# AGENDA

# Planning Commission

April 20, 2026

## 5:30 PM Regular Session

**City Council Chamber**
**300 E. Chapman Avenue**
**Orange, CA 92866**


Hayden Beckman
Planning Manager

Connor Hyland
Senior Assistant City Attorney

Jennifer Scudellari
Executive Assistant

ISAIAH LESLIE
Chair

SHANNON TUCKER
Vice Chair

DAVID VAZQUEZ
Commissioner

RICK MARTINEZ
Commissioner

RUBY MALDONADO
Commissioner

ALISON VEJAR
Commissioner

TIM McCORMACK
Commissioner


Welcome to the Planning Commission meeting. Regular meetings of the City of Orange Planning Commission are held the first and third Monday of each month at 5:30 p.m.

### Agenda Information

The agenda contains a brief general description of each item to be considered. Written materials relating to an item on the agenda that are provided to the Planning Commission after agenda packet distribution and within 72 hours before it is to consider the item will be made available for public inspection in the City Clerk's Office located at 300 E. Chapman Avenue, Orange, during normal business hours; at the Planning Commission meeting; and made available on the City's website.

### Public Participation

Planning Commission meetings may be viewed on Spectrum Cable Channel 3 and AT&T U-verse Channel 99 or streamed live and on-demand on the City's website at www.cityoforange.org.

Pursuant to Government Code Section 54954.3, members of the public may address the Planning Commission on any agenda items or matters within the jurisdiction of the governing body by using any of the following methods:

**1) In-person**

To speak on an item on the agenda, complete a speaker card indicating your name, address, and identify the agenda item number or subject matter you wish to address. The card should be given to City staff prior to the start of the meeting. General comments are made during the "Public Comments" section at the beginning of the meeting. Public Comments are limited to three (3) minutes per speaker unless a different time limit is announced. It is requested that you state your name for the record, then proceed to address the Commission. All speakers shall observe civility, decorum, and good behavior.

*(Continued on page 2)*

**2) Written Public Comments via eComment**

Members of the public can submit their written comments electronically for Planning Commission consideration by using the eComment feature on the Agenda page of the City's website at www.cityoforange.org. To ensure distribution to the Planning Commission prior to consideration of the agenda, we encourage the public to submit written comments by 3:00 p.m. the day of the meeting. All written comments will be provided to the Commissioners for consideration and posted on the City's website after the meeting.

**3) Public Comments via recorded voicemail message**

Finally, the public can record their comments by calling (714) 744-7271 no later than 4:00 p.m. the day of the meeting. Recorded messages will not be played at the meeting, but will be provided to the Planning Commission and the caller's position will be summarized in the minutes.

Please contact the City Clerk's Office at (714) 744-5500 with any questions.

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

***REMINDER: Please silence all electronic devices while Planning Commission is in session.***

## APPEAL PROCEDURE

Any final determination by the Planning Commission may be appealed, and such appeal must be filed within 7 business days after the Planning Commission action. This appeal shall be made in written form to the Community Development Department, accompanied by an initial appeal deposit of $1,000.00.

The City Clerk, upon filing of said appeal, will set petition for public hearing before the City Council at the earliest date. All owners of property located within 300 feet of the project site will be notified by the City Clerk of said hearing. For additional information, please call (714) 744-7220.

If you challenge any City of Orange decision in court, you may be limited to raising only those issues you or someone else raised at the public hearing described on this agenda or in written correspondence delivered to the Planning Commission at, or prior to, the public hearing.

## 1. OPENING/CALL TO ORDER

## 1.1 PLEDGE OF ALLEGIANCE

Commissioner Alison Vejar

## 1.2 ROLL CALL

## 2. PUBLIC COMMENTS

At this time, members of the public may address the Commission on matters not listed on the Agenda which are within the subject matter jurisdiction of the Commission, provided that NO action may be taken on off-agenda items unless authorized by law. Public Comments are limited to three (3) minutes per speaker.

## 3. CONSENT CALENDAR

All matters listed under the Consent Calendar are considered to be routine by the Planning Commission and will be enacted by one motion. There will be no separate discussion of said items unless members of the Planning Commission, staff or the public request specific items removed from the Consent Calendar for separate action.

**3.1. Approval of meeting minutes of the City of Orange Planning Commission Regular Meeting held on February 19, 2026.**

**Recommended Action:**

Approve minutes as presented.

**Attachments:** Staff Report
02-19-26 PC Minutes Draft

## 4. COMMISSION BUSINESS

**4.1. 2025 General Plan Annual Progress Report to the State of California.**

**Recommended Action:**

Receive and file the 2025 General Plan Annual Progress Report

**Attachments:** Staff Report
Attachment 1 - 2010 General Plan Vision Statement
Attachment 2 - 2025 General Plan Implementation Report
Attachment 3 - 2025 Annual Housing Element Implementation Progress Report

## 5. PUBLIC HEARINGS

**5.1. A public hearing to consider a request to establish a Planned Unit Development (PUD) and subdivide a 2.02-acre parcel into 11 single-family homes at 647 N. Rancho Santiago Boulevard and finding of CEQA Exemption (ZC No. 1318, TTM No. 0052, CUP No. 3203, DR No. 5119, and MNSP No. 1137).**

**Recommended Action:**

1. Conduct and close the Public Hearing.
2. Adopt Planning Commission Resolution No. 11-26 entitled: A Resolution of the Planning Commission of the City of Orange recommending City Council approval of Zone Change No. 1318, Tentative Tract Map No. 0052, Conditional Use Permit No. 3203, Design Review No. 5119, and Major Site Plan Review No. 1137, rezoning the property located at 647 N. Rancho Santiago Boulevard to Single Family Residential 10,000 square feet - PUD No. 3203 (R1-10 [PUD 3203]) to establish an 11-unit planned unit development.
3. Find the request categorically exempt from the California Environmental Quality Act (CEQA) in accordance with Section 15183 of the State CEQA Guidelines (Projects consistent with a Community Plan, General Plan, or Zoning).

**Attachments:**

Staff Report
Attachment 1 Planning Commission Resolution No. PC 11-26
Attachment 2 Project Plans (Architectural, Landscaping, Preliminary Civil, and Renderings)
Attachment 3 Vicinity Map
Attachment 4 California Environmental Quality Act (CEQA) Initial Study
Attachment 5 Existing and Proposed Zoning Map

## 6. ADJOURNMENT

The next Regular Planning Commission Meeting will be held on Monday, May 4, 2026 at 5:30 p.m., in the Council Chamber.

I, Jennifer Scudellari, Executive Assistant for the City of Orange, hereby declare, under penalty of perjury, that a full and correct copy of this agenda was posted pursuant to Government Code Section 54950 et. seq., at the following locations: Orange Civic Center kiosk and Orange City Clerk's Office at 300 E. Chapman Avenue, Police facility at 1107 N. Batavia, Orange Main Public Library at 407 E. Chapman Avenue, and uploaded to the City's website www.cityoforange.org.

Date posted: April 17, 2026

# Agenda Item

## Planning Commission

**Item #:** 3.1. 4/20/2026 **File #:** 26-0192

**TO:** **Chair and Members of the Planning Commission**

**THRU:** **Hayden Beckman, Planning Manager**

**FROM:** **Jennifer Scudellari, Executive Assistant**

## 1. SUBJECT

Approval of meeting minutes of the City of Orange Planning Commission Regular Meeting held on February 19, 2026.

## 2. SUMMARY

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

## 3. RECOMMENDED ACTION

Approve minutes as presented.

## 4. ATTACHMENTS

- February 19, 2026 Regular Meeting minutes

# Agenda Item

## Planning Commission

| **Item #:** | 4/20/2026 | **File #:** 26-0192 |
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**THRU:** **Hayden Beckman, Planning Manager**

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## 2. SUMMARY

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

## 3. RECOMMENDED ACTION

Approve minutes as presented.

## 4. ATTACHMENTS

- February 19, 2026 Regular Meeting minutes

**MINUTES - DRAFT**

# City of Orange

**Planning Commission**

February 19, 2026

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The Planning Commission of the City of Orange, California convened on February 19, 2026, at 5:30 p.m. in a Regular Meeting in the Council Chamber, 300 E. Chapman Avenue, Orange, California.

## 1. OPENING/CALL TO ORDER

Chair Vejar called the meeting to order at 5:32 p.m.

## 1.1 PLEDGE OF ALLEGIANCE

Commissioner Ruby Maldonado led the flag salute.

## 1.2 ROLL CALL

**Present:** Leslie, Martinez, Vazquez, Maldonado, Tucker, McCormack, and Vejar
**Absent:** None

## 2. PUBLIC COMMENTS

None.

## 3. CONSENT CALENDAR

All matters listed under the Consent Calendar are considered to be routine by the Planning Commission and will be enacted by one motion. There will be no separate discussion of said items unless members of the Planning Commission, staff or the public request specific items removed from the Consent Calendar for separate action.

**3.1. Approval of meeting minutes of the City of Orange Planning Commission Regular Meeting held on February 2, 2026.**

ACTION: Approved minutes as presented.

**3.2. Request for a time extension for the Copic Orthodox Church located at 491 N. Hewes Street (Conditional Use Permit No. 3215-23, Major Site Plan Review No. 1054-21, and Design Review No. 1799-15).**

ACTION: Approved a two-year extension for Conditional Use Permit No. 3215-23, Major Site Plan Review No. 1054-21, and Design Review No. 1799-15.

## Approval of the Consent Calendar

A motion was made by Commissioner Maldonado, seconded by Commissioner McCormack, to approve the Consent Calendar. The motion carried by the following vote:

**Ayes:** Leslie, Martinez, Vazquez, Maldonado, Tucker, McCormack, and Vejar

**Noes:** None
**Absent:** None

## 4. COMMISSION BUSINESS

### 4.1. Selection of Planning Commission Officers.

A motion was made by Commissioner Tucker, seconded by Commissioner Martinez to nominate Vice Chair Leslie to serve as Chair for a one-year term effective February 20, 2026. The motion carried by the following vote:
**Ayes:** Leslie, Martinez, Vazquez, Maldonado, Tucker, McCormack, and Vejar
**Noes:** None
**Absent:** None

A motion was made by Commissioner Vazquez, seconded by Commissioner Martinez to nominate Commissioner Tucker to serve as Vice Chair for a one-year term effective February 20, 2026. The motion carried by the following vote:
**Ayes:** Leslie, Martinez, Vazquez, Maldonado, Tucker, McCormack, and Vejar
**Noes:** None
**Absent:** None

## 5. PUBLIC HEARINGS

### 5.1. Public Hearing to consider recommendation of an Ordinance amending the Orange Municipal Code to update regulations for Residential Care Facilities and Daycare Homes ensuring consistency with State Law; and finding of CEQA exemption.

Associate Planner, Arlen Beck, presented a summary of the proposed project.

Chair Vejar opened the Public Hearing at 5:39 p.m.
There being no speakers, Chair Vejar closed the Public Hearing at 5:39 p.m.

A motion was made by Chair Vejar, seconded by Commissioner Maldonado to:
1. Adopt Planning Commission Resolution No. 06-26 recommending the City Council adopt an Ordinance amending Title 17 of the Orange Municipal Code to bring the City's regulations regarding Residential Care Facilities and Family Day Care Homes into compliance with State law, specifically the California Community Care Facilities Act (Health and Safety Code Sections 1500-1569.889) and Family Day Care Homes Act (Health and Safety Code Sections 1597.40-1597.46), and updates to related definitions and land use tables for consistency.
2. Recommend that the City Council find the ordinance categorically exempt from the California Environmental Quality Act (CEQA) per State CEQA Guidelines Sections 15061(b)(3).
The motion carried by the following vote:
**Ayes:** Leslie, Martinez, Vazquez, Maldonado, Tucker, McCormack, and Vejar
**Noes:** None
**Absent:** None

### 5.2. Public Hearing to consider a request to subdivide an existing vacant site to construct 15 detached three-story residential dwellings at 715 W. Fletcher Avenue and finding of CEQA Exemption (ENT25-0015).

Senior Planner, Ryan Agbayani, presented a summary of the proposed project.

Chair Vejar opened the public hearing at 5:50 p.m.
Applicant Bart Hornstein spoke in favor of the project.
Chair Vejar closed the public hearing at 5:52 p.m.
Commissioners had further questions for the applicant and staff.
Chair Vejar re-opened the public hearing at 5:53 p.m.
Mr. Hornstein and staff members responded to questions regarding FAR, adjacent uses, ADA sidewalks, existing similar projects, and the affordable units.
Chair Vejar closed the public hearing at 5:59 p.m.

A motion was made by Commissioner Vazquez, seconded by Chair McCormack to:
1. Adopt Planning Commission Resolution No. PC 07-26 recommending City Council approval of ENT25-0015 (Tentative Tract Map, Major Site Plan Review, and Administrative Design Review).
2. Recommend that the City Council find the request categorically exempt from the California Environmental Quality Act (CEQA) in accordance with Section 15332 (Class 32-In-Fill Development Projects) of the State CEQA Guidelines.
The motion carried by the following vote:

**Ayes:** Leslie, Martinez, Vazquez, Maldonado, Tucker, McCormack, and Vejar
**Noes:** None
**Absent:** None

## 6. ADJOURNMENT

There being no further business, the meeting was adjourned at 6:02 p.m.

The next Regular Planning Commission Meeting will be held on Monday March 2, 2026 at 5:30 p.m., in the Council Chamber.

_____
Hayden Beckman
Planning Manager

# Agenda Item

## Planning Commission

**Item #:** 4.1. 4/20/2026 **File #:** 26-0077

**TO:** **Chair and Members of the Planning Commission**

**THRU:** **Hayden Beckman, Planning Manager**

**FROM:** **Arlen Beck, Associate Planner**

## 1. SUBJECT
2025 General Plan Annual Progress Report to the State of California.

## 2. SUMMARY
California Government Code Section 65400 requires that cities submit an annual report on the status of their General Plan and progress in its implementation to the Governor's Office of Land Use and Climate Innovation and the Department of Housing and Community Development each year.

## 3. RECOMMENDED ACTION
Receive and file the 2025 General Plan Annual Progress Report

## 4. PROJECT BACKGROUND
The City's 2010 General Plan was adopted on March 9, 2010. State law requires generalized annual reporting on General Plan implementation, with specific reporting requirements and forms related to the Housing Element.

## 5. PROJECT DESCRIPTION
Over the course of 2025, the City undertook a number of activities that implement the goals and policies of the Land Use, Circulation & Mobility, Natural Resources, Cultural Resources & Historic Preservation, Infrastructure, Urban Design, Public Safety, Economic Development, and Housing Elements. These activities also reflect progress made on the programs of the General Plan Implementation Plan.

## 6. PROJECT ANALYSIS
General Plan Implementation

General Plan implementation supports the quality of life objectives for the community that serve as the foundation for the General Plan (Attachment 1). Activities undertaken by the City through its Capital Improvement Program, project plans and studies, facility maintenance and management, and inter-agency coordination each play a part in General Plan implementation. Annual report and tracking activities enable the City and State to track progress made on General Plan implementation.

Over the course of 2025, the City continued to make measurable progress in implementing important goals, policies, and programs that span a range of General Plan Elements. The General Plan Implementation Report (Attachment 2) details the key implementation actions that the City

accomplished or made progress on in 2025. Some highlights of the City's accomplishments in 2025 include:

- Completed a comprehensive General Plan accuracy update in January 2025 and adopted a Public Safety Element update in coordination with California Department of Forestry and Fire Protection in compliance with State law.
- 2,006 code enforcement cases opened, and 1,981 cases closed, addressing property maintenance, zoning violations, and nuisance issues.
- Completed and advanced traffic signal and intersection improvements, including work at Chapman Avenue and Batavia Street.
- Continued implementation of Capital Improvement Program projects, including street rehabilitation, sewer replacement, ADA improvements, bridge rehabilitation, and park improvements.
- Replaced approximately 5,441 linear feet of sewer lines and reconstructed 14 manholes to improve infrastructure capacity and reliability.
- Initiated and advanced major parks and recreation projects, including the Hart Park pickleball courts, Grijalva Park skate park, Yorba Park dog park improvements, and a new park in West Orange along the Santa Ana River.
- Continued preparation of the Active Transportation Plan and secured grant funding for pedestrian and bicycle improvements.
- Adopted multiple Zoning Code updates, including updates to the alcohol permit process, Design Review Committee procedures, and regulations for farmworker and employee housing, and continued work on sign and landscape standards.
- Adopted the 2025 California Building and Fire Codes, with local amendments, to address updated safety standards.
- Continued CEQA review and development processing, including review of 17 traffic impact analyses and implementation of mitigation measures for development projects.
- Enhanced public safety services, including new emergency equipment, technology upgrades, and expanded police and fire programs.
- Expanded community services and outreach, including library programs, wildfire preparedness education, and public safety engagement initiatives.

Housing Element

The State Department of Housing and Community Development (HCD) requires the reporting of Housing Element implementation on specific state reporting forms. The reporting format of Housing Element implementation is established by HCD with the purpose of tracking overall housing production in a community, as well as a jurisdiction's progress toward meeting its regional housing

needs assessment (RHNA) allocation. The City's Housing Element Implementation Progress Report is included in Attachment 3 of this report.

In 2025 the City issued building permits for a total of 172 housing units. In 2025, a total of 140 housing units completed construction and were issued a certificate of occupancy, 66 of which are Very-Low or Low-Income Deed Restricted units.

The City's progress in meeting its Year 2021-2029 RHNA goals is summarized in the table below.

2025 Building Permit Issuance in Relation to RHNA

| Income Level | 2021-2029 RHNA (# of units) | 2021 New Units (As of 10/15/2021) | 2022 New Units | 2023 New Units | 2024 New Units | 2025 New Units | 2021-2029 Remaining RHNA Need |
|---|---|---|---|---|---|---|---|
| *Very Low* | 1,067 | 0 | 50 | 50 | 0 | 0 | 967 |
| *Low* | 604 | 0 | 62 | 24 | 166 | 0 | 352 |
| *Moderate* | 677 | 2 | 83 | 69 | 104 | 89 | 303 |
| *Above-Moderate* | 1,588 | 1 | 50 | 1 | 4 | 83 | 1,449 |
| ***Total*** | **3,936** | **3** | **245** | **144** | **274** | **172** | **3,071** |

In 2025, the City continued to make steady progress toward implementation of its Housing Element and Regional Housing Needs Assessment (RHNA) allocation through ongoing residential development, including market-rate and deed-restricted affordable units, as well as continued strong activity in accessory dwelling units. While progress remains strongest in the moderate- and above-moderate-income categories, the City continues to focus on facilitating production of very low- and low-income units through implementation of Housing Element programs and regulatory incentives.

The City also maintained compliance with State housing law through ongoing monitoring, coordination with the California Department of Housing and Community Development, and preparation of the Annual Progress Report. The City also adopted a Farmworker and Employee Housing Ordinance and Single Room Occupancy Ordinance. Overall, these efforts reflect continued advancement of Housing Element goals and Policy Action 2A: Annual Review of Housing Element.

## 7. AUTHORIZING GUIDELINES

California Government Code Section 65400 requires that cities submit an annual report on the status of their General Plan and progress in its implementation to the Governor's Office of Land Use and Climate Innovation and Department of Housing and Community Development. In addition to submittal to the State, the annual report must be presented to the City Council for review and acceptance.

As a procedural matter, staff is bringing this annual report to the Planning Commission for receipt and acceptance prior to the City Council action given the role of the Commission as advisory to the Council in planning matters, including implementation of the General Plan.

## 8. PUBLIC NOTICE

No public notification is required for this report to the Planning Commission.

## 9. ADVISORY BOARD ACTION

None.

## 10. ATTACHMENTS

- Attachment 1 2010 General Plan Vision Statement
- Attachment 2 2025 General Plan Implementation Report
- Attachment 3 2025 Annual Housing Element Implementation Progress Report

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# A VISION FOR ORANGE: 2030

## Preamble

The people, neighborhoods, businesses, and educational and religious institutions define Orange. Our identity has been enhanced because we have honored the past while creating our future. We must continue to maintain our small town character within residential neighborhoods, while providing a wide range of services, products, and amenities in our commercial, retail, and industrial districts.

## Where We Live

Our vision for Orange is to continue to provide housing for all lifestyles within its diverse population. The General Plan will strive to maintain the different residential areas that make Orange unique: whether living in a semi-rural area that provides scenic views of natural beauty and convenient access to nature and trails; residing in a traditional suburban neighborhood setting; or enjoying the urban core experience near shops, restaurants, civic facilities, and public services. In the future, we will strive to achieve the following objectives:

- Orange must continue to encourage a variety of living environments for a diverse population, consistent with existing neighborhoods.
- The City will build upon existing assets to create a living, active, and diverse environment that complements all lifestyles and enhances neighborhoods, without compromising the valued resources that make Orange unique.
- The City will continue efforts to protect and enhance its historic core. This same type of care and attention will be applied throughout the rest of the City.
- The City will work to improve the quality of life for all residents by providing residential, commercial, industrial, and public uses that exist in harmony with the surrounding urban and natural environments.
- Residential areas will be connected to commercial, recreational, and open space areas, as well as educational and cultural facilities via a balanced, multi-modal circulation network that accommodates vehicles, pedestrians, cyclists, hikers, and equestrians. This network will create additional opportunities for walking and biking, enhancing safety and well-being for neighborhoods and businesses.
- The City will encourage a local economy that provides ample commercial, financial, office, and industrial opportunities that provide employment and sufficient revenue to support important community services.
- Orange recognizes the importance of managing development in a manner that ensures adequate and timely public services and infrastructure and limits impacts on the natural environment.

## Where We Work

Our vision for Orange is to find an appropriate balance between residential, commercial, and industrial demands. This vision encourages the City's retail districts to improve piece by piece, so that their efforts will result in a public realm along Chapman Avenue, Tustin Street, Katella Avenue, and Main Street that will be characterized by visually attractive commercial development, active public areas, high-quality streetscapes, and innovative design that complements Orange's heritage.

To achieve our vision, we shall work toward the following objectives:

- The City will strive to provide for a range of businesses including both small, family-owned businesses and larger businesses that serve a regional market.
- The appearance and variety of commercial, retail, industrial, and employment centers will reflect the pride that residents have for Orange, as well as the long-term investments the City has made in its infrastructure.
- Orange will tap into the entertainment and hospitality markets by enabling development of high-quality facilities strategically located near other regional tourist draws.
- We will continue to support educational and medical institutions and other industries that provide high paying jobs and are major contributors to the community.

## Where We Play

Our community recognizes that its quality of life will be judged by how well we connect with our surroundings. Therefore, this General Plan has focused on maintaining and creating those special places that bring us together. It is paramount to reinforce the connections between those places and the community, so that all our residents and visitors can share and enjoy the outdoors and other activities.

