Impacts would be less than significant.

Table 13 Basin Routing – 100-Year Peak Flows

Existing Conditions		Project Conditions		Project Conditions – Basin Routing		
Volume (AF)	Peak Flow (cfs)	Volume (AF)	Peak Flow (cfs)	Peak Flow (cfs)	Maximum Basin Depth (feet)	Water Surface Elevation (feet)
4.48	34.6	4.48	27.3	20.3	3.58	179.58

Source: (Webb, 2020b, Table 5)

Mitigation Measures: Mitigation measures are not required.

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:

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?

Significance Determination: Less than Significant Impact

As discussed above under Hydrology and Water Quality Threshold c.i and c.ii, all captured flows will be directed towards a proposed outlet structure near the northwestern corner of the site. Flows are expected to pond up within the outlet structure before spilling out of the structure and into a concrete-lined u-channel. The u-channel conveys the onsite flows north towards a proposed parkway culvert (type B) that will discharge all flows underneath the sidewalk and onto Struck Avenue. Within the outlet structure, an internal weir wall is proposed to divert approximately 2.0 cfs of flows east towards the proposed treatment vaults for water quality treatment. Flows that have been treated by the proposed MWS vaults are then directed towards a proposed pump located northeast of the treatment vaults. The pump will discharge the water quality flows into a second concrete-lined u-channel. From there, treated flows are directed towards a second proposed parkway culvert (type B) that will discharge treated flows underneath the sidewalk and onto Struck Avenue. As discussed above under Hydrology and Water Quality Threshold c.ii, stormwater discharge peak flow would be less than existing conditions. BMPs would ensure that pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to being discharged from the Project site. Impacts would be less than significant.

Mitigation Measures: Mitigation measures are not required.

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:

iv) Impede or redirect flood flows?

Significance Determination: No Impact

According to the Federal Emergency Management Agency (FEMA) flood map No. 06059C0161J, the Project site is within Zone X (Unshaded), an area of minimal flood hazard (FEMA, 2009). The Project does not have the potential to impede or redirect flood flows. No impacts would occur.

Mitigation Measures: Mitigation measures are not required.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Significance Determination: No Impact

As previously discussed, the Project site is not within a 100-year flood hazard zone. The Project does not have the potential to release pollutants due to 100-year flood inundation. No impacts would occur.

According to the Federal Emergency Management Agency (FEMA) flood map No. 06059C0161J, the Project site is within Zone X (Unshaded), an area of minimal flood hazard (FEMA, 2009). The Project does not have the potential to release pollutants due to Project inundation. No impacts would occur.

A tsunami is a sea wave, commonly referred to as a tidal wave, produced by a significant undersea disturbance such as tectonic displacement of a seafloor associated with large, shallow earthquakes. A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin, such as a reservoir, harbor, lake, or storage tank.

The Project site is located approximately 13 miles northeast of the Pacific Ocean. Due to site distance, the Project would not be subject to tsunami-related inundation. Additionally, there are no enclosed or semi-enclosed bodies of water in proximity to the Project site. The nearest enclosed body of water includes the man-made ponds located at the Islands Golf Center approximately 1.1 miles northwest of the Project site. Due to site distance, the Project would not be subject to seiche related inundation. No impacts would occur.

Mitigation Measures: Mitigation measures are not required.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Significance Determination: No Impact

As discussed under Hydrology and Water Quality Threshold a, the Project site is within the Santa Ana River Basin; therefore, Project-related construction and operational activities would be required to

comply with the Santa Ana RWQCB's *Santa Ana River Basin Water Quality Control Plan* by preparing and adhering to an SWPPP and WQMP. Additionally, as discussed previously, implementation of the Project would not conflict with or obstruct the *Santa Ana River Basin Water Quality Control Plan* and no impacts would occur.

The Project site is within the Coastal Plain of Orange County Basin (Basin 8-1). The California Department of Water Resources (DWR), classifies this basin as a medium-priority basin. According to the 2014 Sustainable Groundwater Management Act (SGMA), local public agencies and Groundwater Sustainability Agencies (GSAs) in "high"- and "medium"-priority basins are required to develop and implement Groundwater Sustainability Plans (GSPs) or Alternatives to GSPs (DWR, 2020). GSPs are detailed road maps for how groundwater basins will reach long term sustainability. The GSA for Basin 8-1 is comprised of the OCWD, City of La Habra, and Irvine Ranch Water District (IRWD). These agencies collaborated and submitted an Alternative to a GSP titled *Basin 8-1 Alternative* on January 1, 2017, to the DWR. This Alternative, documents the basin conditions; basin management is be based on measurable objectives and minimum thresholds defined to prevent significant and unreasonable impacts on the sustainability indicators defined in the Alternative.

Groundwater is anticipated to be located at a depth greater than 40 below ground surface (bgs). The Project's potable water would be supplied by the City, which relies on groundwater and imported water. As identified in the City's UWMP, the City's potable water resources contain enough water to meet demands under a normal, single dry year, and multiple dry year hydrologic conditions from 2020 through 2040. Additionally, the Project site is not within a groundwater recharge area. Therefore, the Project would not have the potential to conflict with or obstruct implementation of the *Basin 8-1 Alternative* and no impacts would occur.

Mitigation Measures: Mitigation measures are not required.

f) Potentially impact stormwater runoff from construction activities?

Significance Determination: Less than Significant Impact

Refer to the impact analysis under Threshold a.

Mitigation Measures: Mitigation measures are not required

g) Potentially impact stormwater runoff from post-construction activities?

Significance Determination: Less than Significant Impact

Refer to the impact analysis under Threshold a.

Mitigation Measures: Mitigation measures are not required.

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?

Significance Determination: Less than Significant Impact

Refer to the impact analysis under Threshold a.
Mitigation Measures: Mitigation measures are not required.

i) Result in the potential for discharge of stormwater to affect the beneficial uses of the receiving waters?

Significance Determination: Less than Significant Impact

Refer to the impact analysis under Threshold a.

Mitigation Measures: Mitigation Measures are not required.

j) Create the potential for significant changes in the flow velocity or volume of stormwater runoff to cause environmental harm?

Significance Determination: Less than Significant Impact

Refer to the impact analysis under Threshold c.ii.

Mitigation Measures: Mitigation Measures are not required.

k) Create significant increases in erosion of the project site or surrounding areas?

Significance Determination: Less than Significant Impact

Refer to the impact analysis under Threshold c.i.

Mitigation Measures: Mitigation Measures are not required.

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?	☐	☐	☐	☒
(b)	Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Impact Analysis:

a) Physically divide an established community?

Significance Determination: No Impact

The Project site is developed with the Nursery Supplies, Inc. manufacturing facility. Existing industrial development borders the site to the south and west; the BNSF railroad track borders the site to the east; and Struck Avenue and the public facility uses border the site to the north. The Project Applicant would redevelop the site with another industrial use with associated parking and landscaping improvements. The Project would not have the potential to physically divide an established community. No impacts would occur.

Mitigation Measures: Mitigation measures are not required.

b) Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Significance Determination: No Impact

Under existing conditions, the Project site is designated for "Light Industrial" land uses by the City of Orange General Plan and "Industrial Manufacturing (M-2)" zone. The Project Applicant would redevelop the Project site in accordance with the underlying land use designations and applicable zoning ordinance development standards. As previously discussed under Aesthetics Threshold c in Table 1 and Table 2, the Project would not conflict with the General Plan. Although the proposed building would require a CUP for the proposed truck terminal use, the Project would not conflict with the Zoning Code. Because the Project would be consistent with the underlying General Plan designation for the site, the Project would not conflict with any applicable goals, objectives, and policies of South Coast AQMD's AQMP and SCAG's *Connect SoCal*, which base their assumptions and analyses upon the full build-out of the existing General Plans throughout the region. Refer also to Greenhouse Gas Emissions Threshold b of this IS/MND. No impacts would occur.

Mitigation Measures: Mitigation measures are not required.

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?	☐	☐	☐	☒
(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?	☐	☐	☐	☒

Impact Analysis:

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?

Significance Determination: No Impact

According to Appendix A of the City's General Plan EIR, the City's mineral resources are limited to sand and gravel resources (aggregate) along the Santa Ana River and Santiago Creek. The Project site is located within a developed, urbanized area of the City and is located approximately 0.87 miles east of the Santa Ana River and 1.9 miles north of the Santiago Creek. As such, no mineral resources are anticipated in the Project area and the implementation of the Project would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the State. No impacts would occur.

Mitigation Measures: Mitigation measures are not required.

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?

Significance Determination: No Impact

As previously discussed, the Project site is located approximately 0.87 miles east of the Santa Ana River and approximately 2.0 miles north of the Santiago Creek; therefore, the Project does not have the potential to contain any aggregate resources. Additionally, the site is not permitted for mining use under the Light Industrial land use designation and Industrial Manufacturing zoning classification. Because the Project site is not delineated as containing mineral resources on the City's General Plan, the implementation of the Project does not have the potential to result in the loss of availability of a locally-important mineral resource recovery site. No impacts would occur.

Mitigation Measures: Mitigation measures are not required.

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?	☐	☐	☒	☐
(b)	Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
(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?	☐	☐	☐	☒

This section is primarily based on the *534 Struck Avenue Noise Impact Analysis* (Noise Study), prepared by Urban Crossroads, Inc. (Urban Crossroads) dated March 24, 2021. The Project-specific Noise Study is included as Appendix H of this IS/MND.

Impact Analysis:

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?

Significance Determination: Less than Significant Impact

Noise generated at the Project site under existing conditions is limited to surface street vehicle noise which includes auto and heavy truck activities on the surrounding roadways (Struck Avenue, Collins Avenue, Parker Street, and Brenna Lane) and the railroad tracks located east of the Project site.