Therefore, our Vision includes the following objectives:

- The City will work to define neighborhoods through the use of open space areas and a trail system that provides a source of aesthetic beauty and recreational opportunities. These open space areas support a healthy and active community.
- We will continue to protect our critical watersheds, such as Santiago Creek, and other significant natural and open space resources.
- The City will strive to build a comprehensive system of parks, open space, equestrian areas, scenic resources, undeveloped natural areas, as well as a full array of recreational, educational, and cultural offerings such as libraries, sports, entertainment areas, and play facilities.
- We will develop a connected multi-modal network for traveling from one end of town to the other that provides the option for residents from different neighborhoods to access parks, open spaces, and scenic areas by vehicle, transit, foot, bicycle or, where appropriate, horse.

**City of Orange General Plan Implementation Report for Calendar Year 2025**

## 1. Introduction

The 2010 General Plan provides a strategic program for addressing and planning for the quality of life and needs of the community through 2030. The document consists of a Community Vision Statement that is supported by goals, policies and implementation programs presented in 11 elements. The content strives to address regional and state issues and ensure that a multi-disciplinary approach is taken with the change and physical evolution that occurs in the City.

The complete General Plan, Implementation Plan, and Program EIR are available on the City's website at:
https://www.cityoforange.org/our-city/departments/community-development/general-plan

## 2. Table of Contents

The Table of Contents was submitted to the State Office of Planning and Research (OPR), now the Governor's Office of Land Use and Climate Innovation (LCI) in April 2011 and is on file.

## 3. Date of Presentation/Acceptance by Local Legislative Body

The City Council adopted the 2010 General Plan and certified the associated Program EIR on March 9, 2010. Resolutions 10425 and 10436 are on file with the OPR. The City adopted a General Plan Amendment on December 8, 2015, and again on January 14, 2025, for an accuracy review and technical cleanup of the General Plan. City Council Resolutions 10911 and SAORA-38 related to these accuracy updates are on file with LCI.

## 4. General Plan Implementation Actions in 2024

During the 2025 calendar year the City accomplished or made significant progress on key implementation actions including:

**Zoning Code Update (*Implementation Program I-1*):** In 2025, the City adopted an ordinance to update the City's alcohol permit process, an ordinance to redefine the role and responsibilities of the Design Review Committee, an ordinance to update regulations related to chicken keeping, an ordinance to permit farmworker and employee housing. Additionally, staff continued to work on ordinances to update the City's sign and landscape standards.

*These activities implement Goals 1.0, 6.0, and 8.0 and Policies 1.1, 1.2, 1.3, 1.4, 6.1, 6.2, 6.6, 8.1 and 8.3 of the Land Use Element; Goal 7.0 and Policies 7.2, 7.5, and 7.6 of the Public Safety Element; Goals 1.0, 2.0, and 5.0 and Policies 1.1,1.2, 1.3, 2.2,*

*5.1, and 5.2 of the Noise Element; Goals 1.0, 4.0, and 6.0 and Policies 1.1, 1.4, 4.1, 6.1, and 6.3 of the Urban Design Element; and Goals 1.0, 3.0, 1.0, 3.0, 5.0, and 7.0 and Policies 1.1, 1.5, 3.2, 3.4, 5.2, 5.4, 5.5, 7.1 and 7.2 of the Economic Development Element.*

**Plans, Standards, and Guidelines *(Implementation Program I-4)*:** In 2025, staff continued work on ordinances to update the City's sign and landscape standards and implemented standards and regulations for Farmworker and Employee housing. Additionally, an update to the Grijalva Park Master Plan was initiated.

*This activity is anticipated to implement Goals 1.0, 2.0, 3.0, 6.0, and Policies 1.2, 1.4, 1.6, 2.5, 2.6, 2.7, 2.8. 3.1, 3.3, 6.1, 6.3, 6.6, and 6.8 of the Land Use Element; Goals 1.0, 2.0, 3.0, 4.0, and 6.0 and Policies 1.1, 1.3, 1.7, 2.5, 2.6, 3.2, 3.3, 4.2, 4.7, and 6.3 of the Circulation & Mobility Element; Goal 1.0 and Policies 1.1, 1.5,1.6, 1.7, and 1.9 of the Growth Management Element; Goal 2.0 and Policies 2.2, 2.3, 2.6, 2.8, 2.14, 2.15 of the Natural Resources Element; Goals 2.0, 7.0, 9.0 and Polices 2.4, 7.2, 7.3, 7.4, 7.5, and 9.3 of the Public Safety Element; Goals 1.0, 2.0, and 5.0 and Policies 1.2, 1.3, 1.5, 2.2, 2.3, 2.5, 5.1, and 5.2 of the Noise Element; Goal 3.0 and Policy 3.5 of the Infrastructure Element; Goals 1.0, 2.0, 3.0, 4.0, and 6.0 and Policies 1.1, 1.2, 1.3, 1.5, 2.2, 2.3, 2.4, 2.5, 3.1, 4.1, 4.2, 4.3, 6.1, and 6.2 of the Urban Design Element; Goal 5.0, and Policy 5.2 of the Economic Development Element; and Goal 3.0 of the Housing Element.*

**Code Enforcement (*Implementation Program I-8*):** In 2025, 2,006 code enforcement cases of all types were opened, and 1,981 cases were closed. The cases both opened and closed out in 2025 were related to property maintenance standards, adopted building code violations, zoning ordinance development standard violations, noise ordinance violations, and other provisions of the Orange Municipal Code.

*This activity implements Goals 5.0 and 7.0 and Policy 7.5 of the Land Use Element; Goal 7.0 of the Safety Element; Goal 1.0 and Policy 1.4 of the Noise Element; Goals 4.0 and 5.0 and Policies 4.2 and, 5.2 of the Economic Development Element; and, Policy Action 24 of the Housing Element.*

**Building and Fire Codes (*Implementation Program I-9*):** In 2025, the City adopted by Resolution the 2025 California Fire Code and the 2025 California Building Codes with modification and changes to address local conditions in compliance with State law. The updated Fire and Building Codes went into effect on January 1, 2026. In 2025 the State, and by extension the City, amended code requirements regulating Energy Storage Systems installed on dwelling units and/or in garages attached to dwelling units.

*This activity implements Policy 1.1 of the Public Safety Element, and Policies 5.1, and 6.1 of the Noise Element.*

**Traffic Signals *(Implementation Program I-10):*** Several signalization projects were

completed or were under construction in 2025. Those projects include:

The following projects were completed in 2025:

- Chapman Avenue & Batavia Street Traffic Signal Modification (Left-Turn)

The following projects were under construction in 2025:

- Chapman Avenue & Batavia Street Traffic Signal Modification (Left-Turn)

*This activity implements Goals 1.0 and Policy 1.2 of the Circulation and Mobility Element; Goal 3.0 and Policy 3.3 of the Infrastructure Element; and, Goal 6.0, and Policies 6.1 and 6.2 of the Economic Development Element.*

**Intersection Improvements (*Implementation Program I-11*):** "Critical Intersections" consist of key intersections with historical or projected traffic congestion problems. In 2025, the following intersection improvement project was under construction:

- Chapman Avenue & Batavia Street Traffic Signal Modification (installation of protected left-turn phasing on Batavia Street legs)

*This activity implements Goal 1.0 and Policy 1.2 of the Circulation and Mobility Element; Goal 3.0 and Policies 3.1 and 3.3 of the Infrastructure Element; and, Goal 6.0 and Policy 6.1 and 6.2 of the Economic Development Element.*

**Operating Budget (*Implementation Program I-15*):** In 2025, the City continued to maintain necessary levels of City services for infrastructure such as water, sewer, roads and, parks; and, for recreation programs, public safety, and capital improvement and private development review.

*Although all General Plan Goals and Policies relate to the operating budget, the most directly related Goals and Policies to the implementation program include Goals 1.0 and 5.0 and Policies 1.7, 5.6, 5.7 and, 6.4 of the Land Use Element; Goals 1.0, 2.0, 3.0, 4.0, 6.0 and Policies 1.1, 1.2, 1.6, 3.2, 4.5, 4.7 and, 6.1 - 6.3 of the Circulation & Mobility Element; Goals 2.0 and 5.0 and Policies 2.3, 2.13, 5.1, 5.2, 5.5, 6.2 of the Natural Resources Element; Goals 3.0 and 6.0 and Policies 3.4, 3.8, 6.1, 6.2, 6.3 of the Public Safety Element; Goal 5.0 and Policies 5.1 and 5.5 of the Cultural Resources Element; Goals 1.0, 2.0 and, 3.0 and Policies 1.1, 1.2, 1.5, 2.1, 3.1, 3.2, 3.3 and, 3.5 of the Infrastructure Element; and, Goals 2.0, 5.0 and 6.0 and Policies 2.4, 5.4, 6.1 and, 6.2 of the Economic Development Element.*

**Community Character Design Elements *(Implementation Program I-24):*** In 2025, the City adopted an ordinance to redefine the role and responsibilities of the Design Review Committee, an ordinance to update regulations related to chicken keeping, an ordinance permitting and implementing development standards for farmworker and employee housing. Staff continued work on ordinances to update the City's sign and

landscape standards, and an update to the Grijalva Park Master Plan was initiated.

*These activities implement Goals 1.0, 6.0, and 8.0 and Policies 1.1, 1.2, 1.3, 1.4, 6.1, 6.2, 6.6, 8.1 and 8.3 of the Land Use Element; Goal 7.0 and Policies 7.2, 7.5, and 7.6 of the Public Safety Element; Goals 1.0, 2.0, and 5.0 and Policies 1.1,1.2, 1.3, 2.2, 5.1, and 5.2 of the Noise Element; Goals 1.0, 4.0, and 6.0 and Policies 1.1, 1.4, 4.1, 6.1, and 6.3 of the Urban Design Element; and Goals 1.0, 3.0, 1.0, 3.0, 5.0, and 7.0 and Policies 1.1, 1.5, 3.2, 3.4, 5.2, 5.4, 5.5, 7.1 and 7.2 of the Economic Development Element.*

**Joint-Use agreements for Parks and Open Space *(Implementation Program I-26):*** In 2023, the City finalized a lease agreement with the Orange County Flood Control District (OCFCD) so that the City can build a new park on County property adjacent to the Santa Ana River. The environmental review and park design processes continued in 2025 and are anticipated to be completed in 2026. The roughly 2-acre property will be developed into a linear park with play equipment, fitness area, skate plaza, shaded seating options, and landscaping. The project completion date is dependent on OCFCD's project to raise the levee along the riverbed.

*This activity implements Goal 7.0, and Policy 7.6 of the Land Use Element; Goals 1.0, and 5.0 and Policies 1.2, 5.4 and 5.7 of the Natural Resources Element*

**Fire Hazard Information and Suppression (*Implementation Program I-27*):** Maintaining and keeping up fire stations is crucial to ensure that all facilities and equipment are in optimal condition for responding to emergencies. Regular maintenance helps to uphold the readiness and effectiveness of emergency operations, enhancing the safety of both the firefighters and the community they serve. In 2025 The Orange City Fire Department continued to focus on maintenance of the stations through improvements, including new paint, carpet, and window coverings in some of our older stations.

The Fire Department's top priority is to ensure the safety of its personnel and the public they serve. To achieve this, it is essential that our firefighters and apparatus are properly equipped to perform their duties. In 2025, the Fire Department replaced 50 sets of Structural Turnouts, one set of Genisis Auto Extrication tools, and new Paratec Shoring was purchased and put into service on USAR 1. Two new Ambulances were received and placed into service, and the EOC added five new laptop computers to their cash.

*This activity implements Goal 3.0 and Policies 3.4, 3.6, and 3.8, and Goal 8.0 and Policies 8.1 and 8.2 of the Public Safety Element, pertaining to fire protection, and emergency preparedness.*

**Hazardous Materials Monitoring (*Implementation Program I-29*):** The Fire Department Hazmat Specialists manage approximately 730 hazmat sites with a total of 174 Underground Storage Tanks. In addition to 120 hazardous material disclosure inspections and 98 UST inspections. Fire Safety Specialists completed 4403 Annual

Life Safety Inspections, and 1531 total plan reviews.

*This activity implements Goal 4.0 and Policies 4.1 - 4.4 of the Public Safety Element.*

**Noise Regulations *(Implementation Program I-30):*** During the course of entitlement application review, planning staff provided applicants with comments regarding appropriate placement of walls, landscaping, outdoor open spaces, building orientation, and hours of operation to reduce the interface of projects with potential noise sources or to reduce potential noise sources introduced by the project from creating impacts to adjacent uses. Projects in initial stages of review are frequently amended to include staff-recommended design features to reduce potential noise issues. In 2025, several projects included noise conditions related to those situations identified during initial plan review to ensure design features are implemented or so that operating conditions are limited to reduce potential noise issues.

Orange Police Department conducted surveillance at late night establishments to limit noise intrusion into noise sensitive land uses and to aid city staff in identifying public nuisance crimes including combative/disruptive subjects, assault and battery, noise complaints, citizen assists, drunk in public and alarm response.

*This activity implements Goal 6.0 and Policies 1.6, 3.4, 4.3, 6.2, and 6.10 of the Land Use Element; Goals 1.0, 2.0, 3.0, 5.0, 6.0, and 7.0 and, Policies 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 3.1, 5.1, 5.2, 5.3, 6.1, 7.2, 7.3, and 7.4.*

**Library Programs (*Implementation Program I-31*)*:*** In 2025, public attendance and use of library services remained steady as the Library decreased service hours but continued to offer integral resources and excellent customer service. Library locations were refreshed. At the Orange Public Library & History Center, automated sliding doors were replaced for improved accessibility and security, and renovations to the tower, History Center, and library flooring were completed. Roofing repair and monument sign replacement was completed at the El Modena Branch Library, and a light panel replacement was completed at the Taft Branch Library.

The Library strengthened community ties by expanding Pop Up Library outreach to the Senior Center, Farmers Market, and Wellness Center, while also providing 1,069 summer meals through an OUSD partnership and coordinating donation drives for the Ronald McDonald House and Friendly Center.

The Library expanded literacy services to include family-based programs and job skills workshops alongside established summer and winter reading clubs.

*This activity implements Goals 1.0, 3.0, 4.0 and 5.0, and Policies 1.1, 1.2, 3.1, 4.3, 4.6 and, 5.1 - 5.5, of the Cultural Resources and Historic Preservation Element.*

**Flood Control and Storm Drain Facilities *(Implementation Program I-32)*:** The City performed routine inspections of storm drains, removing debris from catch basins

and maintaining storm drain facilities to minimize the potential for local flooding.

*This activity implements Goal 2.0 of the Public Safety Element; and, Goal 1.0 and Policies 1.1 and 1.2 of the Infrastructure Element, pertaining to sufficient maintenance of infrastructure systems.*

**Solid Waste and Recycling Services** (***Implementation Programs I-33 and IV-5***): With AB 341, AB 1826, and SB 1383 in place, the City continues to educate and provide outreach to residential, commercial, and multifamily accounts while focusing on meeting AB 341, AB 1826, and SB 1383 mandates. CR&R continues to partner with Abound Food Care to facilitate edible food recovery for distribution to those in need. The City also received a second SB 1383 Grant offered by CalRecycle. The City has and will continue to leverage these funds to assist with increased outreach and education by holding multiple workshops, producing social media content, and rebranding outreach material in an effort to educate residential, multifamily, and commercial account holders.

*This activity implements Goal 7.0 and Policy 7.4 of the Land Use Element; Goal 2.0 and Policy 2.5 of the Natural Resources Element; and, Goal 2.0 and Policies 2.1 – 2.4 of the Infrastructure Element.*

**Noise Standards and Acoustical Studies for Noise Reduction (*Implementation Programs I-34 and III-18*):** In 2025, staff continued to review noise analyses and provide mitigation for entitlement projects identified as having the potential to cause construction noise, operational noise, and to mitigate existing noise environments for project occupants.

*This activity implements Goal 6.0 and Policy 6.2 of the Land Use Element; and, Goals 1.0, 2.0, 3.0, 5.0, 6.0 and, 7.0 and Policies 1.1 – 1.6, 2.1 - 2.5, 3.1, 5.1- 5.3, 6.1, 6.2 and, 7.1- 7.4 of the Noise Element.*

**Vehicle Noise Reduction (*Implementation Program 1-37*):** In 2025, the City actively participated in OCTA's Traffic Signal Synchronization Program Projects (aka Project P) which synchronizes signals across multiple jurisdictions along major arterials. Traffic signal synchronization projects reduce travel times, use of gas, and idle at red lights which in turn reduces vehicle noise and emissions.

The City continues to utilize rubberized asphalt to overlay street improvement projects along arterials, which assists in reducing vehicle noise.

*This activity implements Goal 1.0 and Policy 1.3 of the Circulation and Mobility Element; Goal 2.0 and Policies 2.2 and 2.5 of the Noise Element; and Goal 9.0 and Policy 9.3 of the Public Safety Element*

**Capital Improvement Program Projects (*Implementation Program Section II-1 and V-1*):** A number of Capital Improvement Program projects were initiated or completed during 2025. These projects include:

- Annual Sewer Line Replacements, FY 24-25
- Annual Pavement Maintenance FY 24-25
- Annual Concrete Replacement FY 24-25
- CDBG FY 24-25 Americans With Disabilities Act Wheelchair Access Ramp Replacement
- CDBG FY 24-25 Pixley Street Neighborhood Street Rehabilitation
- Cannon Street & Serrano Avenue Intersection Widening
- Riverdale complete street
- Structure bridge project rehabilitation project
- Orangewood bridge widening
- Automated sliding doors replacement and flooring replacement at Orange Public Library & History Center
- Roofing repair and monument sign replacement at El Modena Branch Library
- Light panel replacement at Taft Branch Library
- Corp Yard Renovation – Police Storage Facility
- Mobile Data Computer Replacement Program
- Police Facility Improvements
- Police Enterprise System (Axon & Central Square)
- Hart Park Pickleball Courts & Fitness Circuit
- Grijalva Park Skate Park
- Grijalva Park Area Lighting Replacement
- Yorba Park Dog Park Improvements
- Citywide Park Signage Installation
- Rampart Street Park
- New Park in West Orange
- Olive Park Ballfield Netting Replacement
- Preparation of Active Transportation Plan
- Grijalva Park Master Plan Update

*These activities implement Goals 1.0 and 5.0, and Policies 1.1, 1.7, 2.4, 3.3, 5.3, 5.6, 5.7, 5.9, 6.3 and 6.4 of the Land Use Element; Goals 1.0, 2.0, and 4.0 and Policies 1.1, 1.2, 1.6, 2.3, 4.7 and, 5.2 of the Circulation and Mobility Element; Goals 1.0 and 2.0 and Policy 2.1 of the Growth Management Element; Goals 2.0, 5.0, and 6.0 and Policies 2.3, 2.9, 5.1, 5.2, 5.5, 6.2, and 6.5 of the Natural Resources Element; Goals 2.0, 3.0, 6.0, 7.0, and 9.0 and Policies 2.4, 3.4, 3.5, 3.8, 6.3, 7.2, 7.6, and 9.1 of the Public Safety Element; Goal 5.0 and Policies 5.1, 5.2, and 5.5 of the Cultural Resources Element; Goals 1.0 and 3.0 and Policies 1.3, 3.1, and 3.3 of the Infrastructure Element; Goal 6.0 and Policies 2.3, 2.5, and 6.3 of the Urban Design Element; and Goals 2.0, 4.0, and 6.0 and Policies 2.4, 4.2, and 6.1 of the Economic Development Element.*

**Sewer Line Replacement *(Implementation Programs II-1 and II-6)*:** Sewer line replacements were completed in 2025 throughout the City to address infrastructure condition and capacity issues. The City replaced 5,441 Linear Feet (L.F.) of existing 6” vitrified clay pipe with 8” vitrified clay pipe, and reconstructed 14 sewer manholes.

*This activity implements Goal 1.0 and Policies 1.1 and 1.2 of the Infrastructure*

*Element.*

**Santiago Creek Bike Trail (*Implementation Program II-3*):** In 2025, the City continued to pursue working on the design for the engineering and environmental study phase of the extension of the Santiago Creek Bike Trail. The proposed project will connect the existing bike trail west of Cannon Street and parallel the existing equestrian trail on the northern bank and terminate at the Santiago Oaks Regional Park.

*This activity implements Goals 1.0 and 4.0 and Policies 1.1, 4.1 and, 4.8 of the Circulation and Mobility Element; Goal 2.0 and Policy 2.2 of the Growth Management Element; Goals 2.0, 5.0 and, 6.0 and Policies 2.2, 5.2, 6.1, 6.4 of the Natural Resources Element; and, Goal 9.0 of the Public Safety Element.*

**Pedestrian and Bicycle Amenities (*Implementation Program II-4*):** During 2024, the City performed sidewalk repair and rehabilitation, and accessibility improvements throughout the community. The City continued to require the installation of bike racks for new development projects in 2025.

In 2025, the City began the process of preparing an Active Transportation Plan, with an expected completion in 2028, to develop a roadmap for future pedestrian and bicycle improvements.

In 2025, the City applied for and received HSIP Cycle 12 funding for two projects:

- Installation of rectangular rapid flashing beacon pedestrian crossing at Shaffer St & Everett Pl, Shaffer St near Almond Ave, Walnut Ave & Harwood St and Rancho Santiago Blvd & Orange Grove Ave (estimated completion in 2029).

- Installation of bike lanes along Glassell St (from Riverdale to Katella), Fletcher St (from Batavia to Glassell), Main St (from Taft to Collins), and Canyon View Ave (from Newport to Jamboree) (estimated completion in 2029).

Also in 2025, the City applied for and received HSIP Cycle 11 funding for the following project:

- Installation of rectangular rapid flashing beacon pedestrian crossing at Collins Ave & California St, Jordan Ave & Esplanade St, La Veta Ave & Malena Dr (estimated construction to begin in 2027, with completion by 2028).

*This activity implements Goals 1.0, 4.0 and 6.0, and Policies 1.1, 1.6, 4.2 and Policy 6.2 of the Circulation & Mobility Element; and, Goal 9.0, Policies 9.1 and 9.3 of the Public Safety Element.*

**California Environmental Quality Act (*Implementation Program III-1*):** In 2025, the City continued to review entitlements for private development and capital improvement

projects in accordance with the California Environmental Quality Act (CEQA) pursuant to Section III-1 of the Implementation Plan where specific programs are applicable. Mitigation and/or conditioning were recommended and implemented for all entitled projects respective to each applicable Section III program.

*This activity implements Goals 1.0 – 8.0 of the Land Use Element and multiple policies therein, Goals 1.0, 2.0, and 3.0 of the Circulation and Mobility Element; Goals 1.0 and 2.0 of the Growth Management Element; Goals 1.0, 2.0, 3.0, 4.0, 5.0, and 7.0 and multiple policies therein to the Natural Resources Element, Goals 1.0, 2.0, 3.0, 4.0, 6.0, 7.0, and 9.0 of the Public Safety Element; Goals 1.0, 2.0, 5.0, 6.0, and 7.0 of the Noise Element; Goals 1.0, 2.0, and 4.0 of the Cultural Resources Element; Goals 1.0, 3.0, 4.0, and 5.0 of the Infrastructure Element; Goals 2.0, 3.0, 4.0, 5.0, and 6.0; Goals 4.0 and 6.0 of the Economic Development Element, and Goal 3.0 of the Housing Element.*

**Site Development Review (*Implementation Program III-2*):** In 2025, the City continued to review development projects, and use the site plan review process via the City's inter-departmental Staff Review Committee (SRC) to ensure that applicable General Plan policies and City standards and regulations are applied to proposals for specific development projects.

*This activity implements Goals 1.0, 2.0, 3.0, 4.0, and 6.0, and Policies 1.6, 1.7, 2.5, 2.7, 2.8, 3.1, 3.4, 4.3, 4.5, 6.1, 6.2, 6.9, 6.10, 6.12 of the Land Use Element; Goals 1.0 and 5.0, and Policies 1.1, 1.7, 5.1 and, 5.2 of the Circulation and Mobility Element; Goals 1.0, 2.0, 4.0, and 5.0, and Policies 1.3, 2.3, 2.6, 2.13, 2.14, 2.15, 2.16, 4.3, 4.4, 4.5, 5.4, 5.6, 5.7, 6.6 and, 7.5 of the Natural Resources Element; Goals 1.0 and 4.0, and Policies 1.3, 1.4, 1.5, 1.6, 4.1, 4.2, 4.3, 4.4, and 4.5 of the Cultural Resources & Historic Preservation Element; Goals 1.0, 2.0, 3.0, 4.0, 6.0, 7.0, and 9.0, and Policies 1.1, 2.5, 3.3, 3.5, 4.2, 4.3, 6.2, 7.2, 7.3, 7.4 and, 9.1 of the Public Safety Element; Goals 1.0, 2.0, 5.0, and 6.0, and Policies 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 5.1, 5.2, 5.3, 6.1 and, 6.2 of the Noise Element; Goals 2.0, 3.0, and 6.0, and Policies 2.4, 2.5, 2.6, 3.4, 3.5 and, 6.1 of the Urban Design Element; and, Goal 1.0 and Policies 1.4 and 1.5 of the Infrastructure Element.*

**Commission/Committee Review (*Implementation Program III-3*):** In 2025, the city adopted an ordinance to redefine the role and responsibilities of the Design Review Committee to a more focused application of the Historic Preservation Design Standards for Old Towne, and the Eichler Historic District design standards. In 2025, the Planning Commission adopted 13 resolutions either approving development project or recommending approval of a project to the City Council. The Park Planning and Community Events Commission continued to review parks projects and community events. The City Traffic Commission continued to recommend approval to the City Council for developments impacting traffic conditions.

*This activity implements Goals 2.0, 5.0, 6.0, and 8.0 and Policies 2.7, 2.8, 5.5, 6.1, and 8.3 of the Land Use Element; Policies 7.2 and 7.3 of the Public Safety Element;*

*Policies 1.3, 3.1, and 5.2 of the Noise Element; Goal 1.0 and Policies 1.3 and 1.4 of the Cultural Resources Element; Goals 1.0, 2.0, 3.0, 5.0 and, 6.0 and Policies 1.5, 2.4, 3.2, 3.3, 5.3, 5.4, 6.1, 6.2, 6.4, and 6.5 of the Urban Design Element.*

**Traffic Impact Analysis (*Implementation Program III-4*):** The City continues to evaluate both Level of Service (LOS) and Vehicle Miles Traveled (VMT) to determine traffic impacts from proposed projects. In 2025, the City reviewed 17 proposed projects that conducted Traffic Impact Analysis reports.

*This activity implements Goals 2.0, 3.0, 5.0 and, 6.0 and Policies 2.4, 2.5, 2.6, 2.9, 3.3, 5.1, 5.7, and 5.9 of the Land Use Element; Goals 1.0, 2.0, 3.0, and 4.0 and Policies 1.2, 2.4, 2.6, 3.3, and 4.1 of the Circulation and Mobility Element; Goals 1.0 and 2.0 and Policies 1.2, 1.6, 1.7, 1.8, 1.9, 1.12, 2.1, and 2.3 of the Growth Management Element; Goals 2.0 and 3.0 and Policies 2.1, 2.2, 3.1, and 3.2 of the Natural Resource Element; Goal 2.0 and Policy 2.2 of the Noise Element, Goals 1.0 and 2.0 and Policies 1.1, 2.1, 2.2, and 5.1; Economic Development Element Policies 3.4 and 5.3; and Goal 3.0 of the Housing Element.*

**National Pollutant Discharge Elimination System Compliance (*Implementation Program III- 6*):** In 2025, the City continued to require, review, and implement the use of Low Impact Development design features within the City through the use of Water Quality Management Plans for all applicable entitlement projects.

*This activity implements Goal* 6.0 and Policies *4.3 and 6.5 of the Land Use Element, Goal 2.0 and Policies 2.12, 2.13, 2.14, 2.15, 2.16 and, 2.17 of the Natural Resources Element; and, Policy 2.3 of the Public Safety Element.*

**Adequate Public Safety and Emergency Response (*Implementation Program III-8*):** In 2025, the City continued to fund, staff, and maintain equipment and facilities at a level adequate to provide police and fire response and services to the City. In 2025, the Police department initiated, continued, or completed the following items in furtherance of providing adequate public safety and emergency response for the City.

- The Homeless Outreach Program, HEART and Bike Team, deployed outreach services and community engagement to the homeless population in Orange and successfully provided resources. Ongoing.
- The Public Works Department, in collaboration with the Police Department, completed preventative maintenance of the locker room showers to provide adequate plumbing throughout the department. Completed July 2025.
- The Orange Police Department, in partnership with the Orange Police Foundation, equipped police frontline patrol units with Automated External Defibrillators (AEDs) to enhance emergency medical response capabilities in the field. Completed December 2025.

- Distributed customized Narcan overdose first aid kits to police officers, enhancing frontline capacity for opioid overdose response and supporting community opioid remediation efforts. Completed July 2025.
- The Field Services Division, in partnership with the County of Orange, acquired a mobile response shield for added ballistic protection to minimize injuries to safety personnel, enhance safety, and allow the department to better serve the community. Competed September 2025.
- Completed a Virtual Reality equipment refresh to modernize technology and enhance the training related to use of force options. Completed August 2025.
- Refreshed body worn cameras and corresponding equipment in the Police Department to ensure officers are equipped with the tools they need to protect lives in the field while staying up to date with camera technology and evidence management features. Completed November 2025.
- Repeal and replace Chapter 10.10 of the Orange Municipal Code pertaining to bicycles. Resolution No. 05-25. Establishing regulations of electric bicycles and other motorized conveyances. Completed March 2025.
- The Public Works Department, in collaboration with the Police Department, conducted a crossing guard study with Kimley-Horn and Associates, Inc. for traffic engineering services for the School Crossing Guard Warrant Study at 43 school crossings. Completed May 2025.
- Replaced the outdated transport vehicle with a new jailer van to include secure compartments, a robust restraint system and CCTV system to improve the transportation of prisoners. Completed June 2025.

In 2025, the Fire Department initiated, continued, or completed the following items in furtherance of providing adequate public safety and emergency response for the City.

- The Orange City Fire Department continued to focus on maintenance of the stations through improvements, including new paint, carpet, and window coverings in some of our older stations.
- The Orange City Fire Department replaced 50 sets of Structural Turnouts, one set of Genisis Auto Extrication tools, and new Paratec Shoring was purchased and put into service on USAR 1. Two new Ambulances were received and placed into service, and the EOC added five new laptop computers to their cash.

*This activity directly or indirectly implements all Goals and Policies of the Public Safety Element.*

**Cultural Resources Inventories (*Implementation Program III-10*):** In 2025, the City continued to include mitigation measures in mitigation monitoring programs for capital projects such as the Grijalva Park Skate Park, and the Cannon Street Widening projects and private development projects such as Batavia Self Storage and Taylor-Morrison homes to require tribal and archaeological monitoring during the ground disturbing phases of the projects.

*This activity implements Goal 6.0 and Policy 6.11 of the Land Use Element, and Goal 4.0 and Policies 4.1 and 4.5 of the Cultural Resources & Historic Preservation Element.*

**Noise Reduction in New Construction (Implementation Program III-18):** The City continues to include conditions of approval and mitigation measures as applicable on new construction related to construction equipment maintenance, adherence to operational hours as outlined in the Orange Municipal Code Noise Ordinance, excessive idling periods, and locating stationary equipment as far as possible from noise sensitive receptors.

*This activity implements Policies 1.1, 1.2, 1.4, 1.5, and 7.2 of the Noise Element.*

**Park Acquisition, Construction and Maintenance Report (Implementation Program IV-2):** In 2025, work was actively completed by the City to acquire, build, and maintain additional parkland and upkeep and improve existing parkland. The following are projects that further this implementation measure:

**Hart Park Pickleball Courts & Fitness Circuit.** – Staff completed the Request for Bids process to onboard a construction contractor for this project. Construction began on the new pickleball courts and fitness circuit at Hart Park. Procurement of all equipment was completed during 2025, and substantial progress was made towards installation of the courts and associated amenities. The project will expand recreational opportunities by providing dedicated pickleball facilities and is currently progressing through the construction phase.

**Grijalva Park Skate Park** – Final design and construction documents for the skate park at Grijalva Park have been completed. The City has issued a Request for Bids to solicit contractors for construction, with work anticipated to begin once bids are evaluated and a contract is awarded.

**Grijalva Park Area Lighting Replacement** – Construction has been completed for the replacement of deteriorated pathway lighting throughout the park. New corrosion-resistant poles and fixtures have been installed, and the project has reached completion with the filing of a Notice of Completion.

**Yorba Park Dog Park Improvements** – Phase I improvements at the Yorba Dog Park have been substantially completed, including installation of concrete pavers, new turf areas, irrigation improvements, a retaining wall, and an ADA-accessible entry gate. Staff continue to evaluate potential Phase II improvements in partnership with the Orange Dog Park Association.

**Citywide Park Signage Installation** – The multi-phase park signage improvement project was substantially complete. Monument signs, regulatory signs, and bike trail signage have been installed at multiple park locations. Remaining sign purchases and minor installations will be finalized during the current fiscal year.

**Rampart Street Park**– A conceptual design has been completed for the proposed park located along Rampart Street near the Santa Ana River trail. A lease agreement was finalized with the County of Orange to formally secure the future park site for development. Staff are currently preparing a formal Request for Proposals to procure professional design services to advance the project into the full design phase.

**New Park in West Orange** – The design phase for the new 2.4-acre park site located along W. Chapman Avenue between the I-5 and SR-57 freeways is nearing substantial completion. Staff are continued coordination towards final environmental review requirements and interagency coordination with Orange County Flood Control District prior to advertising the construction Request for Bids.

**Olive Park Ballfield Netting Replacement** – Design level elements for new protective netting at Olive Park baseball fields have been completed to address safety concerns related to foul balls impacting adjacent residential areas. A Request for Bids has been issued to secure a contractor for construction.

**Grijalva Park Master Plan Update** – Work has begun on an updated master planning effort for the remaining undeveloped acreage at Grijalva Park. The project is being conducted in partnership with the Orange County Council of Governments through an EPA Brownfields planning grant and will evaluate feasible future park amenities and parking needs for the site.

*This activity implements Goal 1.0 and 6.0 and Policies 1.7 and 6.4 of the Land Use Element; Goals 1.0, 2.0, 5.0, 6.0 and Policies 1.2, 2.3, 5.1, 5.2, 5.5, 5.6, 6.1, 6.4, and 6.6 of the Natural Resources Element; and, Goal 4.0 and Policy 4.4 of the Cultural Resources Element; Goal 6.0 and Policies 6.2 and 6.3; and, Goal 6.0 and Policy 6.2 of the Economic Development Element.*

**Public Education (*Implementation Program IV-3*):** The Police Department continued to support local Neighborhood Watch Programs and held 34 meetings.

In 2025, the Police Department participated in the following community engagement programs to raise public awareness of public safety issues in the community:

- Red Ribbon Week
- Coffee with a COP
- College Career Fairs
- Story Time at our Libraries
- Walk to School
- Trunk or Treat

In 2025, the Citizens' Police Academy had one class, which allowed approximately 60 participants, through eight weekly sessions, to attend interactive courses to learn about the specific aspects of the Police Department. The Hispanic Outreach program had one class of six weekly sessions for approximately 30 participants, the senior

Citizens' Academy had one class at the Senior Center with six weekly sessions with approximately 50 participants, and the Teen Academy had one class of five weekly sessions for approximately 25 participants. The Police Department also continued to promote the application of Crime Prevention through Environmental Design (CPTED) standards through the review of applicable development projects.

The Orange City Fire Department has continued to take a larger role in the public education arena, working to increase fire safety awareness in our community schools, community groups, and neighborhood organizations. Through this effort the City continued to build positive working relationships throughout the community, by participating in programs like Read Across America, Fire Safety Week, Ready Set Go, and Spark of Love Toy Drive. The Orange City Fire Prevention Bureau continues to provide complimentary home assessments for residents located in our wildland urban interface fire zones. Through these assessment inspections, residents continue to gain valuable information on how to better prepare their homes for wildfires. The City has seen a spike in requests for information on wildfire education, vegetation management and home hardening options in our wildland interface in the Eastern portion of the city.

*This activity implements Goal 8.0 and Policies 8.1 and 8.3 of the Land Use Element; Goal 2.0 and Policy 2.17 with regard to the Natural Resources Element; Goals 3.0, 6.0, 7.0 and, 8.0 and Policies 3.6, 6.5, 7.1 and, 8.1 with regard to the Public Safety Element; Goals 1.0 and 3.0 and Policies 1.2 and 3.1 with regard to the Cultural Resources Element; and, Goals 1.0 and 2.0 and Policies 1.3 2.2, and 2.4 with regard to the Infrastructure Element.*

**Transportation Demand and System Management (*Implementation Program IV-6*):** To address current CEQA requirements for project related traffic impacts, the City has an adopted methodology for evaluating the Vehicle Miles Traveled (VMT). For each proposed project, the City conducts a "Screening Analysis" of the project VMT. This Screening determines if there is any additional analysis and proposed mitigation required of the project.

*This activity implements Goals 1.0 and 2.0 and Policies 1.2, 1.3, and 2.4 with regard to the Circulation and Mobility Element, Goals 1.0 and 7.0 and Policies 1.2, 7.1, 7.2, 7.5. 7.6 With regard to the Public Safety Element; and, Goal 3.0 and Policy 3.3 with regard to the Infrastructure Element.*

**Coordination with Other Agencies and Organizations (*Implementation Program Section V*):** The City participated in inter-agency coordination during 2025. Outside agency coordination included:

- Utility companies such as Southern California Edison for coordination of capital improvement plans.

- Adjacent jurisdictions for noticing of development proposals in the City.

- CalTrans for review of environmental documents pertaining to projects within the City.

- Orange County Transportation Authority (OCTA) for bus detours.

- Secretary of the Interior (SOI) for continued eligibility designation in the National Register of Historic Places for the Plaza and Old Towne Orange historic districts in the National Register. This effort involves through review of development projects for conformance with SOI standards for the Treatment of Historic Properties.

- Continued coordination with OCTA on Katella Avenue Traffic Signal Synchronization Program Project, Main Street TSSP Project, Garden Grove Boulevard TSSP Project. OCTA was the lead agency implementing the improvements and signal timing synchronization for these three arterial projects.

- The City is closely coordinating with the partner agencies for the Tustin Avenue / Rose Drive TSSP Project: Caltrans, Tustin, Santa Ana, Anaheim, Placentia and Yorba Linda.

- There are various regional projects on the State Highways surrounding the city that involve coordination with Caltrans and OCTA: 55- freeway project (between I-5 to 91) and 57-freeway project (between Orangewood Ave and Katella Ave). These projects are on-going.

- The Orange Police Department, through the North Orange County Public Safety Collaborative, has partnered with the Youth Centers of Orange to support developmental needs of at-risk youth, including mentoring, tutoring, sports, music, and various enrichment opportunities.

- Coordination with the State Department of Housing and Community Development for the Annual Performance Report, Housing Element Policy Action Item progress, and resolution of questions pertaining to accessory dwelling unit production.

- The Orange Police Department, through the North Orange County Public Safety Collaborative, has partnered with the Youth Centers of Orange to support developmental needs of at-risk youth, including mentoring, tutoring, sports, music, and various enrichment opportunities.

- The Traffic Bureau, in partnership with the California Office of Traffic Safety, conducted DUI and driver's license checkpoints, DUI saturation patrols, traffic enforcement operations, street racing enforcement, and issued citations for distracted driving.

- The Traffic Bureau, in partnership with the California Highway Patrol, conducted Standardized Field Sobriety Testing (SFST) classes and trained 10 officers on SFST instruction to assist officers in making arrest decisions of driver impairment due to alcohol.

- The Orange Police Department Field Services Division, HEART and Bike Team, developed ongoing collaborations with Orange County Mental Health, Be Well, Psychiatric Emergency and Response Team (PERT), and the Crisis Assessment Team (CAT) to provide continued engagement and outreach to the homeless population in Orange.

*This activity implements Goal 7.0 of the Land Use Element and Policy 7.3; Goals 2.0, 3.0 and, 4.0 and Policies 2.1 -2.4, 3.1 and, 4.1 of the Circulation and Mobility Element; Goal 2.0 and Policies 2.1 and 2.5 of the Growth Management Element; Goals 2.0 and 7.0 and Policies 2.1 and 7.4 of the Natural Resources Element; Goals 1.0, 2.0, 3.0 and, 8.0 and Policies 1.3, 2.1, 3.7, 8.2 and, 8.3 of the Public Safety Element, Goal 2.0 and Policy 2.4 of the Noise Element; Goals 1.0 and 5.0 and Policies 1.3, 1.6 and, 5.4 of the Cultural Resources Element; and, Goal 5.0 and Policies 5.1 and 5.2 of the Infrastructure Element; Goal 1.0 and Policy 1.4 of the Urban Design Element.*

**5. Housing Element Reporting**

The 2025 Housing Element Annual Progress Report prepared in accordance with HCD requirements is provided as Attachment 1 to this report.

**6. General Plan Compliance with OPR Guidelines**

The 2010 General Plan (*Rev. 2015 & 2025*) includes all of the state required elements as well as additional optional elements. Environmental Justice is interspersed throughout all elements. The document was prepared in accordance with OPR Guidelines and is on file with OPR.

**Date of Last General Plan Update**

As indicated in Item 3 above, the comprehensive update to the City of Orange General Plan was adopted on March 9, 2010. General Plan Amendment No. 2014-0001 & 2024-0002 were adopted by the Orange City Council on December 8, 2015 and January 14, 2025, respectively for General Plan maintenance and language accuracy.

The City adopted its Housing Element Update in accordance with state requirements on October 30, 2023. The City's Housing Element update was found to be in substantial conformance with State housing law on January 2, 2024, and every effort is being made to ensure Housing Element goals and polices are implemented.

In 2025, the City completed and adopted an amendment to the General Plan Public Safety Element in coordination with the California Department of Forestry and Fire Protection to comply with State law. Concurrently with the Safety Element update, a review of the entire General Plan was done to make non-substantive accuracy updates to all the General Plan Elements and General Plan Implementation Plan.

**Attachments:**

1. 2025 Housing Element Annual Progress Report

## Please Start Here

| General Information | |
|---|---|
| Jurisidiction Name | Orange |
| Reporting Calendar Year | 2025 |
| **Contact Information** | |
| First Name | Arlen |
| Last Name | Beck |
| Title | Associate Planner |
| Email | abeck@cityoforange.org |
| Phone | 7147447272 |
| **Mailing Address** | |
| Street Address | 300 E. Chapman Ave. |
| City | Orange |
| Zipcode | 92866 |

**Optional:** Click here to import last year's data. This is best used when the workbook is new and empty. You will be prompted to pick an old workbook to import from. Project and program data will be copied exactly how it was entered in last year's form and must be updated. If a project is no longer has any reportable activity, you may delete the project by selecting a cell in the row and typing ctrl + d.

Click here to download APR Instructions

Click here to add rows to a table. If you add too many rows, you may select a cell in the row you wish to remove and type ctrl + d.

v_01_30_26

Optional: This runs a macro which checks to ensure all required fields are filled out. The macro will create two files saved in the same directory this APR file is saved in. One file will be a copy of the APR with highlighted cells which require information. The other file will be list of the problematic cells, along with a description of the nature of the error.

with the table split across 4 tabs, each of which can fit onto a single page for easier printing. Running this macro will remove the comments on the column headers, which contain the instructions. Do not save the APR file after running in order to preserve comments once it is reopened.

Optional: This macro identifies dates entered that occurred outside of the reporting year. RHNA credit is only given for building permits issued during the reporting year.

Link to the online system: https://hcd.my.site.com/hcdconnect

Toggles formatting that turns cells green/yellow/red based on data validation rules.