Redevelopment of the Project site with a new building and associated improvement has the potential to result in the generation of elevated noise levels during both near-term construction activities and under long-term operational conditions. Near-term (i.e., temporary) and long-term (i.e., permanent) noise level increases that would be associated with the Project are described below. Urban Crossroads took 24-hour noise measurements at 4 noise measurement locations depicted in Figure 14, *Noise Measurement Locations*, to assess the existing noise level environment. To assess the potential short-term construction and long-term operational noise impacts, Urban Crossroads identified 4 representative noise-sensitive receiver locations at which the Project's anticipated noise generation was compared against as shown in Figure 15, *Receiver Locations*.

Construction Noise Impact Analysis

The Project's only potential to cause a substantial temporary or periodic increase in ambient noise levels would occur during the construction phase. Construction activities on the Project site, especially those involving the use of heavy equipment, would create intermittent, temporary increases in ambient noise

LEGEND:

▲ Measurement Locations

Source(s): Urban Crossroads (04-20-2020)

Figure 14

Not to Scale

NOISE MEASUREMENT LOCATIONS

LEGEND:

- Receiver Locations
- Distance from receiver to Project site boundary (in feet)
- 6' Existing Barrier Height (in feet)
- Existing Barrier

Source(s): Urban Crossroads (04-20-2020)

Figure 15

Not to Scale

RECEIVER LOCATIONS

levels in the vicinity of the Project site. Noise generated by heavy construction equipment including trucks, graders, bulldozers, concrete mixers, and portable generators can reach high levels. However, construction-related noise increase would: 1) be transitory (i.e., varying from day-to-day and throughout the day), 2) completely cease upon completion of Project construction, and 3) not represent a recurring, periodic source of noise. However, although periodic and temporary construction noise has the potential to be substantial compared to existing ambient noise levels. The Project's construction-related activities are required to comply with the City's Noise Ordinance (OMC Section 8.24.040).

The City's Noise Ordinance includes a provision that exempts construction activities during the hours of 7:00 am and 8:00 pm on any day except for Sunday or a Federal holiday, or between the hours of 9:00 am and 8:00 pm on a Sunday or a Federal holiday. To evaluate the Project potential to generate potentially significant construction noise levels at the off-site receiver locations, the analysis is based on a threshold of 80 decibels (dBA) equivalent sound level (L_{eq}) for more than 8 hours per day for construction-related noise. This threshold was established in the*, Transit Noise and Vibration Impact Assessment Manual* prepared by the Federal Transit Administration. As shown in Table 14, *Construction Noise Level Compliance*, the Project's construction-related noise at the off-site receiver locations will satisfy the 80 dBA L_{eq} significance threshold. Impacts would be less than significant.

Table 14 Construction Noise Level Compliance

Receiver Location[1]	Construction Noise Level (dBA L_{eq})		
	Highest Noise Level[2]	Threshold[3]	Threshold Exceeded?[4]
R1	71.8	80	No
R2	69.0	80	No
R3	67.5	80	No
R4	51.2	80	No

Notes:
1. Noise receiver locations are shown on Figure 15.
2. Highest construction noise level calculations based on distance from the construction noise source activity to nearby receiver locations.
3. Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual
4. Do the estimated Project construction noise levels exceed the construction noise level threshold?

Source: (Urban Crossroads, 2021e, Table 8-3)

Operational Noise Impacts

Future tenants of the proposed Project are currently unknown. Therefore, this analysis presents worst-case scenario noise conditions for typical warehouse, manufacturing, or fulfillment center space activities, assuming that the Project would be operational 24-hours per day, 7 days per week. The Project's proposed business operations would primarily be conducted within the enclosed building, except for traffic movement, parking, and loading/unloading of trucks at designated loading bays. The on-site Project-related noise-sources are anticipated to include: loading dock activity, truck terminal activity, truck movements, and roof-top air conditioning units.

According to the OMC Section 8.24.040, the maximum allowable exterior sound levels for uses in proximity to residential uses are 55 dBA L_{eq} from 7:00 am to 10:00 pm (daytime) and 50 dBA L_{eq} from

10:00 pm to 7:00 am (nighttime) (Urban Crossroads, 2021e). Public facility uses do not have a threshold for maximum allowable exterior sound levels established in the OMC.

To estimate the Project's operational noise impacts, reference noise level measurements were collected from similar types of activities to represent the noise levels anticipated with the development of the Project. It should be noted that the Project's projected noise levels assume the worst-case scenario environment with the loading dock activity, truck terminal activity, truck movements, and roof-top air conditioning units all operating at the same time. These noise level impacts will likely vary throughout the day (Urban Crossroads, 2021e).

The Project-only operational noise levels were evaluated against the City's exterior noise level thresholds at the nearby noise-sensitive receiver locations. As shown in Table 15, *Operational Noise Level Compliance*, the Project's anticipated operational noise level will satisfy the City's daytime and nighttime exterior noise level standards. Impacts would be less than significant.

Table 15 Operational Noise Level Compliance

Receiver Location[1]	Land Use	Noise Levels dBA L_{eq}					
		Project Operation[2]		Noise Thresholds[3]		Threshold Exceeded?[4]	
		Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime
R1	Public-Institutional	52.6	51.6	n/a	n/a	No	No
R2	Residential	50.3	49.3	55	50	No	No
R3	Residential	41.7	40.6	55	50	No	No
R4	Residential	36.3	35.3	55	50	No	No

Notes:
1. See Figure 15 for the receiver locations.
2. Anticipated project operational noise levels
3. Exterior noise level standards for residential land use
4. Do the estimated Project operational noise source activities exceed the noise level standards?

Source: (Urban Crossroads, 2021e, Table 7-5)

Traffic-Related Noise Impact

According to the *534 Struck Avenue Traffic Assessment* (Traffic Assessment), included as Appendix I.1, the Project is anticipated to generate a total of 308 vehicle trip-ends per day with 148 truck trip-ends per day. The Project's Traffic Assessment determined that based on the City's traffic study guidelines and the anticipated trips for the site, additional traffic analysis beyond the trip generation assessment is not necessary. Based on the low number of new trips and surrounding buildout urban uses, impacts would be less than significant (Urban Crossroads, 2021e).

Mitigation Measures: Mitigation measures are not required.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Significance Determination: Less than Significant Impact

According to the Federal Transit Administration (FTA), vibration is the period oscillation of a medium or object. Sources of ground-borne vibrations include natural phenomena (e.g., earthquake, landslides, sea waves) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment).

To analyze vibration impacts originating from the operation and construction of the Project, vibration-generating activities are evaluated based on FTA methodology. The *FTA Transit Noise and Vibration Impact Assessment* methodology provide guidelines for the maximum-acceptable vibration criteria. A significant impact would occur if the Project's results in an exceedance of 78 vibration decibels (vdB).

Construction-Related Vibration Impacts

Construction activities on the Project site would utilize heavy equipment that has the potential to generate low levels of intermittent, localized ground-borne vibration. The Project's construction activities most likely to cause vibration impacts are:

- **Heavy Construction Equipment:** Although all heavy mobile construction equipment has the potential of causing at least some perceptible vibration while operating close to buildings, the vibration is usually short-term and is not of sufficient magnitude to cause building damage.
- **Trucks:** Trucks hauling building materials to construction sites can be sources of vibration intrusion if the haul route passes through residential neighborhoods on streets with bumps or potholes. Repairing the bumps and potholes generally eliminates the problem

As shown in Table 16, at distances ranging from 86 feet to 566 feet from construction activity, construction vibration levels are calculated to range from 46.4 VdB to 70.9 VdB. Therefore, the Project construction vibration levels will remain below the FTA threshold of 78 VdB at all receiver locations. Additionally, the vibration level reported at the sensitive receiver locations are unlikely to be sustained during the entire construction period but will occur only during the times that heavy construction equipment is operating adjacent to the Project site perimeter. The impact would be less than significant.

Table 16 Construction Equipment Vibration Levels

Receiver Location[1]	Land Use	Distance to Construction Activity (Feet)	Vibration Levels (VdB)[2]		Threshold Exceeded?[4]
			Highest Vibration Levels	Threshold[3]	
R1	Public-Institutional	86	70.9	78	No
R2	Residential	217	58.8	78	No
R3	Residential	130	65.5	78	No
R4	Residential	566	46.4	78	No

Notes:
1. See Figure 15 for the receiver locations.
2. Based on the vibration source level of construction equipment included on Noise Study Table 8-4
3. FTA Transit Noise and Vibration Impact Assessment maximum acceptable vibration criteria
4. Does the vibration level exceed the maximum acceptable vibration threshold?

Source: (Urban Crossroads, 2021e, Table 8-5)

Operational Vibration Impacts

Under long-term conditions, the Project would not include nor require equipment, facilities, or activities that would result in substantial or perceptible ground-borne vibration. Trucks would travel to-and-from the Project site during long-term operation; however, vibration levels for heavy trucks operating at low-to-normal speeds on smooth, paved surfaces- as expected on the Project site and surrounding roadways- typically do not exceed 0.004 in/sec PPV, which is lower than the Caltrans vibration thresholds of 0.3 in/sec PPV for building damage and 0.04 in/sec PPV annoyance. Accordingly, long-term operation of the Project would not expose persons or generate excessive groundborne vibration or groundborne noise levels, and a less than significant impact would occur.

Mitigation Measures: Mitigation measures are not required.

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?

Significance Determination: No Impact

As previously discussed, the Project site is not in proximity to any private airstrip or airport and is not within an airport land use plan. The closest airport to the Project site is the Fullerton Municipal Airport located approximately 8.0 miles northwest. Implementation of the Project does not have the potential to expose people residing or working in the Project area to excessive noise levels associated with air travel. No impacts would occur.

Mitigation Measures: Mitigation measures are not required.

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)?	☐	☐	☒	☐
(b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Impact Analysis:

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)?

Significance Determination: Less than Significant Impact

The Project does not include any residential uses; therefore, the Project does not have the potential to directly induce substantial unplanned population growth. Redevelopment of the Project site has the potential to generate up to 200 new jobs. According to the California Employment Development Department (EDD), as of April 2020, the City of Orange has a labor force of 67,200 persons and of that labor force, 8,300 are unemployed (unemployment rate of 12.4 percent) (EDD, 2020). According to SCAG's 2020-2045 Jurisdiction – Level Growth Forecast, the City of Orange is anticipated to employ approximately 131,300 persons (SCAG, 2020a). Project employment is well within the growth forecasts of the City and implementation of the Project would further balance the City's employment-to-population ratio. Therefore, the Project's proposed employees are not likely to relocate to the City, rather, the new jobs associated with the Project would provide employment opportunities for individuals already residing in the City.

The Project involves redevelopment of the site with a permitted use within the Light Industrial land use designation and M-2 zoning classification. Accordingly, the Project would not result in growth that was not already anticipated by the City of Orange General Plan and General Plan EIR. Further, the Project site is already developed and contains existing infrastructure that serves the site's existing use. The Project would improve Struck Avenue along the site's frontage and connect to the existing utility connections. In doing so, the Project would be in conformance with the General Plan and applicable infrastructure master plans. Therefore, the Project would not induce substantial indirect population growth in the area.

Based on the foregoing analysis, the Project is not anticipated to induce substantial unplanned population growth in the area. Impacts would be less than significant.

Mitigation Measures: Mitigation measures are not required.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Significance Determination: No Impact

The Project site is developed with an approximate 40,000 sf manufacturing facility and does not contain any residential structures. Implementation of the Project would not displace any housing or people and no replacement housing would be required. No impacts would occur.

Mitigation Measures: Mitigation measures are not required.

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?	☐	☐	☒	☐
	ii) Police Protection?	☐	☐	☒	☐
	iii) Schools?	☐	☐	☐	☒
	iv) Parks?	☐	☐	☐	☒
	v) Other public facilities?	☐	☐	☐	☒

Impact Analysis:

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?

Significance Determination: Less than Significant Impact

The Orange City Fire Department (OCFD) provides fire and emergency response to the City, including the Project site. According to the City General Plan EIR, the OCFD operates 8 fire stations within the City. OCFD Station No. 5, located at 1345 Maple Street, is the closest fire station to the Project site (located approximately 1.1 miles southwest). According to the OCFD, the average response time in 2019 was 3 minutes and 52 seconds (Stefano, 2020).

As previously discussed, the Project Applicant proposes to demolish the existing on-site structure and redevelop the site with a building up to 57,900 sf. Because fire protection services are currently provided to the surrounding area, and based on the site's close proximity to an existing fire station, the City's existing fire protection facilities would adequately serve the Project. The Project is not anticipated to result in the construction of new or physically altered fire facilities. The Project would be required by the OMC Chapter 15.38, *Fire Protection Facilities Program*¸ to pay a fire protection facilities fee to aid in offsetting the increased demand for fire services created by non-residential development. This fee is due prior to the issuance of a building permit.

The Project's proposed building would feature fire safety and suppression design, including the type of building construction, fire sprinklers, a fire hydrant system, and paved access. The proposed building would be a concrete tilt-up construction that contains a low fire hazard risk rating. Additionally, a fire alarm system is proposed to be installed, as well as an Early Suppression, Fast Response (ESFR) ceiling-mounted fire sprinklers. ESFR provides protection that exceeds that of in-rack systems. ESFR high output, high-volume systems are in ceiling spaces as with conventional fire sprinkler systems, but they

incorporate large, high-volume, high-pressure heads to provide the necessary fire protection for buildings that may contain high-piled storage. While most other sprinklers are intended to control the growth of a fire, an ESFR sprinkler system is designed to suppress a fire, which knocks the fire down to its source.

Based on the foregoing, the Project would receive adequate fire protection services and would not result in the need for new or physically altered fire protection facilities. Impacts would be less than significant.

Mitigation Measures: Mitigation measures are not required.

ii) Police Protection?

Significance Determination: Less than Significant Impact

The City of Orange Police Department provides law enforcement services to the City, including the Project site. The Orange Police Department is located at 1107 N. Batavia Street, which is located approximately 406 feet northwest of the Project site. Implementation of the Project is anticipated to result in similar service calls (typical of an industrial facility) as the existing manufacturing use. According to the General Plan Public Safety Element, to maintain the City's ability to serve current residents and businesses, applicants are required to provide for adequate services and equipment to serve businesses of new developments. Land uses will be evaluated and modified, if necessary, to facilitate access to emergency services, meet service standards, and ensure land use compatibility. Therefore, it is anticipated that emergency response would occur with acceptable response times.

According to OMC Chapter 3.13, *Police Facility Development Fee*, the Project Applicant would be required to pay fair share fees to help finance police facilities required by new development to avoid adversely impacting existing police protection facilities. Additionally, the Project plans would be reviewed and approved by the City of Orange Building and Police Departments, which would ensure that adequate safety and crime prevention measures are provided within the Project's design. Therefore, implementation of the Project is not anticipated to result in the new or physically altered police protection facilities. Impacts would be less than significant.

Mitigation Measures: Mitigation measures are not required.

iii) Schools?

Significance Determination: No Impact

The City provides school services through the Orange Unified School District. The Project Applicant proposes to demolish the existing manufacturing facility and redevelop the site with a single building. Implementation of the Project does not have the potential to result in substantial direct growth in the population, nor an increase in student population. The Project would be required to pay appropriate school fees applicable to all new development in accordance with Assembly Bill (AB) 2926 and Senate Bill (SB) 50 to offset potential impacts on school services. No impact would occur.

Mitigation Measures: Mitigation measures are not required.

iv) Parks?

Significance Determination: No Impact

According to the General Plan Natural Resources Element, the City owns and has developed 22 parks (Orange, 2015b). The City provides approximately 1.81 acres of parkland per 1,000 persons. The City anticipates developing approximately 43.5 acres of planned future parks; the nearest park to the Project site is Killefer Park located approximately 0.39 miles southeast. The proposed Project would not introduce new residents to the City necessitating the need for additional parks. No impact would occur.

Mitigation Measures:

v) Other public facilities?

Significance Determination: No Impact

Other public facilities include public libraries. The City's public libraries operate according to the Public Library Facilities Master Plan (2002-2020). This master plan outlines current and projected future demand based on the City's General Plan buildout; it is intended to ensure that the California State Library's recommended standard of 4 volumes and 0.7 square foot per capita is maintained and that the City's library service needs are met as future development occurs. The nearest library to the Project site is Charles P. Taft Library, located approximately 1.0-miles northeast. The proposed Project would not introduce new residents to the City necessitating the need for additional libraries or demand for library services. No impact would occur.

Mitigation Measures: Mitigation measures are not required.

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?	☐	☐	☐	☒
(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?	☐	☐	☐	☒

Impact Analysis:

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?

Significance Determination: No Impact

As previously stated, the City has owned and developed 22 parks and approximately 15 miles of equestrian, biking, and recreational trails. Parks and open space make up 31.8 present of land use in the City (Orange, 2010a). The Project Applicant does not propose to construct any residential uses on the Project site. Therefore, the Project would not create a substantial population increase that would increase the use of existing neighborhood and regional parks or other recreational facilities, resulting in physical deterioration of park facilities. No impact would occur.

Mitigation Measures: Mitigation measures are not required.

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?

Significance Determination: No Impact

The Project does not include recreational facilities or require the construction or expansion of recreational facilities. Implementation of the Project would not result in any adverse physical effects on the environment due to the construction of recreational facilities. No impact would occur.

Mitigation Measures: Mitigation measures are not required.

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?	☐	☐	☒	☐
(b)	Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☒	☐
(c)	Substantially increase hazards due to a geometric design feature (e. g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
(d)	Result in inadequate emergency access?	☐	☐	☒	☐

This section is primarily based on the *534 Struck Avenue Traffic Assessment* (Traffic Assessment), prepared by Urban Crossroads dated March 10, 2021, and *534 Struck Avenue Vehicle Miles Travelled (VMT) Assessment* (VMT Assessment), prepared by Urban Crossroads dated March 12, 2021. The Project-specific Traffic Assessment and VMT Assessment are included as Appendix I.1 and I.2 of this IS/MND.

Impact Analysis:

a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Significance Determination: Less than Significant Impact

Project Trip Generation

The Project site is developed with an approximately 47,000 sf manufacturing facility and access is provided via three driveways along Struck Avenue. Based on the land use-specific vehicle trip generation rates published by the Institute of Transportation Engineers (ITE; ITE Code 140, Manufacturing), the site's existing use generates 160 trip-ends per day with 25 morning (AM) peak hour trips and 27 evening (PM) peak hour trips.

Traffic counts were collected at the driveways for 700 Eckhoff Street in Orange, California on November 10 and 12, 2020. The average 2-day trip generation was divided by the number of dock doors (95 dock doors) to develop the trip generation rates for the 700 Eckhoff Street site.

Similarly, traffic counts were collected at a second location at 2550 E. 28th Street in Vernon, California on November 24 and 25, 2020. The average 2-day trip generation was divided by the number of dock doors (84 dock doors) to develop the trip generation rates for the 2550 E. 28th Street site.

The number of dock doors has been utilized as the independent variable in calculating the trip generation rates as opposed to square footage since the proposed building is not intended to be used for the storage of materials. The trip generation for a Truck Terminal Facility could be better correlated to the number of dock doors due to the truck activity associated with the transfer of goods.

Trip generation rates calculated for the proposed Truck Terminal based on an average of data collected at the two sites located at 700 Eckhoff Street and 2550 E. 28th Street. The data collected at the two sites indicates most of the truck activity occurs outside of the typical morning and evening peak hours (7-9 AM and 4-6 PM). Implementation of the Project is anticipated to generate 308 two-way daily trips with 19 AM peak hour trips and 19 PM peak hour trips. The Project would result in a net increase of 148 trip-ends per day and net decrease of 6 AM peak hour trips and 8 PM peak hour trips (Urban Crossroads, 2021f).