**Submittal Instructions**

**Please save your file as Jurisdictionname2025 (no spaces).** Example: the City of San Luis Obispo would save their file as SanLuisObispo2025

Housing Element Annual Progress Reports (APRs) forms and tables must be submitted to HCD and the Governor's Office of Planning and Research (OPR) on or before April 1 of each year for the prior calendar year; submit separate reports directly to both HCD and OPR pursuant to Government Code section 65400. There are two options for submitting APRs:

1. **Online Annual Progress Reporting System - Please see the link to the online system to the left.** This allows you to upload the completed APR form into directly into HCD's database limiting the risk of errors. If you would like to use the online system, email APR@hcd.ca.gov and HCD will send you the login information for your jurisdiction. *Please note: Using the online system only provides the information to HCD. The APR must still be submitted to OPR. Their email address is opr.apr@opr.ca.gov.*

2. **Email -** If you prefer to submit via email, you can complete the excel Annual Progress Report forms and submit to HCD at APR@hcd.ca.gov and to OPR at opr.apr@opr.ca.gov. Please send the Excel workbook, not a scanned or PDF copy of the tables.

| | | |
|---|---|---|
| **Jurisdiction** | Orange | |
| **Reporting Year** | 2025 | (Jan. 1 - Dec. 31) |
| **Housing Element Planning Period** | 6th Cycle | 10/15/2021 - 10/15/2029 |

| **Building Permits Issued by Affordability Summary** | | |
|---|---|---|
| **Income Level** | | **Current Year** |
| Acutely Low | Deed Restricted | 0 |
| | Non-Deed Restricted | 0 |
| Extremely Low | Deed Restricted | 0 |
| | Non-Deed Restricted | 0 |
| Very Low | Deed Restricted | 0 |
| | Non-Deed Restricted | 0 |
| Low | Deed Restricted | 0 |
| | Non-Deed Restricted | 0 |
| Moderate | Deed Restricted | 0 |
| | Non-Deed Restricted | 91 |
| Above Moderate | | 81 |
| Total Units | | **172** |

| **Units by Structure Type** | **Entitled** | **Permitted** | **Completed** |
|---|---|---|---|
| Single-family Attached | 0 | 2 | 0 |
| Single-family Detached | 3 | 30 | 2 |
| 2 to 4 units per structure | 2 | 0 | 0 |
| 5+ units per structure | 39 | 51 | 74 |
| Accessory Dwelling Unit | 43 | 89 | 64 |
| Mobile/Manufactured Home | 0 | 0 | 0 |
| **Total** | **87** | **172** | **140** |

| **Infill Housing Developments and Infill Units Permitted** | **# of Projects** | **Units** |
|---|---|---|
| Indicated as Infill | 122 | 172 |
| Not Indicated as Infill | 0 | 0 |

| **Housing Applications Summary** | |
|---|---|
| Total Housing Applications Submitted: | 47 |
| Number of Proposed Units in All Applications Received: | 87 |
| Total Housing Units Approved: | 98 |
| Total Housing Units Disapproved: | 0 |

| **Use of SB 423 Streamlining Provisions - Applications** | |
|---|---|
| Number of SB 423 Streamlining Applications | 0 |
| Number of SB 423 Streamlining Applications Approved | 0 |

| **Units Constructed - SB 423 Streamlining Permits** | | | |
|---|---|---|---|
| **Income** | **Rental** | **Ownership** | **Total** |
| Acutely Low | 0 | 0 | 0 |
| Extremely Low | 0 | 0 | 0 |
| Very Low | 0 | 0 | 0 |
| Low | 0 | 0 | 0 |
| Moderate | 0 | 0 | 0 |
| Above Moderate | 0 | 0 | 0 |
| **Total** | **0** | **0** | **0** |

| **Streamlining Provisions Used - Permitted Units** | **# of Projects** | **Units** |
|---|---|---|
| SB 9 (2021) - Duplex in SF Zone | 0 | 0 |
| SB 9 (2021) - Residential Lot Split | 0 | 0 |
| AB 2011 (2022) | 0 | 0 |
| SB 6 (2022) | 0 | 0 |
| SB 423 (2023) | 0 | 0 |

| **Ministerial and Discretionary Applications** | **# of** | **Units** |
|---|---|---|
| Ministerial | 47 | 87 |
| Discretionary | 0 | 0 |

| **Density Bonus Applications and Units Permitted** | |
|---|---|
| Number of Applications Submitted Requesting a Density Bonus | 1 |
| Number of Units in Applications Submitted Requesting a Density Bonus | 39 |
| Number of Projects Permitted with a Density Bonus | 0 |
| Number of Units in Projects Permitted with a Density Bonus | 0 |

| **Housing Element Programs Implemented and Sites Rezoned** | **Count** |
|---|---|
| Programs Implemented | 63 |
| Sites Rezoned to Accommodate the RHNA | 0 |

| Jurisdiction | Orange | |
|---|---|---|
| Reporting Year | 2025 | (Jan. 1 - Dec. 31) |
| Planning Period | 6th Cycle | 10/15/2021 - 10/15/2029 |

**ANNUAL ELEMENT PROGRESS REPORT**

**Housing Element Implementation**

**Note: "+" indicates an optional field**

Cells in grey contain auto-calculation formulas

## Table A
## Housing Development Applications Submitted

| Project Identifier | | | | | Unit Types | | Date Application Submitted | Proposed Units - Affordability by Household Incomes | | | | | | | | | | | Total Approved Units by Project | Total Disapproved Units by Project | Streamlining | Historic Sites | Density Bonus Law Applications | | Application Status | Project Type | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 2 | 3 | 4 | 5 | | | | | | | | | | 6 | 7 | 8 | 9 | 10 | 11 | | 12 | 13 | 14 |
| Prior APN* | Current APN | Street Address | Project Name* | Local Jurisdiction Tracking ID | Unit Category (SFA,SFD,2 to 4,5+,ADU,MH) | Tenure R=Renter O=Owner | Date Application Submitted (see instructions) | Acutely Low-Income Deed Restricted | Acutely Low-Income Non Deed Restricted | Extremely Low-Income Deed Restricted | Extremely Low-Income Non Deed Restricted | Very Low-Income Deed Restricted | Very Low-Income Non Deed Restricted | Low-Income Deed Restricted | Low-Income Non Deed Restricted | Moderate-Income Deed Restricted | Moderate-Income Non Deed Restricted | Above Moderate-Income | Total PROPOSED Units by Project | Total APPROVED Units by project | Total DISAPPROVED Units by Project | Please select state streamlining provision/s the application was submitted pursuant to. | Is this project located on a site with an associated historical designation as outlined in Government Code Section 65400(a)(2)(N) and reported on Table L? | Did the housing development application seek incentives or concessions pursuant to Government Code section 65915? | Were incentives or concessions requested pursuant to Government Code section 65915 approved? | Please indicate the status of the application. | Is the project considered a ministerial project or discretionary project? | Notes* |
| Summary Row: Start Data Entry Below | | | | | | | | 0 | 0 | 38 | 0 | 0 | 0 | 0 | 0 | 0 | 46 | 3 | 87 | 98 | 0 | | | | | | | |
| 375-205-21 | 375-205-21 | 970 N Shaffer St | ADR-0227 | ADR-0227 | SFD | O | 4/24/2025 | | | | | | | | | | | 1 | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 375-205-21 | 375-205-21 | 972 N Shaffer St | ADU-0327 | ADU-0327 | ADU | R | 4/24/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 375-205-21 | 375-205-21 | 974 N Shaffer St | ADU25-0015 | ADU25-0015 | ADU | R | 4/24/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 386-151-14 | 386-151-14 | 1212 E Walnut AVE | ADU-0200 | ADU-0200 | ADU | R | 1/28/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 386-151-15 | 386-151-15 | 1222 E Walnut AVE | ADU-0286 | ADU-0286 | ADU | R | 2/25/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 386-082-11 | 386-082-11 | 621 E Maple AVE | ADU-0383 | ADU-0383 | ADU | R | 9/11/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 094-385-15 | 094-385-15 | 736 S Prospect ST | ADU-0401 | ADU-0401 | ADU | R | 4/2/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 378-152-28 | 378-152-28 | 1584 N Fern ST | ADU-0403 | ADU-0403 | ADU | R | 1/28/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 039-294-28 | 039-294-28 | 1215 W Sycamore AVE | ADU-0409 | ADU-0409 | ADU | R | 3/16/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 094-552-07 | 094-552-07 | 182 S Kathleen LN | ADU-0412 | ADU-0412 | ADU | R | 2/19/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 386-171-02 | 386-171-02 | 1744 E Orange Grove AVE | ADU-0414 | ADU-0414 | ADU | R | 1/27/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 374-293-39 | 374-293-39 | 2741 N Hartman ST | ADU-0415 | ADU-0415 | ADU | R | 1/20/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 392-162-10 | 392-162-10 | 881 S Fairmont WAY | ADU-0418 | ADU-0418 | ADU | R | 1/16/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 039-031-22 | 039-031-22 | 290 N Jewell PL | ADU-0419 | ADU-0419 | ADU | R | 1/30/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 374-194-25 | 374-194-25 | 1885 N Chouteau ST | ADU-0420 | ADU-0420 | ADU | R | 3/4/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 386-144-21 | 386-144-21 | 471 N Pine ST | ADU-0421 | ADU-0421 | ADU | R | 3/4/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 390-432-18 | 390-432-18 | 727 E Washington AVE | ADU-0426 | ADU-0426 | ADU | R | 3/4/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 386-052-02 | 386-052-02 | 177 N Shattuck PL | ADU-0427 | ADU-0427 | ADU | R | 3/4/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 375-424-04 | 375-424-04 | 1660 N Maplewood ST | ADU-0428 | ADU-0428 | ADU | R | 3/4/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 386-082-13 | 386-082-13 | 633 E Maple AVE | ADU-0432 | ADU-0432 | ADU | R | 4/2/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 386-123-07 | 386-123-07 | 337 N Magnolia St | SP-1185 | SP-1185 | ADU | R | 5/27/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 386-123-07 | 386-123-07 | 339 N Magnolia St | SP-1185 | SP-1185 | ADU | R | 5/27/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 386-123-07 | 386-123-07 | 343 N Magnolia St | SP-1185 | SP-1185 | ADU | R | 5/27/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 374-272-02 | 374-272-02 | 2745 N Pampas ST | SP-1188 | SP-1188 | 2 to 4 | R | 9/29/2025 | | | | | | | | | | 2 | | 2 | 2 | | NONE | No | No | N/A | Approved | Ministerial | |
| 137-396-07 | 137-396-07 | 4409 W Chapman AVE | ADU-0423 | ADU-0423 | ADU | R | 2/5/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 390-672-06 | 390-672-06 | 133 S Clark ST | ADU-0425 | ADU-0425 | ADU | R | 2/11/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 094-491-13 | 094-491-13 | 3425 E Almond Ave | ADU25-0008 | ADU25-0008 | ADU | R | 4/1/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 383-213-19 | 383-213-19 | 2630 E Hamilton Ave | ADU25-0009 | ADU25-0009 | ADU | R | 5/22/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 386-241-16 | 386-241-16 | 680 N Cambridge St | ADU25-0010 | ADU25-0010 | ADU | R | 4/14/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 386-241-16 | 386-241-16 | 680 N Cambridge St | ADU25-0011 | ADU25-0011 | ADU | R | 4/14/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 386-141-15 | 386-141-15 | 631 E Jefferson Ave | ADU25-0012 | ADU25-0012 | ADU | R | 5/20/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 390-414-21 | 390-414-21 | 442 S Shaffer St | ADU25-0014 | ADU25-0014 | ADU | R | 8/21/2025 | | | | | | | | | | 2 | | 2 | 2 | | NONE | No | No | N/A | Approved | Ministerial | |
| 093-331-08 | 093-331-08 | 624 N Hamlin St | ADU25-0017 | ADU25-0017 | ADU | R | 5/7/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 386-204-07 | 386-204-07 | 1334 E Orange Grove Ave | ADU25-0018 | ADU25-0018 | ADU | R | 3/16/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 375-461-09 | 375-461-09 | 1045 E Carleton Ave | ADU25-0007 | ADU25-0007 | ADU | R | 5/5/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 374-251-47 | 374-251-47 | 804 W Brentwood Ave | ADU25-0026 | ADU25-0026 | ADU | R | 5/19/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 360-292-03 | 360-292-03 | 1907 E Bolingridge Dr | ADU25-0028 | ADU25-0028 | ADU | R | 6/24/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 379-181-10 | 379-181-10 | 864 N Ranch Wood Trl | SB925-0002 | SB925-0002 | SFD | O | 7/11/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 379-343-04 | 379-343-04 | 287 N Bobwhite WAY | ADU-0429 | ADU-0429 | ADU | R | 5/8/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 375-113-31 | 375-113-31 | 1422 N Harwood St | ADU25-0032 | ADU25-0032 | ADU | R | 8/13/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 386-442-31 | 386-442-31 | 709 W Palm Ave | ADU25-0034 | ADU25-0034 | ADU | R | 5/19/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 390-102-03 | 390-102-03 | 525 S Orange St | ADU25-0037 | ADU25-0037 | ADU | R | 10/23/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 039-223-17 | 039-223-17 | 414 N Shaffer St | ADU25-0038 | ADU25-0038 | ADU | R | 6/19/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 392-183-10 | 392-183-10 | 145 S Earlham St | DRC25-0021 | DRC25-0021 | SFD | O | 12/17/2025 | | | | | | | | | | | 1 | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 041-141-16 | 041-141-16 | 468 S Pixley St | ADU25-0051 | ADU25-0051 | ADU | R | 9/29/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 390-414-18 | 390-414-18 | 470 S Shaffer St | PA25-0114 | PA25-0114 | ADU | R | 12/15/2025 | | | | | | | | | | 1 | | 1 | 1 | | NONE | No | No | N/A | Approved | Ministerial | |
| 390-231-06 | 390-231-06 | 164 S Marks Wy, Or | SP-1182 | SP-1182 | 5+ | R | 7/11/2025 | | | 38 | | | | | | | | 1 | 39 | 50 | 0 | NONE | No | Yes | Yes | Approved | Ministerial | 11 of the 49 units restricted to Extremely Low income to be counted in the County of Orange RHNA Share. The one market rate (Manager's Unit) units and other 38 Extremely low income units to be counted by City or Orange in their |