Roadway Impacts

According to Figure CM-2 of the City General Plan Circulation and Mobility Element, Struck Avenue is classified as a Collector Street (2 lanes undivided), Batavia Street is classified as a Primary Arterial (4 lanes divided), and Katella Avenue is classified as a Smart Street (6-8 lanes divided). Additionally, the Katella Avenue/Batavia Street intersection is identified as a critical intersection, which is an intersection that deviates from the City's typical design standards by increasing the number of lanes at an intersection beyond what typically would be required. By increasing capacity at the critical intersection, the circulation link increases overall system capacity (Orange, 2015d).

According to the City's *Traffic Impact Analysis Guidelines*, a traffic impact analysis (TIA) may not be required if the AM and PM peak hour trip generation is less than 100 vehicle trips. The Project would contribute less than 51 peak hour trips to any intersection during the AM and PM peak hours, and a TIA is not required. The City will identify a truck route to and from the Project site. It is anticipated that truck-trailers will utilize SR-57 via Katella Avenue to travel to the site. From Katella Avenue, the trucks would be permitted to travel south on Batavia Street and turn left only onto Struck Avenue to access the

site. Truck-trailers leaving the site would be permitted to only turn left from Struck Avenue onto Batavia Street southbound and exit the Project area. The allowable truck routes, which are in compliance with the City's existing approved truck routes, are shown in Figure 16, *Truck Routes*.

Implementation of the Project would not conflict with an applicable plan, ordinance, or policy addressing the circulation system. Impacts would be less than significant.

Transit

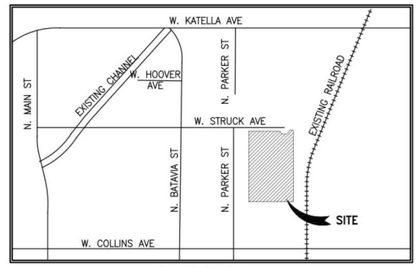
The Orange County Transit Authority (OCTA) provides bus service for the City (Orange, 2015d). The nearest bus stop to the Project site is the Route 50 Katella-Batavia bus stop operated by OCTA located approximately 0.24 miles (approximate 4-minute walk) northwest. The City recognizes that ridership of bus systems will increase and has designed a land use plan that enables and accommodates increased transit use. The City has identified major commercial and employment areas which include the Town and County Road corridor, South Main Street, Katella Avenue, Uptown Orange, and Old Towne. The Project site is not located within the identified major commercial and employment areas of the City. The Project does not have the potential to interfere with the City's goal to provide convenient and attractive transit amenities and streetscape features to encourage transit use. No impacts would occur.

Bicycle and Pedestrian Facilities

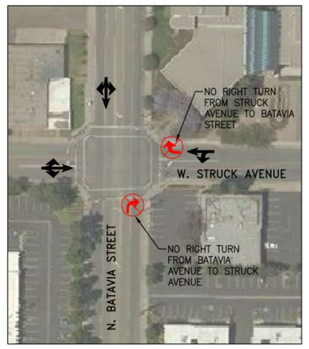
The City of Orange recognizes walking and biking contribute to a healthy community and play significant roles as alternatives to the automobile. The City has identified mixed-use areas and reinvigorated commercial areas within the City as spaces that will provide people areas to walk and shop. The City's goal is to create and implement a pedestrian-oriented streetscape master plan addressing the key commercial corridors including Tustin Street, Chapman Avenue, Main Street, Lincoln Avenue, and Katella Avenue. The Project site not in any of the key commercial corridors. The Project site is within an urbanized and industrial portion of the City that is not conducive to walking. Under existing conditions, sidewalks are provided along Struck Avenue, except along the Project's site frontage. Consistent with the existing pedestrian network, the Project Applicant does not propose to install a sidewalk along the site's frontage along Struck Avenue. Implementation of the Project would not interfere with the City's pedestrian-oriented streetscape master plan. No impacts would occur.

As previously discussed, the Project site is within an industrialized area of the City. According to Figure CM-3 of the City's General Plan Circulation and Mobility Element, there are no existing or proposed bicycle facilities in the Project area. Additionally, the Project does not propose to include a bicycle facility. Implementation of the Project would not interfere with the City's *Bikeway Master Plan*. No impacts would occur.

Mitigation Measures: Mitigation measures are not required.



VICINITY MAP
NTS



DETAIL A
NTS

Source(s): Albert A. Webb Associates (05-05-2020)

Figure 16

Not to Scale

TRUCK ROUTES

b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (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, which went into effect statewide beginning July 1, 2020.)*

Significance Determination: Less than Significant Impact

Changes to State CEQA Guidelines were adopted in December 2018, which requires all lead agencies to adopt vehicle miles traveled (VMT) as a replacement for automobile delay-based level of service (LOS) as the new measurement for identifying transportation impacts for land use projects. This statewide mandate took effect on July 1, 2020.

The City of Orange adopted their own VMT analysis guidelines and thresholds on July 14, 2020. The City has chosen to utilize the North Orange County Collaborative VMT Traffic Study Screening Tool (Screening Tool) that identifies VMT screening criteria for a project based on the type of land use and its location within the City. The Screening tool is based on the screening criteria described in the adopted City Guidelines and follows the those recommended by the Office of Planning and Research (OPR) in their Technical Advisory on Evaluating Transportation Impacts in CEQA (Urban Crossroads, 2021g).

The City Guidelines provide a multi-step procedure to evaluate VMT screening criteria that can be used to identify when a proposed land use project is anticipated to result in a less than significant impact without conducting a more detailed project level VMT analysis. The screening criteria are listed as three steps:

- Transit Priority Area (TPA) Screening
- Low VMT Area Screening
- Project Type Screening

A land use project needs only to meet one of the above screening thresholds to result in a less than significant impact.

<u>TPA Screening</u>

The City's TIA Guidelines note that projects within a TPA, 0.5 miles of an existing "major transit stop," or an existing stop along a "high-quality transit corridor" will have a less than significant impact on VMT. According to the Screening Map, the Project site is within a TPA. Although the Project site is within a TPA, if the Project meets any of the following secondary screening checks, the Project would not meet the TPA Screening threshold:

- Has a FAR of less than 0.75;
- Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking);
- Is inconsistent with the applicable SCS (as determined by the lead agency, with input from the Metropolitan Planning Organization); or

- Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

The Project's proposed FAR would be less than 0.75; therefore, the Project would not meet the TPA Screening threshold.

Low VMT Area Screening

According to the City's TIA Guidelines, "residential and office projects located within a low VMT generating area may be presumed to have a less than significant impact absent substantial evidence to the contrary. In addition, other employment related and mixed-use land use projects may qualify for the use of screening if the project can reasonably be expected to generate VMT per resident, per worker, or per service population that is similar to the existing land uses in the low VMT area." The Project is consistent with this criterion, since it is consistent with the existing land uses in the area. The existing area is predominantly commercial and industrial to the north, west, and south, with high-density residential and industrial to the east, on the opposite side of the BNSF Railroad tracks. Additionally, the City's Screening Map identifies the site as being within a low VMT generating traffic analysis zone (TAZ) as compared to the Citywide average.

The Project Applicant proposes to demolish the existing manufacturing use and redevelop the site with a Truck Terminal Use, which would be a similar type of industrial use and consistent with the General Plan and zoning; thus, the Project would meet the Low VMT Screening threshold. Impacts would be less than significant.

Project Type Screening

The City Guidelines provide a list of project types that are presumed to have a less than significant impact absent substantial evidence to the contrary. Among the list of project types, projects that would attract less than 110 trips per day are assumed to cause a less than significant impact. As the Project would generate 148 daily vehicle trips, it would exceed the 110 daily trip threshold. The Project would not meet the Project Type Screening threshold.

Conclusion

The Project meets the Low VMT Screening threshold and is anticipated to exhibit a similar level of low VMT. Impacts would be less than significant.

Mitigation Measures: Mitigation measures are not required.

c) Substantially increase hazards due to a geometric design feature (e. g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Significance Determination: Less than Significant Impact

The Project's proposed driveway 1, located at the site's northwest corner, and driveway 2, located at the site's northeast corner, would accommodate the wide turning radius of the heavy trucks. Due to the typical wide turning radius of large trucks, a truck turning template has been overlaid on the site plan at each applicable Project driveway anticipated to be utilized by heavy trucks in order to determine appropriate curb radii and to verify that trucks will have sufficient space to execute turning maneuvers. Figure 17, *Project Driveway Truck Access,* shows that the Project driveways would accommodate the wide turning radius of the heavy trucks (WB-67, 53-foot trailer) as currently designed. Additionally, the truck exit would occur at the westernmost driveway (driveway 1) away from the existing driveway across Struck Avenue to the north, which would provide future access to the proposed Orange City Yard Affordable Housing Project, located approximately 220 feet north of the Project site. The Project would not increase hazards and impacts are less than significant.

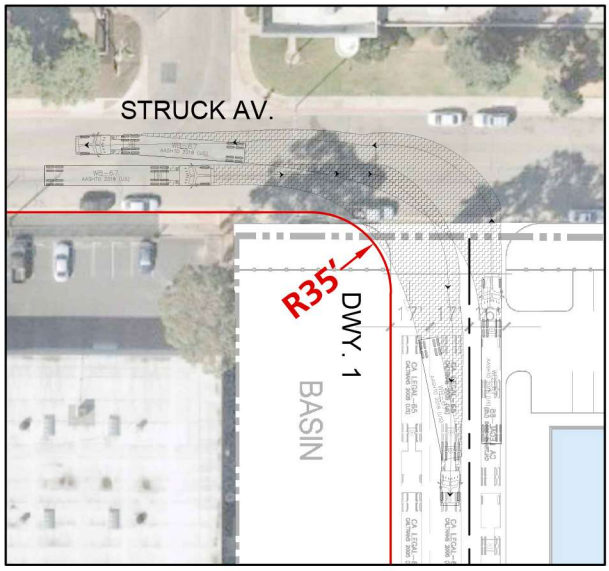
Mitigation Measures: Mitigation measures are not required.

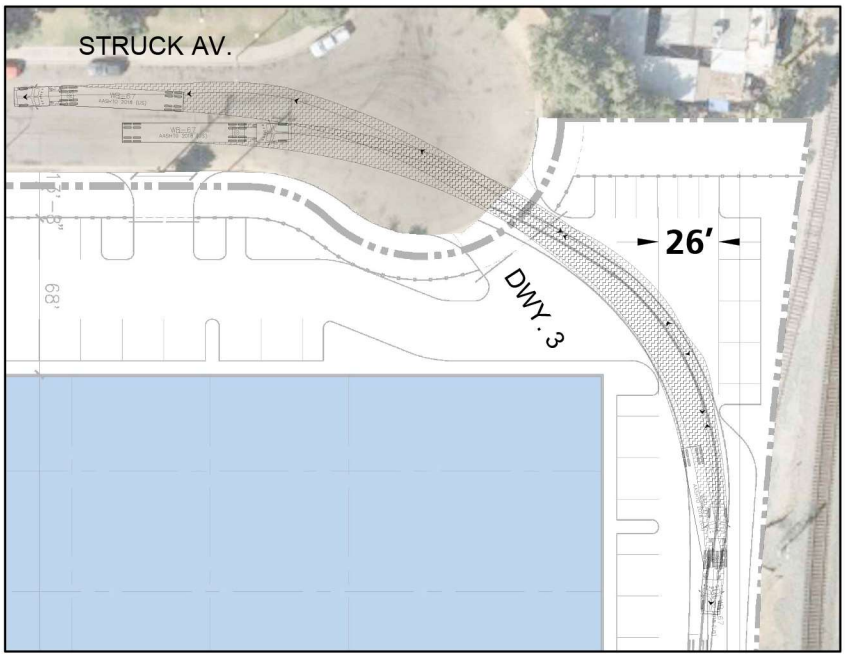
d) Result in inadequate emergency access?

Significance Determination: Less than Significant Impact

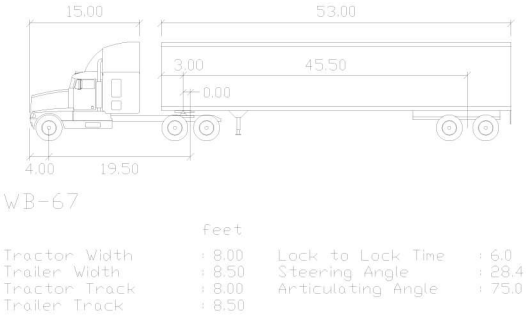
According to the City General Plan Public Safety Element, the City has an emergency plan which establishes emergency preparedness and emergency response procedures. All City arterials are recognized as primary emergency response routes and non-arterials are recognized as secondary emergency response routes. The Project would have three driveways, similar to existing conditions, along Struck Avenue. All Project driveways would be subject to the City's site access and circulation requirements identified in OMC Chapter 12, *Streets, Sidewalks, and Public Places*. Additionally, as shown in Figure 18, *Proposed Fire Plan,* the Project's internal drive aisles will provide adequate access for emergency vehicles. Moreover, all construction staging would occur within the boundaries of the Project site and would not interfere with the circulation of nearby roadways or implementation of the City's emergency plan. The Project would provide adequate emergency access for fire vehicles via Struck Avenue. Impacts would be less than significant.

Mitigation Measures: Mitigation measures are not required.





LEGEND:

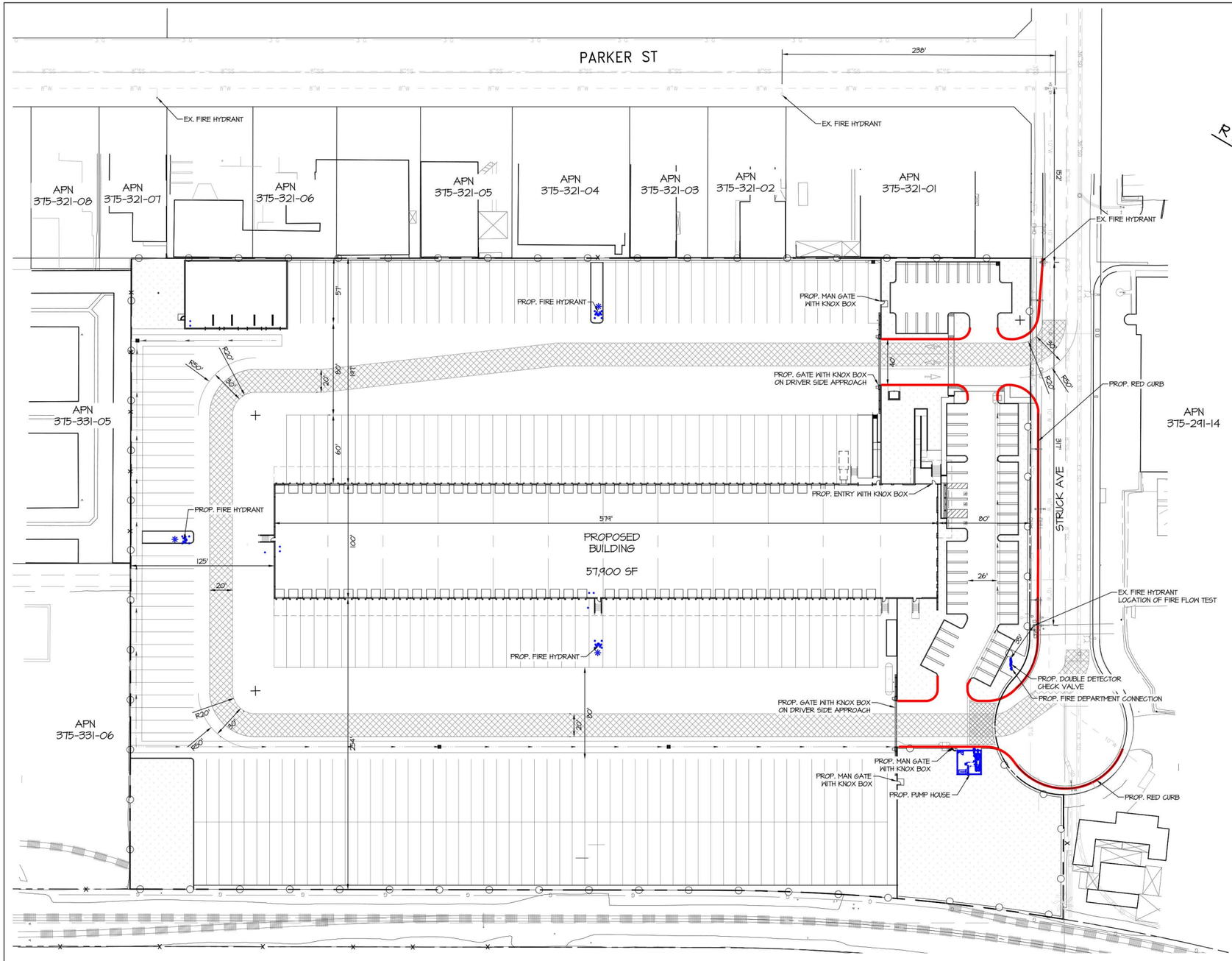


Source(s): Urban Crossroads (September 2020)

Figure 17

Not to Scale

PROJECT DRIVEWAY TRUCK ACCESS



LEGEND

FIRE ACCESS ROAD (20' MIN)

R 50'
R 20'

FIRE ACCESS TURNING RADIUS

FIRE — PROP. FIRE LINE

PROP. RED CURB

ADVANCO Fire Protection
DESIGN - INSTALLATION - SERVICE
C16-631600

FIRE HYDRANT FLOW DATA

Project Address **534 W. Struck Ave**

Date of Water Flow Test: **May 19, 2020**

Location of Water Flow Test: **Struck Ave**

Static Pressure: **90**

Residual Pressure: **80**

G. P. M. Flow Observed: **2,717 G.P.M.**

G. P. M. Flow Calculated @ 20 P.S.I.: **7,770 G.P.M.**

Outlet	Static	Res.	Pitot	G.P.M.
2.5"	90 P.S.I.	84 P.S.I.	30 P.S.I.	919 G.P.M.
Both	90 P.S.I.	76 P.S.I.	10 & 25 P.S.I.	2,678 G.P.M.
4"	90 P.S.I.	80 P.S.I.	40 P.S.I.	2,717 G.P.M.

I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT TO THE BEST OF MY KNOWLEDGE.

By: Geovanni Franco /

Title: Engineering Asst.

Witnessed By: Robert Desmore - Fire Safety Specialist

Date: 5/19/20

Source(s): Albert A. Webb Associates (08-04-2021)

Figure 18

Not to Scale

PROPOSED FIRE PLAN

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)?	☐	☐	☐	☒
(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?	☐	☒	☐	☐

Impact Analysis:

As of July 1, 2015, California Assembly Bill 52 (AB 52) was enacted and expanded CEQA by establishing a formal consultation process for California tribes within the CEQA process. The bill specifies that any project may affect or cause aa substantial adverse change in the significance of a tribal cultural resource that would require a lead agency to "being consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Section 21074 of AB 52 also defines a new category of resources under CEQA called "tribal cultural resources." Tribal cultural resources are defined as "sites, features, places, cultural landscapes, sacred places, and object with cultural value to a California Native American tribe" and are either listed on or eligible for the California Register of Historical Resources or a local historic register, or if the lead agency chooses to treat the resource as a tribal cultural resource.

In compliance with AB 52, the City of Orange distributed letters on July 9, 2020 to those Native American tribes that have requested notification for AB 52 notifying each tribe of the opportunity to consult with the City on the Project. The City conducted Tribal Consultation with the Gabrieleno Band of Mission Indians – Kizh Nation on September 10, 2020.

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)?