**Table A2**

**- New Construction, Entitled, Permits and Completed Units**

| Project Identifier | | | | | | | Affordability by Household Incomes - Building Permits | | | | | Housing with Financial Assistance and/or Deed Restrictions | | Housing without Financial Assistance or Deed Restrictions | Term of Affordability or Deed Restriction | Demolished/Destroyed Units | | | Density Bonus | | | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 5 | 6 | 7 | | | | | 16 | 17 | 18 | 19 | 20 | | | 21 | 22 | 23 | 24 | 25 |
| Current APN | Street Address | Project Name* | Moderate-Income Non Deed Restricted | Above Moderate-Income | Entitlement Date Approved | # of Units issued Entitlements | Acutely Low-Income Deed Restricted | Acutely Low-Income Non Deed Restricted | Extremely Low-Income Deed Restricted | Extremely Low-Income Non Deed Restricted | Very Low-Income Deed Restricted | Assistance Programs for Each Development (may select multiple - see instructions) | Deed Restriction Type (may select multiple - see instructions) | For units affordable without financial assistance or deed restrictions, explain how the locality determined the units were affordable (see instructions) | Term of Affordability or Deed Restriction (years) (if affordable in perpetuity enter 1000)* | Number of Demolished/Destroyed Units | Demolished or Destroyed Units | Demolished/ Destroyed Units Owner or Renter | Total Density Bonus Applied to the Project (Percentage Increase in Total Allowable Units or Total Maximum Allowable Residential Gross Floor Area) | Number of Other Incentives, Concessions, Waivers, or Other Modifications Given to the Project (Excluding Parking Waivers or Parking Reductions) | List the incentives, concessions, waivers, and modifications (Excluding Parking Waivers or Parking Modifications) | Did the project receive a reduction or waiver of parking standards? (Y/N) | Notes* |
| | | | 46 | 3 | | 49 | #REF! | #REF! | #REF! | #REF! | #REF! | | | | | 0 | | | | | | | |
| 375-205-21 | 970 N Shaffer St | ADR-0227 | | 1 | 4/24/2025 | 1 | | | | | | | | SFD | | | | | | | | | |
| 375-205-21 | 972 N Shaffer St | ADU-0327 | 1 | | 4/24/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 375-205-21 | 974 N Shaffer St | ADU25-0015 | 1 | | 4/24/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-151-14 | 1212 E Walnut AVE | ADU-0200 | 1 | | 1/28/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-151-15 | 1222 E Walnut AVE | ADU-0286 | 1 | | 2/25/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-082-11 | 621 E Maple AVE | ADU-0383 | 1 | | 9/11/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 094-385-15 | 736 S Prospect ST | ADU-0401 | 1 | | 4/2/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 378-152-28 | 1584 N Fern ST | ADU-0403 | 1 | | 1/28/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-294-28 | 1215 W Sycamore AVE | ADU-0409 | 1 | | 3/16/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 094-552-07 | 182 S Kathleen LN | ADU-0412 | 1 | | 2/19/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-171-02 | 1744 E Orange Grove AVE | ADU-0414 | 1 | | 1/27/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 374-293-39 | 2741 N Hartman ST | ADU-0415 | 1 | | 1/20/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 392-162-10 | 881 S Fairmont WAY | ADU-0418 | 1 | | 1/16/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-031-22 | 290 N Jewell PL | ADU-0419 | 1 | | 1/30/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 374-194-25 | 1885 N Chouteau ST | ADU-0420 | 1 | | 3/4/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-144-21 | 471 N Pine ST | ADU-0421 | 1 | | 3/4/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-432-18 | 727 E Washington AVE | ADU-0426 | 1 | | 3/4/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-052-02 | 177 N Shattuck PL | ADU-0427 | 1 | | 3/4/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 375-424-04 | 1660 N Maplewood ST | ADU-0428 | 1 | | 3/4/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-082-13 | 633 E Maple AVE | ADU-0432 | 1 | | 4/2/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-123-07 | 337 N Magnolia St | SP-1185 | 1 | | 5/27/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-123-07 | 339 N Magnolia St | SP-1185 | 1 | | 5/27/2025 | 1 | | | | | | | | All SB9 Units assumed to have a level of affordability | | | | | | | | | |
| 386-123-07 | 343 N Magnolia St | SP-1185 | 1 | | 5/27/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 374-272-02 | 2745 N Pampas ST | SP-1188 | 2 | | 9/29/2025 | 2 | | | | | | | | All SB9 Units assumed to have a level of affordability | | | | | | | | | |
| 137-396-07 | 4409 W Chapman AVE | ADU-0423 | 1 | | 2/5/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-672-06 | 133 S Clark ST | ADU-0425 | 1 | | 2/11/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 094-491-13 | 3425 E Almond Ave | ADU25-0008 | 1 | | 4/1/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 383-213-19 | 2630 E Hamilton Ave | ADU25-0009 | 1 | | 5/22/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-241-16 | 680 N Cambridge St | ADU25-0010 | 1 | | 4/14/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-241-16 | 680 N Cambridge St | ADU25-0011 | 1 | | 4/14/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-141-15 | 631 E Jefferson Ave | ADU25-0012 | 1 | | 5/20/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-414-21 | 442 S Shaffer St | ADU25-0014 | 2 | | 8/21/2025 | 2 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 093-331-08 | 624 N Hamlin St | ADU25-0017 | 1 | | 5/7/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-204-07 | 1334 E Orange Grove Ave | ADU25-0018 | 1 | | 3/16/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 375-461-09 | 1045 E Carleton Ave | ADU25-0007 | 1 | | 5/5/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 374-251-47 | 804 W Brentwood Ave | ADU25-0026 | 1 | | 5/19/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 360-292-03 | 1907 E Bolingridge Dr | ADU25-0028 | 1 | | 6/24/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 379-181-10 | 664 N Ranch Wood Trl | SB925-0002 | 1 | | 7/11/2025 | 1 | | | | | | | | All SB9 Units assumed to have a level of affordability | | | | | | | | | |
| 379-343-04 | 267 N Bobwhite WAY | ADU-0429 | 1 | | 5/8/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 375-113-31 | 1422 N Harwood St | ADU25-0032 | 1 | | 8/13/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-442-31 | 709 W Palm Ave | ADU25-0034 | 1 | | 5/19/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-102-03 | 525 S Orange St | ADU25-0037 | 1 | | 10/23/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-223-17 | 414 N Shaffer St | ADU25-0038 | 1 | | 6/19/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 392-183-10 | 145 S Earlham St | DRC25-0021 | | 1 | 12/17/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 041-141-16 | 468 S Pixley St | ADU25-0051 | 1 | | 9/29/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-414-18 | 470 S Shaffer St | PA25-0114 | 1 | | 12/15/2025 | 1 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-365-15 | 1940 W Orangewood AVE, B | 2401-116 | | | | 0 | | | | | | | | | | | | | | | | | |
| 386-365-15 | 1940 W Orangewood AVE, C | 2401-118 | | | | 0 | | | | | | | | | | | | | | | | | |
| 386-365-15 | 1940 W Orangewood AVE, A | 2401-119 | | | | 0 | | | | | | | | | | | | | | | | | |
| 386-241-16 | 684 N Cambridge St, Orange, CA 92 | BLDG25-0652 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 137-401-08 | 4230 W Simmons AVE, Orange, CA | 2308-300 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 393-411-15 | 4533 E Washington AVE, Orange, CA | 2310-086 | | | | 0 | | | | | | | | | | | | | | | | | |
| 378-341-07 | 2336 E Katella AVE, Orange, CA 928 | 2404-077 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-132-25 | 614 E Sycamore AVE, Orange, CA 9 | 2407-133 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-194-10 | 432 E Mayfair AVE, Orange, CA 928 | 2407-222 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 375-404-04 | 1093 N California ST, Orange, CA 92 | 2409-050 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-432-02 | 732 E Almond Ave, Orange, CA 9286 | 2409-134 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-072-20 | 938 E Van Bibber AVE, Orange, CA | 2409-345 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-201-02 | 315 E Everett PL, Orange, CA 92867 | 2410-214 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 372-663-03 | 3628 E Summitridge LN, Orange, CA | 2410-380 | | | | 0 | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 392-141-20 | 605 S Breezy WAY, Orange, CA 928 | 2410-401 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 093-396-03 | 3908 E Walnut Ave, Orange, CA 928 | 2411-033 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 360-143-02 | 712-714 E Meadowbrook AVE, Oran | 2411-312 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-423-23 | 721 E Culver AVE, Orange, CA 9286 | 2412-253 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 393-411-15 | 4531 E Washington AVE, Orange, CA | 2310-085 | | | | 0 | | | | | | | | | | | | | | | | | |
| 232-062-26 | 3063 W Chapman AVE, UNIT 1, Ora | 2402-153 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 232-062-26 | 3063 W Chapman AVE, UNIT 4, Ora | 2402-156 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 361-861-21 | 2543 N LA CAPELLA Ct., Orange, C | 2406-185 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-292-15 | 1151 W Walnut AVE, Orange, CA 92 | 2408-117 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 360-284-05 | 4065 N Ramona ST, Orange, CA 928 | 2408-287 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 372-622-03 | 2407 E Altura AVE, Orange, CA 928 | 2409-157 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-071-11 | 347 S Cambridge ST, Orange, CA 92 | 2410-378 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-205-19 | 504 N Lincoln ST, Orange, CA 92867 | 2411-193 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-461-12 | 923 E Palmyra AVE, Orange, CA 928 | 2411-247 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 232-062-26 | 3063 W Chapman AVE, UNIT 2, Ora | 2402-154 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-173-14 | 2107 E Walnut AVE, Orange, CA 928 | 2402-196 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 379-261-29 | 7834 E Lakeview TRL, Orange, CA 9 | 2403-156 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-011-23 | 832 E La Veta AVE, Orange, CA 928 | 2404-118 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 041-041-12 | 164 S Citrus ST, Orange, CA 92868 | 2405-149 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-142-03 | 522 E Jefferson AVE, Orange, CA 92 | 2408-303 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-271-04 | 929 E Oakmont Ave, Orange, CA 928 | 2409-132 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 094-074-01 | 2708 E Larkstone DR, Orange, CA 9 | 2409-170 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 375-091-11 | 235 E Chestnut AVE, Orange, CA 92 | 2410-399 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-103-20 | 323 E River AVE, Orange, CA 92866 | 2411-055 | | | | 0 | | | | | | | | | | | | | | | | | |
| 386-291-03 | 1424 E Collins AVE, Orange, CA 928 | 2411-276 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 094-414-06 | 456 S Loretta DR, Orange, CA 9286 | 2412-161 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-082-11 | 625 E Maple AVE, Orange, CA 9286 | 2501-020 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-031-22 | 1230 W Palm AVE, Orange, CA 928 | 2501-158 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-031-22 | 1232 W Palm Ave, Orange, CA 9286 | 2502-047 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 137-395-10 | 4416 W Stay CT, Orange, CA 92868 | 2307-227 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 232-062-26 | 3063 W Chapman AVE, UNIT 3, Ora | 2402-155 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-222-26 | 2133 W Palmyra AVE, Orange, CA 9 | 2404-159 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 375-542-06 | 1834 E Adams AVE, Orange, CA 928 | 2409-171 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-131-05 | 514 E Culver AVE, Orange, CA 9286 | 2411-209 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-091-07 | 233 N Cambridge ST, Orange, CA 92 | 2412-064 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-144-21 | 473 N Pine St, Orange, CA 92866 | BLDG25-0018 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-461-12 | 925 E Palmyra Ave, Orange, CA 928 | BLDG25-0024 | | | | 0 | | | | | | | | | | | | | | | | | |
| 390-672-06 | 135 S Clark St, Orange, CA 92868 | BLDG25-0042 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-442-40 | 388 N Parker St., A, Orange, CA | BLDG25-0048 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-442-32 | 316 N Parker St, Orange, CA 92868 | BLDG25-0049 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 392-162-10 | 879 S Fairmont Way, Orange, CA 92 | BLDG25-0149 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-432-18 | 729 E Washington Ave, Orange, CA | BLDG25-0156 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 378-152-28 | 1582 N Fern St, Orange, CA 92867 | BLDG25-0157 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 375-424-04 | 1660 N Maplewood St, Orange, CA 9 | BLDG25-0208 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-052-02 | 177 N Shattuck Pl, Orange, CA 9286 | BLDG25-0209 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 361-642-14 | 3126 E Bradbury Ct, Orange, CA 928 | BLDG25-0251 | | | | 0 | | | | | | | | | | | | | | | | | |
| 386-204-07 | 1336 E Orange Grove Ave., Orange, | BLDG25-0262 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 137-396-07 | 4411 W Chapman Ave, Orange, CA | BLDG25-0294 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 094-491-13 | 3425 E Almond Ave, Orange, CA 928 | BLDG25-0365 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 374-194-25 | 1887 N Chouteau St, Orange, CA 92 | BLDG25-0383 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 374-293-39 | 2743 N Hartman St, Orange, CA 928 | BLDG25-0424 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-433-10 | 870 N Olive St, Orange, CA 92867 | BLDG25-0438 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-284-13 | 472 S Alpine Rd, Orange, CA 92868 | BLDG25-0501 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 375-461-41 | 1012 E Scenic Dr, Orange, CA 9286 | BLDG25-0540 | | | | 0 | | | | | | | | | | | | | | | | | |
| 375-461-41 | 1010 E Scenic Dr, Orange, CA 9286 | BLDG25-0541 | | | | 0 | | | | | | | | | | | | | | | | | |
| 383-071-05 | 721 N Mallard St, Orange, CA 92867 | BLDG25-0567 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 383-071-05 | 717 N Mallard St, Orange, CA 92867 | BLDG25-0572 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 383-071-05 | 719 N Mallard St, Orange, CA 92867 | BLDG25-0573 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 392-171-24 | 304 S Liberty Way, Orange, CA 9286 | BLDG25-0591 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-241-16 | 684 N Cambridge St, Orange, CA 92 | BLDG25-0651 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 093-331-08 | 4703 E El Carmen Ave, Orange, CA | BLDG25-0692 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 375-461-09 | 1047 E Carleton Ave, Orange, CA 92 | BLDG25-0694 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-294-17 | 1409 E Mayfair Ave, Orange, CA 928 | BLDG25-0737 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 374-251-47 | 804 W Brentwood Ave, Orange, CA 9 | BLDG25-0754 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-031-08 | 731 E Fairway Dr, Orange, CA 9286 | BLDG25-0756 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-434-19 | 879 N Olive St, Orange, CA 92867 | BLDG25-0763 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-434-19 | 877 N Olive St, Orange, CA 92867 | BLDG25-0764 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 378-281-41 | 2811 E Garfield Ave, Orange, CA 92 | BLDG25-0772 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-123-07 | 339 N Magnolia St, Orange, CA 9286 | BLDG25-0775 | | | | 0 | | | | | | | | | | | | | | | | | |
| 386-123-07 | 343 N Magnolia St, Orange, CA 9286 | BLDG25-0776 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-123-07 | 337 N Magnolia St, Orange, CA 9286 | BLDG25-0777 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 137-461-13 | 3819 W Compton Ave, Orange, CA 9 | BLDG25-0833 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-362-02 | 263 N Flower St, Orange, CA 92868 | BLDG25-0853 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 360-142-15 | 647 E Meadowbrook St, Orange, CA | BLDG25-0877 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-294-33 | 1119 W Sycamore Ave, Orange, CA | BLDG25-0924 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 374-115-02 | 730 E Glendora Ave, Orange, CA 92 | BLDG25-0958 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 378-341-22 | 2307 E Garfield Ave, Orange, CA 92 | BLDG25-0961 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 378-373-03 | 929 N Milford St, Orange, CA 92867 | BLDG25-0970 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 374-151-04 | 2155 N Shaffer St, Orange, CA 9286 | BLDG25-1002 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 360-292-03 | 1907 E Bolingridge Dr, Orange, CA 9 | BLDG25-1065 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 392-021-18 | 4422 E Fernwood Ave, Orange, CA 9 | BLDG25-1072 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-482-10 | 1416 E Century Dr, Orange, CA 928 | BLDG25-1089 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 375-193-01 | 1005 N Grand St, Orange, CA 92867 | BLDG25-1164 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-012-19 | 435 N Citrus St, Orange, CA 92868 | BLDG25-1755 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 375-461-41 | 1042 E Overlook Dr, Orange, CA 928 | BLDG25-1954 | | | | 0 | | | | | | | | | | | | | | | | | |
| 375-461-41 | 1052 E Overlook Dr, Orange, CA 928 | BLDG25-2053 | | | | 0 | | | | | | | | | | | | | | | | | |
| 375-461-41 | 1054 E Overlook Dr, Orange, CA 928 | BLDG25-2055 | | | | 0 | | | | | | | | | | | | | | | | | |
| 375-461-41 | 1062 E Overlook Dr, Orange, CA 928 | BLDG25-2058 | | | | 0 | | | | | | | | | | | | | | | | | |
| 375-461-41 | 1064 E Overlook Dr, Orange, CA 928 | BLDG25-2059 | | | | 0 | | | | | | | | | | | | | | | | | |
| 375-461-41 | 1072 E Overlook Dr, Orange, CA 928 | BLDG25-2060 | | | | 0 | | | | | | | | | | | | | | | | | |
| 375-461-41 | 1074 E Overlook Dr, Orange, CA 928 | BLDG25-2066 | | | | 0 | | | | | | | | | | | | | | | | | |
| 375-461-41 | 1082 E Overlook Dr, Orange, CA 928 | BLDG25-2067 | | | | 0 | | | | | | | | | | | | | | | | | |
| 375-461-41 | 1084 E Overlook Dr, Orange, CA 928 | BLDG25-2068 | | | | 0 | | | | | | | | | | | | | | | | | |
| 375-461-41 | 1086 E Overlook Dr, Orange, CA 928 | BLDG25-2069 | | | | 0 | | | | | | | | | | | | | | | | | |
| 375-461-41 | 1092 E Overlook Dr, Orange, CA 928 | BLDG25-2070 | | | | 0 | | | | | | | | | | | | | | | | | |
| 375-461-41 | 1001 E Overlook Dr, Orange, CA 928 | BLDG25-2072 | | | | 0 | | | | | | | | | | | | | | | | | |
| 375-461-41 | 1011 E Overlook Dr, Orange, CA 928 | BLDG25-2073 | | | | 0 | | | | | | | | | | | | | | | | | |
| 375-461-41 | 1021 E Overlook Dr, Orange, CA 928 | BLDG25-2074 | | | | 0 | | | | | | | | | | | | | | | | | |
| 375-461-41 | 1031 E Overlook Dr, Orange, CA 928 | BLDG25-2075 | | | | 0 | | | | | | | | | | | | | | | | | |
| 375-461-41 | 1041 E Overlook Dr, Orange, CA 928 | BLDG25-2076 | | | | 0 | | | | | | | | | | | | | | | | | |
| 375-461-41 | 1051 E Overlook Dr, Orange, CA 928 | BLDG25-2078 | | | | 0 | | | | | | | | | | | | | | | | | |
| 375-461-41 | 1071 E Overlook Dr, Orange, CA 928 | BLDG25-2081 | | | | 0 | | | | | | | | | | | | | | | | | |
| 375-461-41 | 1075 E Overlook Dr, Orange, CA 928 | BLDG25-2086 | | | | 0 | | | | | | | | | | | | | | | | | |
| 375-461-41 | 1081 E Overlook Dr, Orange, CA 928 | BLDG25-2088 | | | | 0 | | | | | | | | | | | | | | | | | |
| 375-461-41 | 1085 E Overlook Dr, Orange, CA 928 | BLDG25-2089 | | | | 0 | | | | | | | | | | | | | | | | | |
| 375-461-41 | 1091 E Overlook Dr, Orange, CA 928 | BLDG25-2090 | | | | 0 | | | | | | | | | | | | | | | | | |
| 375-461-41 | 1095 E Overlook Dr, Orange, CA 928 | BLDG25-2092 | | | | 0 | | | | | | | | | | | | | | | | | |
| 372-663-03 | 3628 E Summiridge LN, Orange, CA | 2410-380 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-431-18 | 543 E Washington AVE, Orange, CA | 2206-126 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 041-141-10 | 637 W La Veta AVE, B, Orange, CA | 2212-254 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 041-141-11 | 627 W La Veta AVE, Orange, CA 928 | 2212-256 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-122-37 | 352 N Maplewood ST, Orange, CA 92 | 2311-083 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 374-114-03 | 2385 N Northumberland RD, Orange, | 2401-217 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 374-182-43 | 2059 N Silverwood ST, Orange, CA 9 | 2404-270 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-194-03 | 322 E Mayfair AVE, Orange, CA 928 | 2405-328 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-201-02 | 315 E Everett PL, Orange, CA 92867 | 2410-214 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 360-143-02 | 712-714 E Meadowbrook AVE, Oran | 2411-312 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 360-122-02 | 3198 N Hartman ST, Orange, CA 92 | 2303-209 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-413-06 | 449 S Grand ST, Orange, CA 92866 | 2402-001 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 232-062-26 | 3063 W Chapman AVE, UNIT 4, Ora | 2402-156 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-282-02 | 883 N Waverly ST, Orange, CA 9286 | 2402-161 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-373-02 | 1242 E Fairway DR, Orange, CA 928 | 2408-029 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-071-11 | 347 S Cambridge ST, Orange, CA 92 | 2410-378 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 041-141-12 | 619 W La Veta AVE, Orange, CA 928 | 2212-259 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 093-114-31 | 140 N Hewes ST, Orange, CA 92869 | 2307-098 | | | | 0 | | | | | | | | | | | | | | | | | |
| 093-242-90 | 7719 E Santiago Canyon RD, Orange | 2308-232 | | | | 0 | | | | | | | | | | | | | | | | | |
| 386-122-45 | 1027 E Palm AVE, Orange, CA 9286 | 2310-074 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 378-394-18 | 993 N Laurel DR, Orange, CA 92867 | 2311-127 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-061-13 | 158 N Waverly ST, Orange, CA 9286 | 2311-282 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-035-15 | 925 W Maple AVE, Orange, CA 9286 | 2401-136 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-011-23 | 832 E La Veta AVE, Orange, CA 928 | 2404-118 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-143-04 | 478 N Pine ST, Orange, CA 92866 | 2405-051 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-024-07 | 1202 W Sycamore AVE, Orange, CA | 2411-003 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-291-03 | 1424 E Collins AVE, Orange, CA 928 | 2411-276 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-031-22 | 1232 W Palm Ave, Orange, CA 9286 | 2502-047 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-195-34 | 313 E Mayfair AVE, Orange, CA 928 | 2311-157 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-362-15 | 248 N Stevens ST, Orange, CA 9286 | 2402-060 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 094-493-08 | 260 S Shasta ST, Orange, CA 92869 | 2402-137 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 374-354-10 | 203 E Woodstock AVE, Orange, CA | 2405-277 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-035-07 | 938 W Acacia AVE, Orange, CA 928 | 2411-004 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-091-07 | 233 N Cambridge ST, Orange, CA 92 | 2412-064 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 392-162-10 | 879 S Fairmont Way, Orange, CA 92 | BLDG25-0149 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-204-07 | 1336 E Orange Grove Ave., Orange, | BLDG25-0262 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 374-293-39 | 2743 N Hartman St, Orange, CA 928 | BLDG25-0424 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-294-17 | 1409 E Mayfair Ave, Orange, CA 928 | BLDG25-0737 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 375-461-48 | 1249 E Katella AVE, Orange, CA 928 | 2302-199 | | | | 0 | | | | | HOME, LIHTC, Other | Other, DB | | | 55 | | | 54.0% | | 4 | On-Site Improvements, Development Standards Modification | No | |
| 383-051-15 | 453 N Noble ST, Orange, CA 92869 | 2208-360 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-091-20 | 274 N Waverly ST, Orange, CA 9286 | 2307-158 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 137-462-12 | 3725 W SHERRINGHAM AVE, Oran | 2310-166 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |

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| 137-462-13 | 3735-3737 W SHERRINGHAM AVE, | 2310-334 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 390-421-01 | 311 S Shaffer ST, Orange, CA 9286 | 2402-021 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 375-416-10 | 1056 N Lincoln ST, Orange, CA 9286 | 2403-203 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 386-122-24 | 374 N Magnolia ST, Orange, CA 928 | 2403-230 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 390-141-07 | 329 S Wayfield ST, Orange, CA 928 | 2404-139 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 390-502-18 | 2047 E Palmyra AVE, Orange, CA 92 | 2404-182 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 039-044-28 | 1025 W Arbor WAY, Orange, CA 928 | 2409-297 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 390-461-12 | 923 E Palmyra AVE, Orange, CA 928 | 2411-247 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 094-451-12 | 3791 E Larkstone DR, Orange, CA 9 | 2205-131 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 379-311-18 | 5106 E Glen Arran LN, Orange, CA 9 | 2307-254 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 386-151-17 | 1244 E Walnut AVE, Orange, CA 928 | 2402-159 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 392-184-09 | 215 S Earlham ST, Orange, CA 9286 | 2405-303 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 390-397-06 | 333 E Palmyra AVE, Orange, CA 928 | 2401-204 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 039-203-12 | 690 N Grand ST, Orange, CA 92867 | 2402-251 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 360-283-12 | 4070 N Ramona ST, Orange, CA 92 | 2404-074 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 039-244-04 | 269 N Center ST, Orange, CA 92866 | 2404-181 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 386-084-07 | 239 N Pine ST, Orange, CA 92866 | 2301-045 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 360-121-18 | 3220 N Pinewood ST, Orange, CA 92 | 2304-027 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 386-134-19 | 358 N Cambridge ST, Orange, CA 92 | 2310-329 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 392-141-18 | 619 S Breezy WAY, Orange, CA 928 | 2402-034 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 039-253-22 | 322 E Maple AVE, Orange, CA 9286 | 2406-288 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 378-182-20 | 2409 E Trenton AVE, Orange, CA 92 | 2407-209 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 386-232-10 | 525 N Pine ST, Orange, CA 92867 | 2306-163 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 231-281-12 | 3813 W Park Balboa AVE, Orange, C | 2309-076 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 093-362-31 | 3413 E Vine AVE, Orange, CA 9286 | 2405-317 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 390-413-13 | 337 E La Veta AVE, Orange, CA 928 | 2409-295 | | | | 0 | | | | | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 390-231-06 | 164 S Marks Wy, Orange, CA 92868 | SP-1182 | | 1 | 7/31/2025 | 1 | | | | | | Other | Other, DB | | 55 | | | 285.0% | 8 | On-Site Improvements, Development Standards Modification | No | 11 of the 49 units restricted to Extremely Low income to be counted in the County of Orange RHNA Share. The one market rate (Manager's Unit) units and other 38 Extremely low income units to be counted by City or Orange in their RHNA allocation. |
| | | | | | | 0 | | | | | | | | | | | | | | | | | |