Significance Determination: No Impact

As analyzed in Cultural Resources Threshold a, there are no resources on the Project site that are eligible for listing in the California Register of Historical Resources or in a local register of historical resources as defined by Public Resources Code Section 5020.1(k). Implementation of the Project would not result in a substantial adverse change in the significance of a listed historical resource. No impacts would occur.

Mitigation Measures: Mitigation measures are not required.

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.

Significance Determination: Less than Significant Impact with Mitigation Incorporated

As indicated in the Cultural Resources section of this IS/MND, the Project site is not included on the National Register of Historic Places, California Register of Historical Resources, or a local register of historical resources, nor is it eligible for listing. Accordingly, pursuant to subsection (c) of Public Resources Code Section 5024.1, the City of Orange has determined that the Project would not impact historical resources resulting from Project implementation.

As of the date of this IS/MND, only the Gabrieleno Band of Mission Indians – Kizh Nation has requested consultation with the City of Orange. The City conducted consultation with the Gabrieleno Band of Mission Indians – Kizh Nation on September 10, 2020.

Because the Project would require excavation for construction into previously undisturbed soils, there is a potential to uncover undiscovered prehistoric artifacts or tribal cultural resources during excavation. Therefore, while unlikely, the presence of subsurface tribal cultural resources on the Project site remains possible, and these could be affected by ground-disturbing activities associated with grading and construction at the Project Site. To address the inadvertent discovery of tribal cultural resources, MM TCR-1 has been incorporated into the Project. This mitigation measure requires the presence of a Native American monitor during grading activities and the proper handling, treatment, and disposition of any discovered tribal cultural resources. With implementation of Mitigation Measure TCR-1, impacts to tribal cultural resources would be less than significant.

Mitigation Measure:

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"). A copy of the executed contract shall be submitted to the City of Orange Planning and Building Department prior to the issuance of any permit necessary to commence a ground-disturbing activity. The Tribal monitor will only be present on-site during the construction phases that involve ground-disturbing activities into areas of undisturbed soils. Ground disturbing activities are defined by the Tribe 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 Site. 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. The on-site monitoring shall end when all ground-disturbing activities on the Project Site are

completed, or when the Tribal Representatives and Tribal Monitor have indicated that all upcoming ground-disturbing activities at the Project Site have little to no potential for impacting Tribal Cultural Resources.

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 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 (CEQA Guidelines Section 15064.5[f]). If a non-Native American resource is determined by the qualified archaeologist to constitute a "historical resource" or "unique archaeological resource," time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and PRC Sections 21083.2(b) for unique archaeological resources.

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?	☐	☐	☒	☐
(b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☒	☐
(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?	☐	☐	☒	☐
(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?	☐	☐	☒	☐
(e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid wastes?	☐	☐	☒	☐

Impact Analysis:

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?

Significance Determination: Less than Significant Impact

Water and Wastewater Treatment

The City of Orange Water Division provides potable water service (water supplies include imported water, groundwater, and surface water) to over 139,000 residents within the City's 32 square-mile planning area. The Orange County Sanitation District (OCSD) provides wastewater services to the City. Under existing conditions, the Project site is developed with a manufacturing facility. Implementation of the Project would demolish the existing approximately 40,000 sf manufacturing facility and redevelop the site with a single approximately 57,900 sf building. The Project would connect a new 3-inch water line, 3-inch fire line and 6-inch sewer lines to the existing 10-inch water line and 8-inch sewer line beneath Struck Avenue. Because the Project Applicant proposes to redevelop the site with a permitted use under the Light Industrial land use designation and M-2 Zone Classification, the water demand from the Project site was anticipated and analyzed in the City's Urban Water Management Plan (UWMP). Therefore, the City's existing water infrastructure and treatment facilities are adequate to serve the Project. OMC Section 13.56.090, *Charges for Sewer Mains and Extensions*, imposes a sewer main connection fee on non-residential development in the City as a condition precedent to the issuance of a building permits to fund the Project's fair share of costs to upgrade the City's sewer system. Additionally, the Project would be required to pay ongoing user fees. Payment of these fees would offset the Project's potential increase in demand for wastewater collection services.

Although the Project would result in new water and sewer line connections, these connections would occur on-site and would be part of the Project's construction phase, which is evaluated throughout this IS/MND. The construction of the Project's water and sewer lines necessary to serve the Project would not result in any significant physical effects on the environment that are not already identified and disclosed as part of this IS/MND. Impacts would be less than significant.

Stormwater Drainage

Stormwater originating on the Project site sheet flows from the south to the northwest to an existing curb gutter along Struck Avenue. Runoff from the Project site enters the existing 30-inch storm drainage main beneath Struck Avenue, which then conveys flows to the Orange County storm drain system that discharges runoff to the Santa Ana River.

Refer to the analysis under Section 10, Hydrology and Water Quality Threshold c.ii, above. As discussed, stormwater runoff would be treated on site and would not require relocation or construction of new or expanded storm water drainage infrastructure which could cause significant environmental effects. Impacts would be less than significant.

Dry Utilities

Under existing conditions, the Project site is served by Southern California Edison (SCE) for electrical power, Southern California Gas Company (SoCal Gas) for natural gas, and AT&T for telephone and fiber optics. Connections to the existing utility networks are available in the Project area and any off-site improvements would occur within improved rights-of-way, which are inherent to the Project's construction phase and have been evaluated throughout this IS/MND. Where necessary, mitigation measures have been identified to reduce impacts to a level below significance. Because the Project site has been previously developed with a manufacturing facility that requires electric power, natural gas, and telecommunication services, implementation of the proposed Project is not anticipated to limit the ability of SCE, SoCalGas, or AT&T to provide service to Project. Therefore, the proposed Project would not require or result in the construction or expansion of new facilities, and impacts would be less than significant.

Mitigation Measures: Mitigation Measures are not required.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

Significance Determination: Less than Significant Impact

The City of Orange provides water service to the City. Under existing conditions, the City of Orange provides water services to the Project site. The City receives its water from 2 main sources: groundwater from the Lower Santa Ana River Groundwater Basin, managed by the Orange County Water District (OCWD), and imported water from the MWD, managed by the Municipal Water District of Orange County. Groundwater is pumped from 15 active wells in the City. According to the City's Urban Water Management Plan (UWMP), the City relies on approximately 6,515 acre-feet per year (AFY) of imported water and 20,372 AFY of groundwater form the Lower Santa Ana River Groundwater Basin. Additionally, the City relied on 1,757 acre-feet of surface water purchased through the Serrano Water District in 2015.

The City's UWMP includes an analysis of water supply reliability projected through 2040 under normal years, single dry year, and multiple dry years. The City's total water demand for 2015 was approximately 28,643 AF. The City's forecasts for projected water demand based on the population projections of the Southern California Associations of Governments (SCAG), which rely on the adopted land use designations contained within the general plans that cover the geographic area within City of Orange's service. Because the Project Applicant would redevelop the site with a use permitted under the Light Industrial land use designation, the Project would be consistent with the City's General Plan and, therefore, the water demand associated with the Project was considered in the demand anticipated by the 2015 UWMP and analyzed therein. As stated above, the City is anticipated to have adequate water supplies to meet all its demands until the year 2040 under a normal year, single dry year, and multiple dry years. Therefore, the City has sufficient water supplies available to serve the Project from existing entitlements/resources and no new or expanded entitlements are needed. Impacts would be less than significant.

Mitigation Measures: Mitigation measures are not required.

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?

Significance Determination: Less than Significant Impact

The OCSD provides wastewater treatment for the City of Orange via 2 reclamation plants: Reclamation Plant No.1 in Fountain Valley and Treatment Plant No. 2 in Huntington Beach. Reclamation Plant No. 1 has a total rated primary capacity of 108 million gallons per day (mgd) and a secondary treatment capacity of 80 mgd. Treatment Plant No. 2 has a total rated primary capacity of 168 mgd and a secondary treatment capacity of 90 mgd (Carollo, 2020). According to the City's General Plan EIR, the City's Sewer Master Plan estimated a wastewater generation rate of 23.7 mgd in the City, which includes wastewater flow from industrial, commercial, and residential land uses.

The Project site is developed with an approximately 40,000 sf manufacturing facility that requires wastewater treatment services. The Project Applicant would demolish the existing structure and redevelop the site with an approximately 57,900 sf building. The Project Applicant would redevelop the Project site with a use that is consistent with the site's underlying land use designation; therefore, the wastewater generation associated with the Project was considered in the demand anticipated by the City's General Plan EIR and the City's Sewer Master Plan and analyzed therein. As such, the OCSD's existing wastewater treatment facilities are anticipated to have adequate capacity to serve the Project's project demand in addition to its existing commitments. Impacts would be less than significant.

Mitigation Measures: Mitigation measures are not required.

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?

Significance Determination: Less than Significant Impact

The City of Orange contracts with a private service provider to collect solid waste, green waste (grass clippings, tree, and shrub clippings), and items for recycling. Waste collected from the City is disposed of at 1 of 3 landfills in Orange County: Olinda Alpha Landfill, Frank R. Bowerman Landfill, and the Pima Deshecha Landfill. The Orange County Integrated Waste Management Department (OCIWMD) owns and operates these landfills.

According to the California Department of Resources Recycling and Recovery (CalRecycle), the Olinda Alpha Landfill is permitted to accept 8,000 tons per day (tpd), the Frank R. Bowerman Landfill is permitted to accept 11,500 tpd, and the Pima Deshecha Landfill is permitted to accept 4,000 tpd. Additionally, the Olinda Alpha Landfill has a closure date of December 21, 2021; the Frank R. Bowerman Landfill has a closure date of December 31, 2053; and the Pima Deshecha Landfill has a closure date of December 31, 2102. (CalRecycle, 2020a; CalRecycle, 2020b; CalRecycle, 2020c) It

should be noted that the Project is anticipated to be constructed by the year 2022 and by this time, the Olinda Alpha Landfill is expected to be closed.

Implementation of the Project would generate an incremental increase in solid waste volumes requiring off-site disposal during short-term construction and long-term operational activities. Additionally, the Project would be required to comply with mandatory waste reduction requirements as described below in Utilities and Service Systems Threshold g.

Construction Impact Analysis

Solid waste requiring disposal would be generated by the construction process, primarily consisting of discarded demolition materials and packaging. The Project would reuse 10,905 tons of crushed concrete and asphalt.

Based on the size of the Project (57,900 sf) and the United States Environmental Protection Agency's (US EPA) construction waste generation factor of 4.34 pounds per sf (lbs/sf) for non-residential uses, approximately 437.3 tons of waste is calculated to be generated during the Project's construction phase ([57,900 sf x 4.34 lbs/sf]/2,000 lbs/ton = 125.6 tons) (EPA, 2009, p. 10). California Assembly Bill 939 (AB 939) requires that a minimum of 50% of all solid waste be diverted from landfills (by recycling, reusing, and other waste reduction strategies); therefore, the Project is estimated to generate approximately 62.8 tons during its construction phase. The Project's construction phase is anticipated to last for approximately 220 days; therefore, the Project is calculated to generate approximately 0.29 tons of solid waste per day requiring landfill during its construction phase.

The Project's non-recyclable construction waste generated by the Project would be disposed of at 1 of the 3 landfills as described above. The Project's estimated total construction solid waste would represent approximately 0.8 percent of the daily tpd at Olinda Alpha Landfill, 0.5 percent at the Frank R. Bowerman Landfill, and 1.57 percent at the Prima Deshecha Landfill. As previously stated, the Olinda Alpha Landfill has a closure date of December 31, 2021, and the Project's construction is anticipated to be completed by 2022. Although the Olinda Alpha Landfill will be closed during a portion of the Project's construction phase, the Frank R. Bowerman and Pima Deshecha Landfill will be open during the Project's entire construction phase. These 2 landfills have sufficient daily capacity to accept solid waste generated by the Project's construction phase. Impacts would be less than significant.

Operational Impact Analysis

Based on a daily waste generation factor of 1.42 lbs of waste per 100 sf of industrial building obtained from CalRecycle, long-term, on-going operation of the Project would generate up to approximately 0.20 tons ([57,900 sf x {1.42 lbs/100sf}]/2,000 lbs/ton= 0.20 tons) of solid waste per day (CalRecycle, 2006). . Implementation of the Project would result in an approximately 0.20-ton net increase in solid waste generation. It should be noted that by the time the Project is operational, the Olinda Alpha Landfill will be closed; however, the Frank R. Bowerman Landfill and Prima Deshecha Landfill are anticipated to be open during the lifetime of the Project. Although the implementation of the Project would increase the amount of solid waste generated at the Project site, the Project's projected solid waste would be below the Frank R. Bowerman and Prima Deshecha Landfill daily disposal volume. Additionally, according

to AB 939, at least 50 percent of the Project's solid waste is required to be diverted from landfills; therefore, the Project would generate approximately 0.10 tons of solid waste per day requiring landfilling (0.20 tons per day x 50% = 0.10 tons per day).

The non-recyclable solid waste generated during the long-term operation of the Project would be disposed at 1 of the 2 landfills described above. The Project's estimated solid waste is well below the maximum daily capacities of any of the 2 landfills. The Project is not anticipated to cause these landfills to exceed their maximum daily permitted solid waste amounts. Impacts would be less than significant.

Mitigation Measures: Mitigation measures are not required.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid wastes?

Significance Determination: Less than Significant Impact

AB 939 requires that local jurisdictions divert at least 50 percent of all solid waste generated by January 1, 2000. SB 2202 clarified that local governments shall continue to diver 50 percent of all solid waste on and after January 1, 2000. SB 1016 introduced a per capita disposal measurement system that measures the 50 percent diversion requirement using a disposal measurement equivalent. For the 2017 reporting year, the City's per employee disposal rate was 7.10 lbs/person/day, which is less than the City's Disposal Rate Target of 14.4 lbs/person/day.

Additionally, in accordance with the California Solid Waste Reuse and Recycling Act of 1991 (Cal Pub Res. Code Section 42911), the Project is required to provide adequate areas for collecting and loading recyclable materials where solid waste is collected. The collection areas are required to be shown on construction drawings and be in place before occupancy permits are issued. Additionally, in compliance with AB 341 (Mandatory Commercial Recycling Program), the future occupant of the Project would be required to arrange for recycling services, if the occupant generates four (4) or more cubic yards of solid waste per week. The implementation of these mandatory requirements would reduce the amount of solid waste generated by the Project and diverted to landfills, which in turn will aid in the extension of the life of affected disposal sites. The Project would be required to comply with all applicable solid waste statutes and regulations. Impacts would be less than significant.

Mitigation Measures: Mitigation measures are not required.

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?	☐	☐	☐	☒
(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?	☐	☐	☐	☒
(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?	☐	☐	☐	☒
(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?	☐	☐	☐	☒

Impact Analysis:

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

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?

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?

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?

Significance Determination: No Impact

The State Responsibility Area (SRA) is the land where the State of California is financially responsible for the preservation and suppression of wildfires. The SRA does not include lands within city boundaries or in federal ownership; therefore, the Project site does not have the potential to be in an SRA. Based on the review of Figure PS-1, *Environmental and Natural Hazard Policy Map*, of the City's General Plan Public Safety Element, the Project site is not within a Very High Fire Hazard Severity Zone (VHFHSZ) (Orange, 2010b). Additionally, according to CalFire, the Project site is not within a VHFHSZ (CalFire, 2011). As such, no impacts related to wildfire would occur.

Mitigation Measures: Mitigation measures are not required.

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?	☐	☒	☐	☐
(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?)	☐	☒	☐	☐
s(c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Impact Analysis:

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?

Significance Determination: Less than Significant Impact with Mitigation Incorporated

The Project site is within an urbanized area of the City of Orange. The Project site is fully developed with a manufacturing facility and is void of any suitable habitat for rare, endangered, or threatened plants and animal species. Because there is available nesting habitat within the ornamental trees along the Project site's frontage, the Project has the potential to result in impacts to nesting birds protected by the MBTA. As such MM BIO-1 is incorporated to minimize potential impacts to nesting birds.

As indicated in the Cultural Resources section of this IS/MND, the Project site is not included on the National Register of Historic Places, California Register of Historical Resources, or a local register of historical resources, nor is it eligible for listing. Therefore, there would be no impact on historical resources resulting from Project implementation. However, while unlikely, the presence of subsurface archaeological resources on the Project site remains possible, and these resources could be affected by ground-disturbing activities associated with grading and construction at the site. It is possible that subsurface disturbance would occur at levels not previously disturbed. The Project would implement MM CUL-1, which provides direction for the proper recordation of previously undiscovered archaeological resources, should they be found during Project construction activities. Additionally, the Project site is in an area with high paleontological sensitivity. Notwithstanding this conclusion, based on the results of Native American consultation pursuant to AB 52, the City is requiring monitoring of ground-disturbing activities to ensure there are no impacts to tribal cultural resources or Native American human remains in the event they are encountered during construction (refer to MM TCR-1 in the Tribal

Cultural Resources section). Potential impacts to paleontological resources, if encountered during construction, would be less than significant with implementation of MM GEO-1

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?)

Significance Determination: Less than Significant Impact with Mitigation Incorporated

As identified through the analysis presented in this IS/MND, with the implementation of Project-specific MMs, the Project would have no impact or less than significant impacts related to each topical issue. For example, the Project's maximum daily construction and operational emissions would not exceed South Coast AQMD's regional thresholds or LSTs. Therefore, the Project's construction emissions would not result in a cumulatively considerable net contribution to the exiting cumulative air quality impacts. Furthermore, all construction activities would be required to comply with South Coast AQMD rules and regulations, including Rule 403, to minimize fugitive PM dust emissions.

The Project would require MMs to reduce potential temporary construction-related impacts. MMs would protect potential nesting birds and discovery of unknown artifacts during grading. All other environmental impacts were determined to be less than significant. Impacts associated with the Project would not result in cumulatively-considerable impacts when added to the impacts of other Projects planned or proposed in the vicinity of the site. Cumulative impacts would be less than significant.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Significance Determination: Less than Significant Impact with Mitigation Incorporated

As discussed throughout this IS/MND, the Project's potential impacts were evaluated with respect to 20 environmental topical areas. Project specific MMs were required to reduce temporary construction-related impacts related to biological resources, cultural resources, paleontological resources, and tribal cultural resources. As discussed, there is a potential for the Project site to contain impacted soil or other subsurface features (pits, sumps, clarifies, or USTs) that may need to be appropriately and expeditiously managed due to additional agency oversight and/or any permitting necessary to properly abandon such features. In order to ensure public and worker safety, an SMP was prepared (Appendix F.3) to provide procedures for efficiently managing potentially-impacted soils and/or USTs during site preparation activities. Implementation of MM HAZ-1 would ensure compliance with the SMP, which would reduce potential impacts related to routine transport, use, or disposal of contaminated or potentially contaminated soils to less than significant. Therefore, with implementation of standard conditions and mitigation measures, the proposed project would not result in environmental impacts that would cause substantial adverse effects on human beings.

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5.0 MITIGATION MONITORING AND REPORTING PROGRAM

PROJECT NAME: 534 STRUCK AVENUE PROJECT
PROJECT LOCATION: 534 STRUCK AVENUE, ORANGE, CA
PROJECT DESCRIPTION: The Project entails the demolition of the site's existing 40,000 sf manufacturing facility and associated structures to redevelop the site with an approximately 57,900 sf building with associated parking and improvements.