**Table A2**

**Annual Building Activity Report Summary - New Construction, Entitled, Permits and Completed Units**

| Project Identifier | | | | | | | | | | | Affordability by Household Incomes - Certificates of Occupancy | Housing with Financial Assistance and/or Deed Restrictions | | Housing without Financial Assistance or Deed Restrictions | Term of Affordability or Deed Restriction | Demolished/Destroyed Units | | | Density Bonus | | | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | 8 | 9 | 10 | 16 | 17 | 18 | 19 | 20 | | | 21 | 22 | 23 | 24 | 25 |
| Current APN | Street Address | Project Name* | Very Low-Income Non Deed Restricted | Low-Income Deed Restricted | Low-Income Non Deed Restricted | Moderate-Income Deed Restricted | Moderate-Income Non Deed Restricted | Above Moderate-Income | Building Permits Date Issued | # of Units Issued Building Permits | Acutely Low-Income Deed Restricted | Assistance Programs for Each Development (may select multiple - see instructions) | Deed Restriction Type (may select multiple - see instructions) | For units affordable without financial assistance or deed restrictions, explain how the locality determined the units were affordable (see instructions) | Term of Affordability or Deed Restriction (years) (if affordable in perpetuity enter 1000)* | Number of Demolished/Destroyed Units | Demolished or Destroyed Units | Demolished/ Destroyed Units Owner or Renter | Total Density Bonus Applied to the Project (Percentage Increase in Total Allowable Units or Total Maximum Allowable Residential Gross Floor Area) | Number of Other Incentives, Concessions, Waivers, or Other Modifications Given to the Project (Excluding Parking Waivers or Parking Reductions) | List the incentives, concessions, waivers, and modifications (Excluding Parking Waivers or Parking Modifications) | Did the project receive a reduction or waiver of parking standards? (Y/N) | Notes* |
| | | | 0 | 0 | 0 | 0 | 91 | 81 | | 172 | #REF! | | | | | 0 | | | | | | | |
| 375-205-21 | 970 N Shaffer St | ADR-0227 | | | | | | | | 0 | | | | SFD | | | | | | | | | |
| 375-205-21 | 972 N Shaffer St | ADU-0327 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 375-205-21 | 974 N Shaffer St | ADU25-0015 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-151-14 | 1212 E Walnut AVE | ADU-0200 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-151-15 | 1222 E Walnut AVE | ADU-0286 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-082-11 | 621 E Maple AVE | ADU-0383 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 094-385-15 | 736 S Prospect ST | ADU-0401 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 378-152-28 | 1584 N Fern ST | ADU-0403 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-294-28 | 1215 W Sycamore AVE | ADU-0409 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 094-552-07 | 182 S Kathleen LN | ADU-0412 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-171-02 | 1744 E Orange Grove AVE | ADU-0414 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 374-293-39 | 2741 N Hartman ST | ADU-0415 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 392-162-10 | 881 S Fairmont WAY | ADU-0418 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-031-22 | 290 N Jewell PL | ADU-0419 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 374-194-25 | 1885 N Chouteau ST | ADU-0420 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-144-21 | 471 N Pine ST | ADU-0421 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-432-18 | 727 E Washington AVE | ADU-0426 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-052-02 | 177 N Shattuck PL | ADU-0427 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 375-424-04 | 1660 N Maplewood ST | ADU-0428 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-082-13 | 633 E Maple AVE | ADU-0432 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-123-07 | 337 N Magnolia St | SP-1185 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-123-07 | 339 N Magnolia St | SP-1185 | | | | | | | | 0 | | | | All SB9 Units assumed to have a level of affordability | | | | | | | | | |
| 386-123-07 | 343 N Magnolia St | SP-1185 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 374-272-02 | 2745 N Pampas ST | SP-1188 | | | | | | | | 0 | | | | All SB9 Units assumed to have a level of affordability | | | | | | | | | |
| 137-396-07 | 4409 W Chapman AVE | ADU-0423 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-672-06 | 133 S Clark ST | ADU-0425 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 094-491-13 | 3425 E Almond Ave | ADU25-0008 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 383-213-19 | 2630 E Hamilton Ave | ADU25-0009 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-241-16 | 680 N Cambridge St | ADU25-0010 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-241-16 | 680 N Cambridge St | ADU25-0011 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-141-15 | 631 E Jefferson Ave | ADU25-0012 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-414-21 | 442 S Shaffer St | ADU25-0014 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 093-331-08 | 624 N Hamlin St | ADU25-0017 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-204-07 | 1334 E Orange Grove Ave | ADU25-0018 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 375-461-09 | 1045 E Carleton Ave | ADU25-0007 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 374-251-47 | 804 W Brentwood Ave | ADU25-0026 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 360-292-03 | 1907 E Bolingridge Dr | ADU25-0028 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 379-181-10 | 664 N Ranch Wood Trl | SB925-0002 | | | | | | | | 0 | | | | All SB9 Units assumed to have a level of affordability | | | | | | | | | |
| 379-343-04 | 267 N Bobwhite WAY | ADU-0429 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 375-113-31 | 1422 N Harwood St | ADU25-0032 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-442-31 | 709 W Palm Ave | ADU25-0034 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-102-03 | 525 S Orange St | ADU25-0037 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-223-17 | 414 N Shaffer St | ADU25-0038 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 392-183-10 | 145 S Earlham St | DRC25-0021 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 041-141-16 | 468 S Pixley St | ADU25-0051 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-414-18 | 470 S Shaffer St | PA25-0114 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-365-15 | 1940 W Orangewood AVE, B | 2401-116 | | | | | | 8 | 6/12/2025 | 8 | | | | | | | | | | | | | |
| 386-365-15 | 1940 W Orangewood AVE, C | 2401-118 | | | | | | 15 | 6/12/2025 | 15 | | | | | | | | | | | | | |
| 386-365-15 | 1940 W Orangewood AVE, A | 2401-119 | | | | | | 28 | 6/12/2025 | 28 | | | | | | | | | | | | | |
| 386-241-16 | 684 N Cambridge St, Orange, CA 928 | BLDG25-0652 | | | | | 1 | | 9/4/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 137-401-08 | 4230 W Simmons AVE, Orange, CA 9 | 2308-300 | | | | | 1 | | 4/4/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 393-411-15 | 4533 E Washington AVE, Orange, CA | 2310-086 | | | | | | 1 | 11/26/2025 | 1 | | | | | | | | | | | | | |
| 378-341-07 | 2336 E Katella AVE, Orange, CA 928 | 2404-077 | | | | | 1 | | 10/1/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-132-25 | 614 E Sycamore AVE, Orange, CA 9 | 2407-133 | | | | | 1 | | 6/24/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-194-10 | 432 E Mayfair AVE, Orange, CA 928 | 2407-222 | | | | | 1 | | 12/9/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 375-404-04 | 1093 N California ST, Orange, CA 92 | 2409-050 | | | | | 1 | | 9/8/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 390-432-02 | 732 E Almond Ave, Orange, CA 9286 | 2409-134 | | | | | 1 | | 9/17/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-072-20 | 938 E Van Bibber AVE, Orange, CA 9 | 2409-345 | | | | | 1 | | 2/26/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-201-02 | 315 E Everett PL, Orange, CA 92867 | 2410-214 | | | | | 1 | | 11/12/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 372-663-03 | 3628 E Summbridge LN, Orange, CA | 2410-380 | | | | | | 1 | 10/21/2025 | 1 | | | | | | | | | | | | | |
| 392-141-20 | 605 S Breezy WAY, Orange, CA 928 | 2410-401 | | | | | 1 | | 3/18/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 093-396-03 | 3908 E Walnut Ave, Orange, CA 928 | 2411-033 | | | | | 2 | | 4/8/2025 | 2 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 360-143-02 | 712-714 E Meadowbrook AVE, Orang | 2411-312 | | | | | 1 | | 2/5/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-423-23 | 721 E Culver AVE, Orange, CA 9286 | 2412-253 | | | | | 1 | | 2/12/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 393-411-15 | 4531 E Washington AVE, Orange, CA | 2310-085 | | | | | | 1 | 12/1/2025 | 1 | | | | | | | | | | | | | |
| 232-062-26 | 3063 W Chapman AVE, UNIT 1, Ora | 2402-153 | | | | | 1 | | 1/29/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 232-062-26 | 3063 W Chapman AVE, UNIT 4, Ora | 2402-156 | | | | | 1 | | 1/29/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 361-861-21 | 2543 N LA CAPELLA Ct., Orange, CA | 2406-185 | | | | | 1 | | 3/4/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-292-15 | 1151 W Walnut AVE, Orange, CA 92 | 2408-117 | | | | | 1 | | 4/2/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 360-284-05 | 4065 N Ramona ST, Orange, CA 928 | 2408-287 | | | | | 1 | | 3/17/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 372-622-03 | 2407 E Altura AVE, Orange, CA 9286 | 2409-157 | | | | | 1 | | 2/3/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-071-11 | 347 S Cambridge ST, Orange, CA 92 | 2410-378 | | | | | 1 | | 4/4/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-205-19 | 504 N Lincoln ST, Orange, CA 92867 | 2411-193 | | | | | 1 | | 9/24/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-461-12 | 923 E Palmyra AVE, Orange, CA 928 | 2411-247 | | | | | 1 | | 3/3/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 232-062-26 | 3063 W Chapman AVE, UNIT 2, Ora | 2402-154 | | | | | 1 | | 1/29/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-173-14 | 2107 E Walnut AVE, Orange, CA 928 | 2402-196 | | | | | 1 | | 4/10/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 379-261-29 | 7834 E Lakeview TRL, Orange, CA 9 | 2403-156 | | | | | 1 | | 8/28/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-011-23 | 832 E La Veta AVE, Orange, CA 928 | 2404-118 | | | | | 1 | | 1/9/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 041-041-12 | 164 S Citrus ST, Orange, CA 92868 | 2405-149 | | | | | 1 | | 2/4/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-142-03 | 522 E Jefferson AVE, Orange, CA 92 | 2408-303 | | | | | 1 | | 4/28/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-271-04 | 929 E Oakmont Ave, Orange, CA 928 | 2409-132 | | | | | 1 | | 7/9/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 094-074-01 | 2708 E Larkstone DR, Orange, CA 9 | 2409-170 | | | | | 1 | | 1/13/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 375-091-11 | 235 E Chestnut AVE, Orange, CA 92 | 2410-399 | | | | | 1 | | 2/6/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-103-20 | 323 E River AVE, Orange, CA 92866 | 2411-055 | | | | | | 1 | 11/4/2025 | 1 | | | | | | | | | | | | | |
| 386-291-03 | 1424 E Collins AVE, Orange, CA 928 | 2411-276 | | | | | 1 | | 3/18/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 094-414-06 | 456 S Loretta DR, Orange, CA 9286 | 2412-161 | | | | | 1 | | 1/24/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-082-11 | 625 E Maple AVE, Orange, CA 9286 | 2501-020 | | | | | 1 | | 10/23/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-031-22 | 1230 W Palm AVE, Orange, CA 9286 | 2501-158 | | | | | 1 | | 5/15/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-031-22 | 1232 W Palm Ave, Orange, CA 9286 | 2502-047 | | | | | 1 | | 5/2/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 137-395-10 | 4416 W Stay CT, Orange, CA 92868 | 2307-227 | | | | | 1 | | 1/8/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 232-062-26 | 3063 W Chapman AVE, UNIT 3, Ora | 2402-155 | | | | | 1 | | 1/29/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-222-26 | 2133 W Palmyra AVE, Orange, CA 9 | 2404-159 | | | | | 1 | | 4/16/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 375-542-06 | 1834 E Adams AVE, Orange, CA 928 | 2409-171 | | | | | 1 | | 2/3/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-131-05 | 514 E Culver AVE, Orange, CA 9286 | 2411-209 | | | | | 1 | | 3/10/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-091-07 | 233 N Cambridge ST, Orange, CA 92 | 2412-064 | | | | | 1 | | 3/7/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-144-21 | 473 N Pine St, Orange, CA 92866 | BLDG25-0018 | | | | | 1 | | 7/9/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-461-12 | 925 E Palmyra Ave, Orange, CA 928 | BLDG25-0024 | | | | | | 1 | 7/22/2025 | 1 | | | | | | | | | | | | | |
| 390-672-06 | 135 S Clark St, Orange, CA 92868 | BLDG25-0042 | | | | | 1 | | 6/5/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-442-40 | 388 N Parker St., A, Orange, CA | BLDG25-0048 | | | | | 1 | | 10/22/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-442-32 | 316 N Parker St, Orange, CA 92868 | BLDG25-0049 | | | | | 2 | | 9/2/2025 | 2 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 392-162-10 | 879 S Fairmont Way, Orange, CA 92 | BLDG25-0149 | | | | | 1 | | 5/12/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-432-18 | 729 E Washington Ave, Orange, CA | BLDG25-0156 | | | | | 1 | | 9/19/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 378-152-28 | 1582 N Fern St, Orange, CA 92867 | BLDG25-0157 | | | | | 1 | | 7/25/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 375-424-04 | 1660 N Maplewood St, Orange, CA 9 | BLDG25-0208 | | | | | 1 | | 7/9/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-052-02 | 177 N Shattuck Pl, Orange, CA 9286 | BLDG25-0209 | | | | | 1 | | 7/2/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 361-642-14 | 3126 E Bradbury Ct, Orange, CA 928 | BLDG25-0251 | | | | | | 1 | 9/17/2025 | 1 | | | | | | | | | | | | | |
| 386-204-07 | 1336 E Orange Grove Ave., Orange, | BLDG25-0262 | | | | | 1 | | 6/16/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 137-396-07 | 4411 W Chapman Ave, Orange, CA | BLDG25-0294 | | | | | 1 | | 10/21/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 094-491-13 | 3425 E Almond Ave, Orange, CA 928 | BLDG25-0365 | | | | | 1 | | 8/28/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 374-194-25 | 1887 N Chouteau St, Orange, CA 92 | BLDG25-0383 | | | | | 1 | | 8/14/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 374-293-39 | 2743 N Hariman St, Orange, CA 928 | BLDG25-0424 | | | | | 1 | | 6/18/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-433-10 | 870 N Olive St, Orange, CA 92867 | BLDG25-0438 | | | | | 1 | | 7/22/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-284-13 | 472 S Alpine Rd, Orange, CA 92868 | BLDG25-0501 | | | | | 1 | | 10/13/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 375-461-41 | 1012 E Scenic Dr, Orange, CA 9286 | BLDG25-0540 | | | | | 1 | | 11/20/2025 | 1 | | | | | | | | | | | | | |
| 375-461-41 | 1010 E Scenic Dr, Orange, CA 9286 | BLDG25-0541 | | | | | 1 | | 11/20/2025 | 1 | | | | | | | | | | | | | |
| 383-071-05 | 721 N Mallard St, Orange, CA 92867 | BLDG25-0567 | | | | | 1 | | 11/12/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 383-071-05 | 717 N Mallard St, Orange, CA 92867 | BLDG25-0572 | | | | | 1 | | 11/12/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 383-071-05 | 719 N Mallard St, Orange, CA 92867 | BLDG25-0573 | | | | | 1 | | 11/12/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 392-171-24 | 304 S Liberty Way, Orange, CA 9286 | BLDG25-0591 | | | | | 1 | | 9/5/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-241-16 | 684 N Cambridge St, Orange, CA 928 | BLDG25-0651 | | | | | 1 | | 9/4/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 093-331-08 | 4703 E El Carmen Ave, Orange, CA | BLDG25-0692 | | | | | 1 | | 11/4/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 375-461-09 | 1047 E Carleton Ave, Orange, CA 92 | BLDG25-0694 | | | | | 1 | | 11/3/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-294-17 | 1409 E Mayfair Ave, Orange, CA 928 | BLDG25-0737 | | | | | 1 | | 8/12/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 374-251-47 | 804 W Brentwood Ave, Orange, CA 9 | BLDG25-0754 | | | | | 1 | | 9/25/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-031-08 | 731 E Fairway Dr, Orange, CA 9286 | BLDG25-0756 | | | | | 1 | | 8/11/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-434-19 | 879 N Olive St, Orange, CA 92867 | BLDG25-0763 | | | | | 1 | | 9/24/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-434-19 | 877 N Olive St, Orange, CA 92867 | BLDG25-0764 | | | | | 1 | | 9/24/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 378-281-41 | 2811 E Garfield Ave, Orange, CA 928 | BLDG25-0772 | | | | | 1 | | 8/21/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 386-123-07 | 339 N Magnolia St, Orange, CA 9286 | BLDG25-0775 | | | | | | 1 | 8/27/2025 | 1 | | | | | | | | | | | | | | | |
| 386-123-07 | 343 N Magnolia St, Orange, CA 9286 | BLDG25-0776 | | | | | 1 | | 8/27/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 386-123-07 | 337 N Magnolia St, Orange, CA 9286 | BLDG25-0777 | | | | | 1 | | 8/27/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 137-461-13 | 3819 W Compton Ave, Orange, CA 9 | BLDG25-0833 | | | | | 1 | | 10/31/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 039-362-02 | 263 N Flower St, Orange, CA 92868 | BLDG25-0853 | | | | | 1 | | 8/21/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 360-142-15 | 647 E Meadowbrook St, Orange, CA | BLDG25-0877 | | | | | 1 | | 11/17/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 039-294-33 | 1119 W Sycamore Ave, Orange, CA | BLDG25-0924 | | | | | 1 | | 10/17/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 374-115-02 | 730 E Glendora Ave, Orange, CA 928 | BLDG25-0958 | | | | | 1 | | 10/3/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 378-341-22 | 2307 E Garfield Ave, Orange, CA 928 | BLDG25-0961 | | | | | 1 | | 9/18/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 378-373-03 | 929 N Milford St, Orange, CA 92867 | BLDG25-0970 | | | | | 1 | | 12/15/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 374-151-04 | 2155 N Shaffer St, Orange, CA 9286 | BLDG25-1002 | | | | | 1 | | 9/25/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 360-292-03 | 1907 E Bolingridge Dr, Orange, CA 9 | BLDG25-1065 | | | | | 1 | | 10/14/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 392-021-18 | 4422 E Fernwood Ave, Orange, CA 9 | BLDG25-1072 | | | | | 1 | | 11/5/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 390-482-10 | 1416 E Century Dr, Orange, CA 9286 | BLDG25-1089 | | | | | 1 | | 8/21/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 375-193-01 | 1005 N Grand St, Orange, CA 92867 | BLDG25-1164 | | | | | 1 | | 10/3/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 039-012-19 | 435 N Citrus St, Orange, CA 92868 | BLDG25-1755 | | | | | 1 | | 11/25/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 375-461-41 | 1042 E Overlook Dr, Orange, CA 928 | BLDG25-1954 | | | | | | 1 | 12/18/2025 | 1 | | | | | | | | | | | | | | | |
| 375-461-41 | 1052 E Overlook Dr, Orange, CA 928 | BLDG25-2053 | | | | | | 1 | 12/18/2025 | 1 | | | | | | | | | | | | | | | |
| 375-461-41 | 1054 E Overlook Dr, Orange, CA 928 | BLDG25-2055 | | | | | | 1 | 12/18/2025 | 1 | | | | | | | | | | | | | | | |
| 375-461-41 | 1062 E Overlook Dr, Orange, CA 928 | BLDG25-2058 | | | | | | 1 | 12/18/2025 | 1 | | | | | | | | | | | | | | | |
| 375-461-41 | 1064 E Overlook Dr, Orange, CA 928 | BLDG25-2059 | | | | | | 1 | 12/18/2025 | 1 | | | | | | | | | | | | | | | |
| 375-461-41 | 1072 E Overlook Dr, Orange, CA 928 | BLDG25-2060 | | | | | | 1 | 12/18/2025 | 1 | | | | | | | | | | | | | | | |
| 375-461-41 | 1074 E Overlook Dr, Orange, CA 928 | BLDG25-2066 | | | | | | 1 | 12/18/2025 | 1 | | | | | | | | | | | | | | | |
| 375-461-41 | 1082 E Overlook Dr, Orange, CA 928 | BLDG25-2067 | | | | | | 1 | 12/18/2025 | 1 | | | | | | | | | | | | | | | |
| 375-461-41 | 1084 E Overlook Dr, Orange, CA 928 | BLDG25-2068 | | | | | | 1 | 12/18/2025 | 1 | | | | | | | | | | | | | | | |
| 375-461-41 | 1086 E Overlook Dr, Orange, CA 928 | BLDG25-2069 | | | | | | 1 | 12/18/2025 | 1 | | | | | | | | | | | | | | | |
| 375-461-41 | 1092 E Overlook Dr, Orange, CA 928 | BLDG25-2070 | | | | | | 1 | 12/18/2025 | 1 | | | | | | | | | | | | | | | |
| 375-461-41 | 1001 E Overlook Dr, Orange, CA 928 | BLDG25-2072 | | | | | | 1 | 12/18/2025 | 1 | | | | | | | | | | | | | | | |
| 375-461-41 | 1011 E Overlook Dr, Orange, CA 928 | BLDG25-2073 | | | | | | 1 | 12/18/2025 | 1 | | | | | | | | | | | | | | | |
| 375-461-41 | 1021 E Overlook Dr, Orange, CA 928 | BLDG25-2074 | | | | | | 1 | 12/18/2025 | 1 | | | | | | | | | | | | | | | |
| 375-461-41 | 1031 E Overlook Dr, Orange, CA 928 | BLDG25-2075 | | | | | | 1 | 12/18/2025 | 1 | | | | | | | | | | | | | | | |
| 375-461-41 | 1041 E Overlook Dr, Orange, CA 928 | BLDG25-2076 | | | | | | 1 | 12/18/2025 | 1 | | | | | | | | | | | | | | | |
| 375-461-41 | 1051 E Overlook Dr, Orange, CA 928 | BLDG25-2078 | | | | | | 1 | 12/18/2025 | 1 | | | | | | | | | | | | | | | |
| 375-461-41 | 1071 E Overlook Dr, Orange, CA 928 | BLDG25-2081 | | | | | | 1 | 12/18/2025 | 1 | | | | | | | | | | | | | | | |
| 375-461-41 | 1075 E Overlook Dr, Orange, CA 928 | BLDG25-2086 | | | | | | 1 | 12/18/2025 | 1 | | | | | | | | | | | | | | | |
| 375-461-41 | 1081 E Overlook Dr, Orange, CA 928 | BLDG25-2088 | | | | | | 1 | 12/18/2025 | 1 | | | | | | | | | | | | | | | |
| 375-461-41 | 1085 E Overlook Dr, Orange, CA 928 | BLDG25-2089 | | | | | | 1 | 12/18/2025 | 1 | | | | | | | | | | | | | | | |
| 375-461-41 | 1091 E Overlook Dr, Orange, CA 928 | BLDG25-2090 | | | | | | 1 | 12/18/2025 | 1 | | | | | | | | | | | | | | | |
| 375-461-41 | 1095 E Overlook Dr, Orange, CA 928 | BLDG25-2092 | | | | | | 1 | 12/18/2025 | 1 | | | | | | | | | | | | | | | |
| 372-663-03 | 3628 E Summitridge LN, Orange, CA | 2410-380 | | | | | 1 | | 10/21/2025 | 1 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 390-431-18 | 543 E Washington AVE, Orange, CA | 2206-126 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 041-141-10 | 637 W La Veta AVE, B, Orange, CA 9 | 2212-254 | | | | | | 1 | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 041-141-11 | 627 W La Veta AVE, Orange, CA 928 | 2212-256 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 386-122-37 | 352 N Maplewood ST, Orange, CA 92 | 2311-083 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 374-114-03 | 2385 N Northumberland RD, Orange, | 2401-217 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 374-182-43 | 2059 N Silverwood ST, Orange, CA 9 | 2404-270 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 039-194-03 | 322 E Mayfair AVE, Orange, CA 928 | 2405-328 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 039-201-02 | 315 E Everett PL, Orange, CA 92867 | 2410-214 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 360-143-02 | 712-714 E Meadowbrook AVE, Orang | 2411-312 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 360-122-02 | 3198 N Hartman ST, Orange, CA 928 | 2303-209 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 390-413-06 | 449 S Grand ST, Orange, CA 92866 | 2402-001 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 232-062-26 | 3063 W Chapman AVE, UNIT 4, Oran | 2402-156 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 386-282-02 | 883 N Waverly ST, Orange, CA 9286 | 2402-161 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 390-373-02 | 1242 E Fairway DR, Orange, CA 928 | 2408-029 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 390-071-11 | 347 S Cambridge ST, Orange, CA 92 | 2410-378 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 041-141-12 | 619 W La Veta AVE, Orange, CA 928 | 2212-259 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 093-114-31 | 140 N Hewes ST, Orange, CA 92869 | 2307-098 | | | | | | | | 0 | | | | | | | | | | | | | | | |
| 093-242-90 | 7719 E Santiago Canyon RD, Orange | 2308-232 | | | | | | | | 0 | | | | | | | | | | | | | | | |
| 386-122-45 | 1027 E Palm AVE, Orange, CA 92866 | 2310-074 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 378-394-18 | 993 N Laurel DR, Orange, CA 92867 | 2311-127 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 386-061-13 | 158 N Waverly ST, Orange, CA 9286 | 2311-282 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 039-035-15 | 925 W Maple AVE, Orange, CA 9286 | 2401-136 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 390-011-23 | 832 E La Veta AVE, Orange, CA 928 | 2404-118 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 386-143-04 | 478 N Pine ST, Orange, CA 92866 | 2405-051 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 039-024-07 | 1202 W Sycamore AVE, Orange, CA | 2411-003 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 386-291-03 | 1424 E Collins AVE, Orange, CA 928 | 2411-276 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 039-031-22 | 1232 W Palm Ave, Orange, CA 9286 | 2502-047 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 039-195-34 | 313 E Mayfair AVE, Orange, CA 928 | 2311-157 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 039-362-15 | 248 N Stevens ST, Orange, CA 9286 | 2402-060 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 094-493-08 | 260 S Shasta ST, Orange, CA 92869 | 2402-137 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 374-354-10 | 203 E Woodstock AVE, Orange, CA 9 | 2405-277 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 039-035-07 | 938 W Acacia AVE, Orange, CA 928 | 2411-004 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 386-091-07 | 233 N Cambridge ST, Orange, CA 92 | 2412-064 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 392-162-10 | 879 S Fairmont Way, Orange, CA 92 | BLDG25-0149 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 386-204-07 | 1336 E Orange Grove Ave., Orange, | BLDG25-0262 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 374-293-39 | 2743 N Hartman St, Orange, CA 928 | BLDG25-0424 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |
| 386-294-17 | 1409 E Mayfair Ave, Orange, CA 928 | BLDG25-0737 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 375-461-48 | 1249 E Katella AVE, Orange, CA 928 | 2302-199 | | | | | | | | 0 | | HOME, LIHTC, Other | Other, DB | | 55 | | | | 54.0% | 4 | On-Site Improvements, Development Standards Modification | No | | |
| 383-051-15 | 453 N Noble ST, Orange, CA 92869 | 2208-360 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 386-091-20 | 274 N Waverly ST, Orange, CA 9286 | 2307-158 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 137-462-12 | 3725 W SHERRINGHAM AVE, Oran | 2310-166 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 137-462-13 | 3735-3737 W SHERRINGHAM AVE, | 2310-334 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 390-421-01 | 311 S Shaffer ST, Orange, CA 92866 | 2402-021 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 375-416-10 | 1056 N Lincoln ST, Orange, CA 9286 | 2403-203 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 386-122-24 | 374 N Magnolia ST, Orange, CA 928 | 2403-230 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 390-141-07 | 329 S Wayfield ST, Orange, CA 928 | 2404-139 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 390-502-18 | 2047 E Palmyra AVE, Orange, CA 92 | 2404-182 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 039-044-28 | 1025 W Arbor WAY, Orange, CA 928 | 2409-297 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 390-461-12 | 923 E Palmyra AVE, Orange, CA 928 | 2411-247 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 094-451-12 | 3791 E Larkstone DR, Orange, CA 9 | 2205-131 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 379-311-18 | 5106 E Glen Arran LN, Orange, CA 9 | 2307-254 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 386-151-17 | 1244 E Walnut AVE, Orange, CA 928 | 2402-159 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 392-184-09 | 215 S Earlham ST, Orange, CA 9286 | 2405-303 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 390-397-06 | 333 E Palmyra AVE, Orange, CA 928 | 2401-204 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 039-203-12 | 690 N Grand ST, Orange, CA 92867 | 2402-251 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 360-283-12 | 4070 N Ramona ST, Orange, CA 928 | 2404-074 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 039-244-04 | 269 N Center ST, Orange, CA 92866 | 2404-181 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 386-084-07 | 239 N Pine ST, Orange, CA 92866 | 2301-045 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 360-121-18 | 3220 N Pinewood ST, Orange, CA 92 | 2304-027 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 386-134-19 | 358 N Cambridge ST, Orange, CA 92 | 2310-329 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 392-141-18 | 619 S Breezy WAY, Orange, CA 928 | 2402-034 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 039-253-22 | 322 E Maple AVE, Orange, CA 9286 | 2406-288 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 378-182-20 | 2409 E Trenton AVE, Orange, CA 92 | 2407-209 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 386-232-10 | 525 N Pine ST, Orange, CA 92867 | 2306-163 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 231-281-12 | 3813 W Park Balboa AVE, Orange, C | 2309-076 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 093-362-31 | 3413 E Vine AVE, Orange, CA 92866 | 2405-317 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 390-413-13 | 337 E La Veta AVE, Orange, CA 928 | 2409-295 | | | | | | | | 0 | | | | All ADUs assumed to have a level of affordability | | | | | | | | | | |
| 390-231-06 | 164 S Marks Wy, Orange, CA 92868 | SP-1182 | | | | | | | | 0 | | Other | Other, DB | | 55 | | | | 285.0% | 8 | On-Site Improvements, Development Standards Modification | No | | 11 of the 49 units restiricted to Extremely Low income to be counted in the County of Orange RHNA Share. The one market rate (Manager's Unit) units and other 38 Extremely low income units to be counted by City or Orange in their RHNA allocation. |
| | | | | | | | | | | 0 | | | | | | | | | | | | | |

**Table A2**

**Annual Building Activity Report Summary - New Construction, Entitled, Permits and Completed Units**

| Project Identifier | | | | | | | | | | | | | | | Streamlining | Historic Sites | Housing with Financial Assistance and/or Deed Restrictions | | Housing without Financial Assistance or Deed Restrictions | Term of Affordability or Deed Restriction | Demolished/Destroyed Units | | | Density Bonus | | | | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | 11 | 12 | | | 16 | 17 | | | | 20 | | | 21 | 22 | 23 | 24 | 25 |
| Current APN | Street Address | Project Name* | Acutely Low-Income Non Deed Restricted | Extremely Low-Income Deed Restricted | Extremely Low-Income Non Deed Restricted | Very Low-Income Deed Restricted | Very Low-Income Non Deed Restricted | Low-Income Deed Restricted | Low-Income Non Deed Restricted | Moderate-Income Deed Restricted | Moderate-Income Non Deed Restricted | Above Moderate-Income | Certificates of Occupancy or other forms of readiness (see instructions) Date Issued | # of Units issued Certificates of Occupancy or other forms of readiness | Please select the state streamlining provision the project was APPROVED pursuant to. (may select multiple) | Is this project located on a site with an associated historical designation as outlined in Government Code Section 65400(a)(2)(N) and reported on Table L7 | Assistance Programs for Each Development (may select multiple - see instructions) | Deed Restriction Type (may select multiple - see instructions) | For units affordable without financial assistance or deed restrictions, explain how the locality determined the units were affordable (see instructions) | Term of Affordability or Deed Restriction (years) (if affordable in perpetuity enter 1000)* | Number of Demolished/Destroyed Units | Demolished or Destroyed Units | Demolished/ Destroyed Units Owner or Renter | Total Density Bonus Applied to the Project (Percentage Increase in Total Allowable Units or Total Maximum Allowable Residential Gross Floor Area) | Number of Other Incentives, Concessions, Waivers, or Other Modifications Given to the Project (Excluding Parking Waivers or Parking Reductions) | List the incentives, concessions, waivers, and modifications (Excluding Parking Waivers or Parking Modifications) | Did the project receive a reduction or waiver of parking standards? (Y/N) | Notes* |
| | | | 0 | 8 | 0 | 42 | 0 | 24 | 0 | 0 | 64 | 2 | | 140 | | | | | | | 8 | | | | | | | |
| 375-205-21 | 970 N Shaffer St | ADR-0227 | | | | | | | | | | | | 0 | NONE | No | | | SFD | | | | | | | | | |
| 375-205-21 | 972 N Shaffer St | ADU-0327 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 375-205-21 | 974 N Shaffer St | ADU25-0015 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-151-14 | 1212 E Walnut AVE | ADU-0200 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-151-15 | 1222 E Walnut AVE | ADU-0286 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-082-11 | 621 E Maple AVE | ADU-0383 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 094-385-15 | 736 S Prospect ST | ADU-0401 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 378-152-28 | 1584 N Fern ST | ADU-0403 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-294-28 | 1215 W Sycamore AVE | ADU-0409 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 094-552-07 | 182 S Kathleen LN | ADU-0412 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-171-02 | 1744 E Orange Grove AVE | ADU-0414 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 374-293-39 | 2741 N Hartman ST | ADU-0415 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 392-162-10 | 881 S Fairmont WAY | ADU-0418 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-031-22 | 280 N Jewell PL | ADU-0419 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 374-194-25 | 1885 N Chouteau ST | ADU-0420 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-144-21 | 471 N Pine ST | ADU-0421 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-432-18 | 727 E Washington AVE | ADU-0426 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-052-02 | 177 N Shattuck PL | ADU-0427 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 375-424-04 | 1660 N Maplewood ST | ADU-0428 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-082-13 | 633 E Maple AVE | ADU-0432 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-123-07 | 337 N Magnolia St | SP-1185 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-123-07 | 339 N Magnolia St | SP-1185 | | | | | | | | | | | | 0 | SB 9 (2021) - Duplex in SF Zone | No | | | All SB9 Units assumed to have a level of affordability | | | | | | | | | |
| 386-123-07 | 343 N Magnolia St | SP-1185 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 374-272-02 | 2745 N Pampas ST | SP-1188 | | | | | | | | | | | | 0 | SB 9 (2021) - Duplex in SF Zone | No | | | All SB9 Units assumed to have a level of affordability | | | | | | | | | |
| 137-396-07 | 4409 W Chapman AVE | ADU-0423 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-672-06 | 133 S Clark ST | ADU-0425 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 094-491-13 | 3425 E Almond Ave | ADU25-0008 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 383-213-19 | 2630 E Hamilton Ave | ADU25-0009 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-241-16 | 680 N Cambridge St | ADU25-0010 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-241-16 | 680 N Cambridge St | ADU25-0011 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-141-15 | 631 E Jefferson Ave | ADU25-0012 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-414-21 | 442 S Shaffer St | ADU25-0014 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 093-331-08 | 624 N Hamlin St | ADU25-0017 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-204-07 | 1334 E Orange Grove Ave | ADU25-0018 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 375-461-09 | 1045 E Carleton Ave | ADU25-0007 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 374-251-47 | 804 W Brentwood Ave | ADU25-0026 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 360-292-03 | 1907 E Bolingridge Dr | ADU25-0028 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 379-181-10 | 664 N Ranch Wood Trl | SB925-0002 | | | | | | | | | | | | 0 | SB 9 (2021) - Duplex in SF Zone | No | | | All SB9 Units assumed to have a level of affordability | | | | | | | | | |
| 379-343-04 | 267 N Bobwhite WAY | ADU-0429 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 375-113-31 | 1422 N Harwood St | ADU25-0032 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-442-31 | 709 W Palm Ave | ADU25-0034 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-102-03 | 525 S Orange St | ADU25-0037 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-223-17 | 414 N Shaffer St | ADU25-0038 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 392-183-10 | 145 S Earlham St | DRC25-0021 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 041-141-16 | 468 S Pixley St | ADU25-0051 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-414-18 | 470 S Shaffer St | PA25-0114 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-365-15 | 1940 W Orangewood AVE, B | 2401-116 | | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | |
| 386-365-15 | 1940 W Orangewood AVE, C | 2401-118 | | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | |
| 386-365-15 | 1940 W Orangewood AVE, A | 2401-119 | | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | |
| 386-241-16 | 684 N Cambridge St, Orange, CA 928 | BLDG25-0652 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 137-401-08 | 4230 W Simmons AVE, Orange, CA 9 | 2308-300 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 393-411-15 | 4533 E Washington AVE, Orange, CA | 2310-086 | | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | |
| 378-341-07 | 2336 E Katella AVE, Orange, CA 928 | 2404-077 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 386-132-25 | 614 E Sycamore AVE, Orange, CA 92 | 2407-133 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-194-10 | 432 E Mayfair AVE, Orange, CA 9286 | 2407-222 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 375-404-04 | 1093 N California ST, Orange, CA 928 | 2409-050 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-432-02 | 732 E Almond Ave, Orange, CA 9286 | 2409-134 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-072-20 | 938 E Van Bibber AVE, Orange, CA 9 | 2409-345 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-201-02 | 315 E Everett PL, Orange, CA 92867 | 2410-214 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 372-663-03 | 3628 E Summitridge LN, Orange, CA | 2410-380 | | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | |
| 392-141-20 | 605 S Breezy WAY, Orange, CA 9286 | 2410-401 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 093-396-03 | 3908 E Walnut Ave, Orange, CA 9286 | 2411-033 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 360-143-02 | 712-714 E Meadowbrook AVE, Orang | 2411-312 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 390-423-23 | 721 E Culver AVE, Orange, CA 9286 | 2412-253 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 393-411-15 | 4531 E Washington AVE, Orange, CA | 2310-085 | | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | |
| 232-062-26 | 3063 W Chapman AVE, UNIT 1, Oran | 2402-153 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 232-062-26 | 3063 W Chapman AVE, UNIT 4, Oran | 2402-156 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 361-861-21 | 2543 N LA CAPELLA Ct, Orange, CA | 2406-185 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 039-292-15 | 1151 W Walnut AVE, Orange, CA 928 | 2408-117 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 360-284-05 | 4065 N Ramona ST, Orange, CA 928 | 2408-287 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |
| 372-622-03 | 2407 E Altura AVE, Orange, CA 9286 | 2409-157 | | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 390-071-11 | 347 S Cambridge ST, Orange, CA 928 | 2410-378 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 386-205-19 | 504 N Lincoln ST, Orange, CA 92867 | 2411-193 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 390-461-12 | 923 E Palmyra AVE. Orange, CA 928 | 2411-247 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 232-062-26 | 3063 W Chapman AVE, UNIT 2, Oran | 2402-154 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 386-173-14 | 2107 E Walnut AVE, Orange, CA 928 | 2402-196 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 379-261-29 | 7834 E Lakeview TRL, Orange, CA 92 | 2403-156 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 390-011-23 | 832 E La Veta AVE, Orange, CA 928 | 2404-118 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 041-041-12 | 164 S Citrus ST, Orange, CA 92868 | 2405-149 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 386-142-03 | 522 E Jefferson AVE, Orange, CA 92 | 2408-303 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 386-271-04 | 929 E Oakmont Ave, Orange, CA 928 | 2409-132 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 094-074-01 | 2708 E Larkstone DR, Orange, CA 92 | 2409-170 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 375-091-11 | 235 E Chestnut AVE, Orange, CA 928 | 2410-399 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 390-103-20 | 323 E River AVE, Orange, CA 92866 | 2411-055 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | |
| 386-291-03 | 1424 E Collins AVE, Orange, CA 928 | 2411-276 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 094-414-06 | 456 S Loretta DR, Orange, CA 92869 | 2412-161 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 386-082-11 | 625 E Maple AVE. Orange. CA 92866 | 2501-020 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 039-031-22 | 1230 W Palm AVE, Orange, CA 9286 | 2501-158 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 039-031-22 | 1232 W Palm Ave, Orange, CA 92866 | 2502-047 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 137-395-10 | 4416 W Stay CT, Orange, CA 92868 | 2307-227 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 232-062-26 | 3063 W Chapman AVE, UNIT 3, Oran | 2402-155 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 390-222-26 | 2133 W Palmyra AVE, Orange, CA 92 | 2404-159 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 375-542-06 | 1834 E Adams AVE, Orange, CA 928 | 2409-171 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 390-131-05 | 514 E Culver AVE, Orange, CA 9286 | 2411-209 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 386-091-07 | 233 N Cambridge ST. Orange. CA 92 | 2412-084 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 386-144-21 | 473 N Pine St, Orange, CA 92866 | BLDG25-0018 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 390-461-12 | 925 E Palmyra Ave. Orange. CA 9286 | BLDG25-0024 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | |
| 390-672-06 | 135 S Clark St, Orange, CA 92868 | BLDG25-0042 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 386-442-40 | 388 N Parker St., A, Orange, CA | BLDG25-0048 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 386-442-32 | 316 N Parker St, Orange, CA 92868 | BLDG25-0049 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 392-162-10 | 879 S Fairmont Way, Orange, CA 928 | BLDG25-0149 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 390-432-18 | 729 E Washington Ave, Orange, CA 9 | BLDG25-0156 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 378-152-28 | 1582 N Fern St, Orange, CA 92867 | BLDG25-0157 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 375-424-04 | 1660 N Maplewood St, Orange, CA 92 | BLDG25-0208 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 386-052-02 | 177 N Shattuck Pl, Orange, CA 92866 | BLDG25-0209 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 361-642-14 | 3126 E Bradbury Ct, Orange, CA 928 | BLDG25-0251 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | |
| 386-204-07 | 1336 E Orange Grove Ave., Orange, ( | BLDG25-0262 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 137-396-07 | 4411 W Chapman Ave, Orange, CA 9 | BLDG25-0294 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 094-491-13 | 3425 E Almond Ave, Orange, CA 928 | BLDG25-0365 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 374-194-25 | 1887 N Chouteau St. Orange. CA 928 | BLDG25-0383 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 374-293-39 | 2743 N Hartman St, Orange, CA 9286 | BLDG25-0424 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 386-433-10 | 870 N Olive St, Orange, CA 92867 | BLDG25-0438 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 390-284-13 | 472 S Alpine Rd, Orange, CA 92868 | BLDG25-0501 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 375-461-41 | 1012 E Scenic Dr, Orange, CA 92867 | BLDG25-0540 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | |
| 375-461-41 | 1010 E Scenic Dr, Orange, CA 92867 | BLDG25-0541 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | |
| 383-071-05 | 721 N Mallard St, Orange, CA 92867 | BLDG25-0567 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 383-071-05 | 717 N Mallard St, Orange, CA 92867 | BLDG25-0572 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 383-071-05 | 719 N Mallard St, Orange, CA 92867 | BLDG25-0573 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 392-171-24 | 304 S Liberty Way. Orange. CA 9286 | BLDG25-0591 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 386-241-16 | 684 N Cambridge St, Orange, CA 928 | BLDG25-0651 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 093-331-08 | 4703 E El Carmen Ave, Orange, CA 9 | BLDG25-0692 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 375-461-09 | 1047 E Carleton Ave. Orange. CA 928 | BLDG25-0694 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 386-294-17 | 1409 E Mayfair Ave, Orange, CA 928 | BLDG25-0737 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 374-251-47 | 804 W Brentwood Ave, Orange, CA 9 | BLDG25-0754 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 390-031-08 | 731 E Fairway Dr, Orange, CA 92866 | BLDG25-0756 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 386-434-19 | 879 N Olive St, Orange, CA 92867 | BLDG25-0763 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 386-434-19 | 877 N Olive St, Orange, CA 92867 | BLDG25-0764 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 378-281-41 | 2811 E Garfield Ave, Orange, CA 928 | BLDG25-0772 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 386-123-07 | 339 N Maonolia St. Orange. CA 9286 | BLDG25-0775 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | |
| 386-123-07 | 343 N Magnolia St, Orange, CA 9286 | BLDG25-0776 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 386-123-07 | 337 N Magnolia St, Orange, CA 9286 | BLDG25-0777 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 137-461-13 | 3819 W Commton Ave. Orange. CA 92 | BLDG25-0833 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 039-362-02 | 263 N Flower St, Orange, CA 92868 | BLDG25-0853 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 360-142-15 | 647 E Meadowbrook St, Orange, CA 9 | BLDG25-0877 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 039-294-33 | 1119 W Sycamore Ave, Orange, CA 9 | BLDG25-0924 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 374-115-02 | 730 E Glendora Ave, Orange, CA 928 | BLDG25-0958 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 378-341-22 | 2307 E Garfield Ave, Orange, CA 928 | BLDG25-0961 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 378-373-03 | 929 N Milford St, Orange, CA 92867 | BLDG25-0970 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 374-151-04 | 2155 N Shaffer St, Orange, CA 92865 | BLDG25-1002 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 360-292-03 | 1907 E Bolmondoe Dr. Orange. CA 92 | BLDG25-1065 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 392-021-18 | 4422 E Fernwood Ave, Orange, CA 9 | BLDG25-1072 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 390-482-10 | 1416 E Century Dr, Orange, CA 9286 | BLDG25-1089 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 375-193-01 | 1005 N Grand St, Orange, CA 92867 | BLDG25-1164 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 039-012-19 | 435 N Citrus St, Orange, CA 92868 | BLDG25-1755 | | | | | | | | | | | 0 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | |
| 375-461-41 | 1042 E Overlook Dr. Orange. CA 928 | BLDG25-1954 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | |
| 375-461-41 | 1052 E Overlook Dr, Orange, CA 928 | BLDG25-2053 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | |
| 375-461-41 | 1054 E Overlook Dr, Orange, CA 928 | BLDG25-2055 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | |
| 375-461-41 | 1062 E Overlook Dr, Orange, CA 928 | BLDG25-2058 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | |
| 375-461-41 | 1064 E Overlook Dr. Orange. CA 928 | BLDG25-2059 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | |
| 375-461-41 | 1072 E Overlook Dr, Orange, CA 928 | BLDG25-2060 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | |
| 375-461-41 | 1074 E Overlook Dr, Orange, CA 928 | BLDG25-2066 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | |
| 375-461-41 | 1082 E Overlook Dr, Orange, CA 928 | BLDG25-2067 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | |
| 375-461-41 | 1084 E Overlook Dr, Orange, CA 928 | BLDG25-2068 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | |
| 375-461-41 | 1086 E Overlook Dr. Orange. CA 928 | BLDG25-2069 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | |
| 375-461-41 | 1092 E Overlook Dr. Orange. CA 928 | BLDG25-2070 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | |
| 375-461-41 | 1001 E Overlook Dr, Orange, CA 928 | BLDG25-2072 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | |
| 375-461-41 | 1011 E Overlook Dr, Orange, CA 928 | BLDG25-2073 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | |
| 375-461-41 | 1021 E Overlook Dr, Orange, CA 928 | BLDG25-2074 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | |
| 375-461-41 | 1031 E Overlook Dr, Orange, CA 928 | BLDG25-2075 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | |
| 375-461-41 | 1041 E Overlook Dr, Orange, CA 928 | BLDG25-2076 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | |
| 375-461-41 | 1051 E Overlook Dr, Orange, CA 928 | BLDG25-2078 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | |
| 375-461-41 | 1071 E Overlook Dr. Orange. CA 928 | BLDG25-2081 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 375-461-41 | 1075 E Overlook Dr, Orange, CA 928 | BLDG25-2086 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | | |
| 375-461-41 | 1081 E Overlook Dr, Orange, CA 928 | BLDG25-2088 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | | |
| 375-461-41 | 1085 E Overlook Dr, Orange, CA 928 | BLDG25-2089 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | | |
| 375-461-41 | 1091 E Overlook Dr, Orange, CA 928 | BLDG25-2090 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | | |
| 375-461-41 | 1095 E Overlook Dr, Orange, CA 928 | BLDG25-2092 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | | |
| 372-663-03 | 3628 E Summitridge LN, Orange, CA | 2410-380 | | | | | | | | | | | 0 | NONE | No | | | | | | | | | | | | | | | | |
| 390-431-18 | 543 E Washington AVE, Orange, CA | 2206-126 | | | | | | | | 1 | | 12/18/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 041-141-10 | 637 W La Veta AVE, B, Orange, CA 9 | 2212-254 | | | | | | | | 1 | | 9/11/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 041-141-11 | 627 W La Veta AVE, Orange, CA 928 | 2212-256 | | | | | | | | 1 | | 9/11/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 386-122-37 | 352 N Maplewood ST, Orange, CA 92 | 2311-083 | | | | | | | | 1 | | 11/14/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 374-114-03 | 2385 N Northumberland RD, Orange, | 2401-217 | | | | | | | | 1 | | 11/26/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 374-182-43 | 2059 N Silverwood ST, Orange, CA 9 | 2404-270 | | | | | | | | 1 | | 8/27/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 039-194-03 | 322 E Mayfair AVE, Orange, CA 9286 | 2405-328 | | | | | | | | 1 | | 12/3/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 039-201-02 | 315 E Everett PL, Orange, CA 92867 | 2410-214 | | | | | | | | 1 | | 11/12/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 360-143-02 | 712-714 E Meadowbrook AVE, Orang | 2411-312 | | | | | | | | 1 | | 7/16/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 360-122-02 | 3198 N Hartman ST, Orange, CA 928 | 2303-209 | | | | | | | | 1 | | 10/8/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 390-413-06 | 449 S Grand ST, Orange, CA 92866 | 2402-001 | | | | | | | | 1 | | 7/15/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 232-062-26 | 3063 W Chapman AVE, UNIT 4, Oran | 2402-156 | | | | | | | | 1 | | 11/3/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 386-282-02 | 883 N Waverly ST, Orange, CA 9286 | 2402-161 | | | | | | | | 1 | | 10/14/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 390-373-02 | 1242 E Fairway DR, Orange, CA 9286 | 2408-029 | | | | | | | | 1 | | 7/10/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 390-071-11 | 347 S Cambridge ST, Orange, CA 92 | 2410-378 | | | | | | | | 1 | | 9/29/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 041-141-12 | 619 W La Veta AVE, Orange, CA 928 | 2212-259 | | | | | | | | 1 | | 9/11/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 093-114-31 | 140 N Hewes ST, Orange, CA 92869 | 2307-098 | | | | | | | | | 1 | 11/20/2025 | 1 | NONE | No | | | | | | | | | | | | | | | | |
| 093-242-90 | 7719 E Santiago Canyon RD, Orange, | 2308-232 | | | | | | | | | 1 | 7/9/2025 | 1 | NONE | No | | | | | | | | | | | | | | | | |
| 386-122-45 | 1027 E Palm AVE, Orange, CA 92866 | 2310-074 | | | | | | | | 1 | | 11/20/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 378-394-18 | 993 N Laurel DR, Orange, CA 92867 | 2311-127 | | | | | | | | 1 | | 12/8/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 386-061-13 | 158 N Waverly ST, Orange, CA 9286 | 2311-282 | | | | | | | | 1 | | 12/10/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 039-035-15 | 925 W Maple AVE, Orange, CA 9286 | 2401-136 | | | | | | | | 1 | | 7/25/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 390-011-23 | 832 E La Veta AVE, Orange, CA 928 | 2404-118 | | | | | | | | 1 | | 10/21/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 386-143-04 | 478 N Pine ST, Orange, CA 92866 | 2405-051 | | | | | | | | 1 | | 8/4/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 039-024-07 | 1202 W Sycamore AVE, Orange, CA | 2411-003 | | | | | | | | 1 | | 10/20/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 386-291-03 | 1424 E Collins AVE, Orange, CA 928 | 2411-276 | | | | | | | | 1 | | 7/1/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 039-031-22 | 1232 W Palm Ave, Orange, CA 92866 | 2502-047 | | | | | | | | 1 | | 11/13/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 039-195-34 | 313 E Mayfair AVE, Orange, CA 9286 | 2311-157 | | | | | | | | 1 | | 11/20/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 039-362-15 | 248 N Stevens ST, Orange, CA 9286 | 2402-060 | | | | | | | | 1 | | 7/25/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 094-493-08 | 260 S Shasta ST, Orange, CA 92869 | 2402-137 | | | | | | | | 1 | | 10/15/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 374-354-10 | 203 E Woodstock AVE, Orange, CA 9 | 2405-277 | | | | | | | | 1 | | 8/28/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 039-035-07 | 938 W Acacia AVE, Orange, CA 9286 | 2411-004 | | | | | | | | 1 | | 10/20/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 386-091-07 | 233 N Cambridge ST, Orange, CA 92 | 2412-084 | | | | | | | | 1 | | 12/29/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 392-162-10 | 879 S Fairmont Way, Orange, CA 928 | BLDG25-0149 | | | | | | | | 1 | | 9/17/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 386-204-07 | 1336 E Orange Grove Ave., Orange, | BLDG25-0262 | | | | | | | | 1 | | 11/24/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 374-293-39 | 2743 N Hartman St, Orange, CA 9286 | BLDG25-0424 | | | | | | | | 1 | | 9/18/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 386-294-17 | 1409 E Mayfair Ave, Orange, CA 9286 | BLDG25-0737 | | | | | | | | 1 | | 12/16/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 375-461-48 | 1249 E Katella AVE, Orange, CA 928 | 2302-199 | | 8 | | 42 | | 24 | | | | 2/11/2025 | 74 | NONE | No | HOME, LIHTC, Other | Other, DB | | 55 | | | | 54.0% | | On-Site Improvements, Development Standards Modification | 4 | No | | |
| 383-051-15 | 453 N Noble ST, Orange, CA 92869 | 2208-360 | | | | | | | | 1 | | 4/10/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 386-091-20 | 274 N Waverly ST, Orange, CA 9286 | 2307-158 | | | | | | | | 1 | | 6/11/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 137-462-12 | 3725 W SHERRINGHAM AVE, Orang | 2310-166 | | | | | | | | 1 | | 1/20/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 137-462-13 | 3735-3737 W SHERRINGHAM AVE, | 2310-334 | | | | | | | | 1 | | 1/8/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 390-421-01 | 311 S Shaffer ST, Orange, CA 92866 | 2402-021 | | | | | | | | 1 | | 3/21/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 375-416-10 | 1056 N Lincoln ST, Orange, CA 9286 | 2403-203 | | | | | | | | 1 | | 6/13/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 386-122-24 | 374 N Magnolia ST, Orange, CA 9286 | 2403-230 | | | | | | | | 1 | | 1/6/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 390-141-07 | 329 S Wayfield ST, Orange, CA 9286 | 2404-139 | | | | | | | | 1 | | 1/9/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 390-502-18 | 2047 E Palmyra AVE, Orange, CA 92 | 2404-182 | | | | | | | | 1 | | 4/9/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 039-044-28 | 1025 W Arbor WAY, Orange, CA 928 | 2409-297 | | | | | | | | 1 | | 6/19/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 390-461-12 | 923 E Palmyra AVE, Orange, CA 928 | 2411-247 | | | | | | | | 1 | | 6/3/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 094-451-12 | 3791 E Lakstone DR, Orange, CA 92 | 2205-131 | | | | | | | | 1 | | 1/6/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 379-311-18 | 5106 E Glen Arran LN, Orange, CA 92 | 2307-254 | | | | | | | | 1 | | 3/31/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 386-151-17 | 1244 E Walnut AVE, Orange, CA 928 | 2402-159 | | | | | | | | 1 | | 1/8/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 392-184-09 | 215 S Earlham ST, Orange, CA 9286 | 2405-303 | | | | | | | | 1 | | 3/19/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 390-397-06 | 333 E Palmyra AVE, Orange, CA 928 | 2401-204 | | | | | | | | 1 | | 4/14/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 039-203-12 | 690 N Grand ST, Orange, CA 92867 | 2402-251 | | | | | | | | 1 | | 5/1/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 360-283-12 | 4070 N Ramona ST, Orange, CA 928 | 2404-074 | | | | | | | | 1 | | 4/22/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 039-244-04 | 269 N Center ST, Orange, CA 92866 | 2404-181 | | | | | | | | 1 | | 6/3/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 386-084-07 | 239 N Pine ST, Orange, CA 92866 | 2301-045 | | | | | | | | 1 | | 4/14/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 360-121-18 | 3220 N Pinewood ST, Orange, CA 92 | 2304-027 | | | | | | | | 1 | | 5/28/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 386-134-19 | 358 N Cambridge ST, Orange, CA 92 | 2310-329 | | | | | | | | 1 | | 1/8/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 392-141-18 | 619 S Breezy WAY, Orange, CA 9286 | 2402-034 | | | | | | | | 1 | | 6/18/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 039-253-22 | 322 E Maple AVE, Orange, CA 92866 | 2406-288 | | | | | | | | 1 | | 1/10/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 378-182-20 | 2409 E Trenton AVE, Orange, CA 92 | 2407-209 | | | | | | | | 1 | | 5/15/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 386-232-10 | 525 N Pine ST, Orange, CA 92867 | 2306-163 | | | | | | | | 1 | | 2/12/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 231-281-12 | 3813 W Park Bellhoa AVE, Orange, C | 2309-076 | | | | | | | | 1 | | 5/29/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 093-362-31 | 3413 E Vine AVE, Orange, CA 92869 | 2405-317 | | | | | | | | 1 | | 6/16/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 390-413-13 | 337 E La Veta AVE. Orange. CA 9286 | 2409-295 | | | | | | | | 1 | | 6/26/2025 | 1 | NONE | No | | | All ADUs assumed to have a level of affordability | | | | | | | | | | | | | |
| 390-231-06 | 164 S Marks Wy, Orange, CA 92868 | SP-1182 | | | | | | | | | | | 0 | NONE | No | Other | Other, DB | | 55 | | | | 285.0% | | On-Site Improvements, Development Standards Modification | 8 | No | | 11 of the 49 units restricted to Extremely Low income to be counted in the County of Orange RHNA Share. The one market rate (Manager's Unit) units and other 38 Extremely low income units to be counted by City or Orange in their RHNA allocation. |
| | | | | | | | | | | | | | 0 | | | | | | | | | | | | | | | | | |
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|---|---|---|
| **Jurisdiction** | Orange | |
| **Reporting Year** | 2025 | (Jan. 1 - Dec. 31) |
| **Planning Period** | 6th Cycle | 10/15/2021 - 10/15/2029 |