LEAD AGENCY: CITY OF ORANGE
CONTACT PERSON/TELEPHONE NO.: ROBERT GARCIA, SENIOR PLANNER (714) 744-7231

APPLICANT: PROLOGIS
CONTACT PERSON/TELEPHONE NO.: JOHN CARTER, DIRECTOR OF CONSTRUCTION 7 DEVELOPMENT (562) 345-9237

No.	Mitigation Measure	Time Frame and Responsible Party for Implementation	Time Frame and Responsible Party for Monitoring	Verification of Compliance		
				Initials	Date	Remarks
Aesthetics						
The Project would not result in significant adverse impacts related to aesthetics. No mitigation is required.						
Agriculture and Forestry Resources						
The Project would not result in significant adverse impacts related to agriculture and forest resources. No mitigation is required.						
Air Quality						
The Project would not result in significant adverse impacts related to air quality. No mitigation is required.						
Biological Resources						
BIO-1	In the event that vegetation and tree removal should occur between January 15 and September 15, the Project Applicant shall retain a qualified biologist to conduct a nesting bird survey no more than 3 days prior to commencement of construction activities. The biologist conducting the clearance survey shall	Prior to vegetation/tree removal; Project Applicant	Prior to the commencement of construction activities and the issuance of any permit; City of			

No.	Mitigation Measure	Time Frame and Responsible Party for Implementation	Time Frame and Responsible Party for Monitoring	Verification of Compliance		
				Initials	Date	Remarks
	document the negative results if no active bird nests are observed on the Project site or within the vicinity during the clearance survey with a brief letter report, submitted to the City of Orange Community Development Department prior to construction, indicating that no impacts to active bird nests would occur before construction can proceed. If an active avian nest is discovered during the pre-construction clearance survey, construction activities shall stay outside of a 200-foot buffer around the active nest. For listed and raptor species, this buffer shall be 500-feet. A biological monitor shall be present to delineate the boundaries of the buffer area and to monitor the active nest to ensure that nesting behavior is not adversely affected by the construction activity. Prior to the commencement of construction activities and the issuance of any permits, results of the pre-construction survey and any subsequent monitoring shall be provided to the City of Orange Community Development Department.		Orange Director of Community Development			
Cultural Resources						
CUL-1	In the event a potentially significant cultural resource is encountered during subsurface earthwork activities, all construction activities within a 100-foot radius of the find shall cease and workers should avoid altering the materials until a qualified archaeologist who meets the Secretary of Interior's Professional Qualification Standards for archaeology has evaluated the resource. The Applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Any previously undiscovered resource	During subsurface earthwork activities; Project Applicant	During subsurface earthwork activities; City of Orange Director of Community Development			

No.	Mitigation Measure	Time Frame and Responsible Party for Implementation	Time Frame and Responsible Party for Monitoring	Verification of Compliance		
				Initials	Date	Remarks
	found during construction-related activities shall be recorded on the 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 prepare and implement a research design and archeological data recovery plan that will capture those categories of data for which the site is significant in accordance with Section 15064.5 of the State CEQA Guidelines. The archaeologist shall also 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, the South-Central Coastal Information Center, and the State Historic Preservation Office, if required.					
Energy						
The Project would not result in significant adverse impacts related to energy. No mitigation is required.						
Geology and Soils						
GEO-1	Prior to the issuance of a grading permit, the Applicant shall provide written evidence to the Community Development Department that the Applicant has retained a qualified paleontologist to	Prior to the issuance of a grading permit; Project Applicant	Prior to the issuance of a grading permit; City of Orange Director of			

No.	Mitigation Measure	Time Frame and Responsible Party for Implementation	Time Frame and Responsible Party for Monitoring	Verification of Compliance		
				Initials	Date	Remarks
	respond on an as-needed basis to address unanticipated paleontological discoveries. In the event that paleontological resources are encountered during ground-disturbing activities, all construction activities within 100 foot vicinity of the find shall halt until the qualified paleontologist identifies the paleontological significance of the find. If determined to be significant, the fossil shall be collected and prepared to the point of identification, identified to the lowest taxonomic level possible, cataloged, and curated into the permanent collections of a museum repository. At the conclusion of curation, a report of findings shall be prepared to document the results of the monitoring program. Construction shall not resume within the vicinity until the site paleontologist states in writing that the proposed construction activities would not significantly damage paleontological resources.		Community Development			
Greenhouse Gas Emissions						
The Project would not result in significant adverse impacts related to greenhouse gas emissions. No mitigation is required.						
Hazards and Hazardous Materials						
HAZ-1	The Project Contractor shall adhere to the protocols and performance standards stipulated in the SMP (Appendix F.3). Contractors working at the site follow all applicable Cal/OSHA regulations for construction safety. A Completion Report shall be prepared at the conclusion of grading activities. The report shall document field monitoring activities and visual observations made during grading/excavations, as well as soil sampling locations and results. The report shall include a	During construction; Project Contractor	Prior to issuance of building permits; City of Orange Director of Community Development			

No.	Mitigation Measure	Time Frame and Responsible Party for Implementation	Time Frame and Responsible Party for Monitoring	Verification of Compliance		
				Initials	Date	Remarks
	description of the location of impacted soil encountered, actions taken to characterize and mitigate impacts, confirmation soil sampling results, and disposition of any excavated soil. In addition, the report shall include a description of encountered subsurface structures and steps to remove and close such structures. The report shall be reviewed and approved by the City of Orange Community Development Director, prior to issuance of building permits.					
Hydrology and Water Quality						
The Project would not result in significant adverse impacts related to hydrology and water quality. No mitigation is required.						
Land Use and Planning						
The Project would not result in significant adverse impacts related to land use and planning. No mitigation is required.						
Mineral Resources						
The Project would not result in significant adverse impacts related to mineral resources. No mitigation is required.						
Noise						
The Project would not result in significant adverse impacts related to noise. No mitigation is required.						
Population and Housing						
The Project would not result in significant adverse impacts related to population and housing. No mitigation is required.						
Public Services						
The Project would not result in significant adverse impacts related to public services. No mitigation is required.						
Recreation						
The Project would not result in significant adverse impacts related to recreation. No mitigation is required.						

No.	Mitigation Measure	Time Frame and Responsible Party for Implementation	Time Frame and Responsible Party for Monitoring	Verification of Compliance		
				Initials	Date	Remarks
Transportation						
The Project would not result in significant adverse impacts related to transportation. No mitigation is required.						
Tribal Cultural Resources						
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"). A copy of the executed contract shall be submitted to the City of Orange Planning and Building Department prior to the issuance of any permit necessary to commence a ground-disturbing activity. The Tribal monitor will only be present on-site during the construction phases that involve ground-disturbing activities into areas of undisturbed soils. Ground disturbing activities are defined by the Tribe 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 Site. 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. The on-site monitoring shall end when all ground-disturbing activities on the Project Site are completed, or when the Tribal Representatives and Tribal Monitor have indicated that all upcoming ground-disturbing activities at the Project Site have little to no potential for impacting Tribal Cultural Resources.	Prior to the commencement of any ground disturbing activity; Project Applicant	Prior to issuance of any permits necessary to commence a ground-disturbing activity; City of Orange Director of Community Development			

No.	Mitigation Measure	Time Frame and Responsible Party for Implementation	Time Frame and Responsible Party for Monitoring	Verification of Compliance		
				Initials	Date	Remarks
	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 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 (CEQA Guidelines Section 15064.5[f]). If a non-Native American resource is determined by the qualified archaeologist to constitute a "historical resource" or "unique archaeological resource," time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and PRC Sections 21083.2(b) for unique archaeological resources.					

No.	Mitigation Measure	Time Frame and Responsible Party for Implementation	Time Frame and Responsible Party for Monitoring	Verification of Compliance		
				Initials	Date	Remarks
Wildfire						
The Project would not result in significant adverse impacts related to wildfire. No mitigation is required.						

6.0 APPENDICES

Appendix A.1	Urban Crossroads, Inc. 2021. Air Quality Impact Analysis. March 31, 2021
Appendix A.2	Urban Crossroads, Inc. 2021. 534 Struck Avenue Mobile Source Health Risk Assessment City of Orange. March 31, 2021.
Appendix B	Duke Cultural Resources Management. 2020. Cultural and Paleontological Resource Letter Report for the 534 Struck Avenue Project, City of Orange, Orange County, California. April 30, 2021.
Appendix C	Urban Crossroads, Inc. 2021. 534 Struck Avenue Energy Analysis City of Orange. March 31, 2021.
Appendix D	GeoTek, Inc. 2020. Geotechnical and Infiltration Evaluation Proposed Warehouse Facility 534 Struck Avenue, Orange, Orange County, California. March 31, 2020.
Appendix E	Urban Crossroads, Inc. 2021. 534 Struck Avenue Greenhouse Gas Analysis City of Orange. March3, 2021.
Appendix F.1	GeoTek, Inc. 2020. Phase I Environmental Site Assessment Assessor's Parcel Number (APN) 375-331-04 534 Struck Avenue, Orange, Orange County, California. March 31, 2020.
Appendix F.2	GeoTek, Inc. 2020. Limited Phase II Environmental Site Assessment, 534 West Struck Avenue, Orange, Orange County, California 92867. June 20, 2020.
Appendix F.3	Ramboll US Corporation. 2020. Soil Management Plan, Proposed Industrial Development, 534 West Struck Avenue, Orange, California. August 12, 2020.
Appendix G.1	Albert A. Webb Associates. 2021a. Priority Water Quality Management Plan For 534 Struck Ave Redevelopment Project. February 2021.
Appendix G.2	Albert A. Webb Associates. 2021b. 534 W. Struck Avenue Redevelopment Project Orange, California Preliminary Drainage Study. February 2021.
Appendix H	Urban Crossroads, Inc. 2021. 534 Struck Avenue Noise Impact Analysis City of Orange. March 24, 2021.
Appendix I.1	Urban Crossroads, Inc. 2021. 534 Struck Avenue Traffic Assessment. March 10, 2021.
Appendix I.2	Urban Crossroads, Inc. 2021. 534 Struck Avenue Vehicle Miles Travelled (VMT) Assessment. March 12, 2021.

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION NO. 1870-20

APPENDICES CAN BE VIEW AT THE FOLLOWING LINK:

https://www.cityoforange.org/290/Current-Projects