**ANNUAL ELEMENT PROGRESS REPORT**
**Housing Element Implementation**

This table is auto-populated once you enter your jurisdiction name and current year data. Past year information comes from previous APRs.

Please contact HCD if your data is different than the material supplied here

**Table B**
**Regional Housing Needs Allocation Progress**
**Permitted Units Issued by Affordability**

| | | 1 | Projection Period | 2 | | | | | | | | | 3 | 4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Income Level** | | **RHNA Allocation by Income Level** | **Projection Period - 06/30/2021-10/14/2021** | **2021** | **2022** | **2023** | **2024** | **2025** | **2026** | **2027** | **2028** | **2029** | **Total Units to Date (all years)** | **Total Remaining RHNA by Income Level** |
| Acutely Low | Deed Restricted | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Non-Deed Restricted | | - | - | - | - | - | - | - | - | - | - | | |
| Extremely Low | Deed Restricted | - | - | - | 24 | 8 | - | - | - | - | - | - | 32 | - |
| | Non-Deed Restricted | | - | - | - | - | - | - | - | - | - | - | | |
| Very Low | Deed Restricted | 1,067 | - | - | 26 | 42 | - | - | - | - | - | - | **100** | **967** |
| | Non-Deed Restricted | | - | - | - | - | - | - | - | - | - | - | | |
| Low | Deed Restricted | 604 | - | - | 62 | 24 | 166 | - | - | - | - | - | **252** | **352** |
| | Non-Deed Restricted | | - | - | - | - | - | - | - | - | - | - | | |
| Moderate | Deed Restricted | 677 | - | - | - | - | - | - | - | - | - | - | **376** | **301** |
| | Non-Deed Restricted | | 27 | 2 | 83 | 69 | 104 | 91 | - | - | - | - | | |
| Above Moderate | | 1,588 | - | 1 | 50 | 1 | 4 | 81 | - | - | - | - | **137** | **1,451** |
| Total RHNA | | **3,936** | | | | | | | | | | | | |
| Total Units | | | **27** | **3** | **245** | **144** | **274** | **172** | **-** | **-** | **-** | **-** | **865** | **3,071** |

*For years prior to 2025, Acutely Low-Income units are reported within the Extremely Low-Income category

*For jurisdictions that received RHNA determinations for the current cycle prior to the passage of AB 3093 (September 19, 2024):
- You were not allocated Acutely Low-Income and Extremely Low-Income RHNA targets, therefore the allocations in Field 1 are listed as "0"
  - If you wish to set your own targets in these income categories for informational purposes, contact HCD staff at apr@hcd.ca.gov.
- All Acutely Low-Income and Extremely Low-Income units reported during the cycle are counted towards Very-Low Income RHNA progress

*For years prior to 2025, data on deed-restricted vs. non-deed restricted Extremely Low-Income units is approximated from whether the projects reported any deed-restricted Very Low-Income Units. If you wish to edit this historical data for accuracy or have any questions about the data, you may login to HCD's online APR system, or contact HCD staff at apr@hcd.ca.gov.

Please Note: Table B does not currently contain data from Table F or Table F2 for prior years. You may login to the APR system to see Table B that contains this data.

Please note: The APR form can only display data for one planning period. To view progress for a different planning period, you may login to HCD's online APR system, or contact HCD staff at apr@hcd.ca.gov.

| | | |
|---|---|---|
| **Jurisdiction** | Orange | |
| **Reporting Year** | 2025 | (Jan. 1 - Dec. 31) |
| **Planning Period** | 6th Cycle | 10/15/2021 - 10/15/2029 |

**ANNUAL ELEMENT PROGRESS REPORT**

**Housing Element Implementation**

**Note: "+" indicates an optional field**

Cells in grey contain auto-calculation formulas

**Table C**

**Sites Identified or Rezoned to Accommodate Shortfall Housing Need and No Net-Loss Law**

| Project Identifier | | | | Date of Rezone | RHNA Shortfall by Household Income Category | | | | Rezone Type | Sites Description | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | 2 | 3 | | | | 4 | 5 | 6 | 7 | 8 | | 9 | 10 | 11 |
| APN | Street Address | Project Name+ | Local Jurisdiction Tracking ID+ | Date of Rezone | Very Low-Income | Low-Income | Moderate-Income | Above Moderate-Income | Rezone Type | Parcel Size (Acres) | General Plan Designation | Zoning | Minimum Density Allowed | Maximum Density Allowed | Realistic Capacity | Vacant/Nonvacant | Description of Existing Uses |
| Summary Row: Start Data Entry Below | | | | | | | | | | | | | | | | | |
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# ANNUAL ELEMENT PROGRESS REPORT
## Housing Element Implementation

| Jurisdiction | Orange | |
|---|---|---|
| Reporting Year | 2025 | (Jan. 1 - Dec. 31) |

**Table D**

**Program Implementation Status pursuant to GC Section 65583**

**Housing Programs Progress Report**
**Describe progress of all programs including local efforts to remove governmental constraints to the maintenance, improvement, and development of housing as identified in the housing element.**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|
| Name of Program | Objective | Projected Completion Date in Housing Element | Applicable Cycle | Status of Program Implementation | Program Implementation Details | Quantified Outcomes: Category | Quantified Outcomes: Count | Supporting Documents |
| 1A - The City will identify and pursue potential financing sources, as well as identify and implement regulatory incentives and other in-kind technical assistance to non-profits, affordable housing developers and property owners for the rehabilitation/acquisition of multi-family properties for affordable housing which is subject to available funding sources annually. The City will work with property owners to determine the most appropriate method to maintain affordability of housing units through restriction and/or covenants and prioritize and target buildings that exhibit the highest levels of deferred maintenance. | Annually identify and pursue potential funding sources, as well as adopt and implement regulatory incentives and technical assistance for property owners and housing developers. | 12/31/2025 | 6th Cycle | Continuous | With the dissolution of Redevelopment Agencies throughout the State in 2011/2012, including the Orange Redevelopment Agency, the City can no longer provide financial assistance for acquisition/ rehabilitation projects in the same direct manner. Instead, dedicated staff have been available at no cost for tracking at-risk projects and engaging in discussions with multi-family property owners and potential owners seeking to maintain affordability.<br><br>The City Council has authorized the execution of a joint exercise of powers agreement relating to the CSCDA Community Improvement Authority, and the formation of a public benefit agreement, approving the issuance of revenue bonds for financing, acquisition, and construction of projects. The City will continue to utilize this tool. To preserve affordable housing, the City has partnered with property owners and developers to use and, as available subject to fund eligibility, will continue to use funding options including: California Debt Limit Allocation Committee (CDLAC) tax-exempt bonds, Local Housing Trust Fund (LHTF), Low-Income Housing Tax Credit (LIHTC) via the California Tax Credit Allocation Committee (CTCAC), Project Based Section 8 (PBS8), Redevelopment Agency (RDA) funds, Section 8 Annual Renewal Program, and Housing Assistance Payments (HAP) contracts.<br><br>In 2025, the City provided funding in the amount of $225,313 from HOME, Housing Set-Aside, and In-Lieu fees funding to support Villa St. Joseph, a 49-unit senior affordable housing development that includes units for extremely low-income households<br><br>In 2022, the City provided 3 surplus, single family residential properties with historic homes on them to HomeAid Orange County to create a multigenerational affordable housing community that both families and seniors experiencing homelessness can reside within. As part of the project HomeAid will renovate the homes and add Accessory Dwelling Units to each property to expand the resident capacity. HomeAid submitted for building plan check in 2023, building permits for construction were issued in 2024, and the construction for the home renovations and new ADUs began in 2024. Construction is expected to be completed in spring 2025. | Other | 1 | None |
| 1A - The City will identify and pursue potential financing sources, as well as identify and implement regulatory incentives and other in-kind technical assistance to non-profits, affordable housing developers and property owners for the rehabilitation/acquisition of multi-family properties for affordable housing which is subject to available funding sources annually. The City will work with property owners to determine the most appropriate method to maintain affordability of housing units through restriction and/or covenants and prioritize and target buildings that exhibit the highest levels of deferred maintenance. | Annually outreach to property owners to collaborate in preserving affordable units at-risk of converting to market rate. The City will outreach to property owners whose deed restriction expires within the next three years to discuss an agreement to maintain the affordability of the units in question with final decision by the property owner. | 12/31/2025 | 6th Cycle | Continuous | Throughout 2025, City staff remained available to provide technical assistance and information regarding affordability extension options, including renewal of affordability agreements, participation in rental assistance programs, and coordination with qualified entities. Additionally, City staff reached out to C&C regarding Adams Triplex I and requested we meet to discuss extending affordability. | Other | 1 | None |
| 1B - The City shall provide for regular monitoring of deed-restricted units that have the potential of converting to market-rate during the planning period. The City may provide technical assistance for owners of these units seeking funding and other opportunities to extend and/or renew deed restrictions and/or covenants. The City will assist in preserving at-risk units by, but not limited to, supporting non-profit applications for funding to purchase at-risk units, work with property owners to maintain affordability and develop preservation strategies, and assist with funding when available. The City will continue to comply with noticing requirements and coordinate with qualified entities to preserve at-risk units. | Coordinate with property owners in identifying methods and funding sources to maintain the affordability of units at-risk of converting to market-rate. | 12/31/2025 | 6th Cycle | Continuous | The City maintains an affordable housing project compliance spreadsheet which tracks projects nearing the end of their affordability covenant. This list is reviewed annually to identify property owners that the City needs to reach out to in advance to discuss options for extending affordability. The following property is at-risk of converting to market-rate within the planning period:<br><br>Three (3) units at Adams Triplex I (1837-1841 E. Adams) are identified as at-risk of converting to market rate units. These units are being preserved through the Section 8 Annual Renewal Program. The current contract runs through 2027.<br><br>The City will continue to assist in preserving at-risk units by, but not limited to, supporting non-profit applications for funding to purchase at-risk units, work with property owners to maintain affordability and develop preservation strategies, and assist with aforementioned funding options when available. The City will continue to comply with noticing requirements and coordinate with qualified entities to preserve at-risk units. Long-term solutions, including alternative funding options, are continually being sought for retention of all the City's affordable housing stock. | Other | 1 | None |
| 1C - The City will conduct annual internal reviews of the planning and development review process. The City will look for opportunities to create efficiency in the review of residential projects to reduce the holding, development and labor costs assumed by the project applicant. | Annual review of the planning and development review process. | 12/31/2025 | 6th Cycle | Continuous | The City already complies with State Density Bonus law which reduces project costs by increasing density, reduces any costs born of development standards through waivers and concessions, and reduces parking standards thereby increasing land area for housing.<br><br>To create efficiency in the development review process, Staff continues to meet with prospective affordable housing developers in an effort to answer preliminary questions and explain the submittal requirements for all departments and to identify any potential development constraints. | Other | 1 | None |

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|---|---|---|---|---|---|---|---|---|
| 1D - The City will continue to address code violations and deferred maintenance issues on a case-by-case basis, as well as provide information and seek grant and other funding mechanisms on resources available for maintenance of existing neighborhoods. | Maintain informational material(s) on the City's website regarding code violations and resources for maintenance of existing neighborhoods. | 12/31/2029 | 6th Cycle | Continuous | In 2025, the City launched its online Civic Portal for applicants and residents. Through the Civic Portal residents are able to report any code violations 24/7. | Other | 1 | https://h2.maintstar.co/orange/portal/#/ |
| 1D - The City will continue to address code violations and deferred maintenance issues on a case-by-case basis, as well as provide information and seek grant and other funding mechanisms on resources available for maintenance of existing neighborhoods. | Seek grants and other funding mechanisms for maintenance of existing neighborhoods. | 12/31/2029 | 6th Cycle | Continuous | The City dedicates staff to property maintenance activities for complainants unable to perform required upkeep. Staff continues to coordinate with Fair Housing and the County of Orange to bring information on resources to these communities. | Other | 1 | https://www.fairhousingoc.org/ & https://ochousing.org/ |
| 1D - The City will continue to address code violations and deferred maintenance issues on a case-by-case basis, as well as provide information and seek grant and other funding mechanisms on resources available for maintenance of existing neighborhoods. | Annually review the number and types of code violations and identify additional resources in areas demonstrating additional need through an increase in code enforcement cases year over year. | 12/31/2025 | 6th Cycle | Continuous | The City maintains a database that tracks code complaints, types of complaints, locations of complaints, and disposition of complaints. Staff analyzed and reviewed the inspection policies and procedures and implemented a digital format to streamline the inspection process to enhance the quality of life of our City's most vulnerable populations. Staff continues to perform annual inspections of the affordable housing stock in the City, with 254 units inspected in 2025 at various afforable housing sites. | Units | 254 | None |
| 1E - The City will continue to utilize the Public Works and Community Services Departments for the removal of graffiti and other deferred maintenance issues on public property, including sidewalks, parks, bus shelters signs and other structures adjacent to the public right-of-way, to enhance the quality of Orange's residential neighborhoods. | Maintain informational material(s) on the City's website regarding City resources for public property maintenance. | 12/31/2029 | 6th Cycle | Continuous | The Public Works Field Service Division maintains information on public property maintenance reporting resources at the following link: https://www.cityoforange.org/our-city/departments/public-works/field-services-division | Other | 1 | https://www.cityoforange.org/our-city/departments/public-works/field-services-division |
| 1E - The City will continue to utilize the Public Works and Community Services Departments for the removal of graffiti and other deferred maintenance issues on public property, including sidewalks, parks, bus shelters signs and other structures adjacent to the public right-of-way, to enhance the quality of Orange's residential neighborhoods. | Annually review City-provided resources for graffiti and other deferred maintenance issues on public property, and if issues increase, identify and implement solutions and/or adopt new programs, including, but not limited to, changes to landscaping and streetscape, outreach to local residents or businesses, or increased security presence. | 12/31/2025 | 6th Cycle | Continuous | The City's Public Works and Community Services Departments continue to maintain public property and address deferred maintenance issues, including on sidewalks, parks, bus shelters and signs. City staff strives to remove graffiti within 48 business hours. | Other | 1 | None |
| 1F - The City places high priority to the conservation, preservation and enhancement of the City's historic residential neighborhoods. The City will continue to implement the goals and objectives contained in the Cultural Resources and Historic Preservation Element of the General Plan, the Historic Preservation Design Standards for Old Towne, and the Orange Eichler Design Standards to promote the continued quality of the City's historic residential resources and maintenance of the City's existing housing stock. In addition, the City will continue to promote the Mills Act Program and create public information and outreach materials. | Promote informational materials on historical preservation and the Mills Act Program on the City's website and at City Hall. Provide materials at community outreach events. | 12/31/2029 | 6th Cycle | Continuous | Information regarding historic preservation and the Mills Act Program is located on our website through this link: https://www.cityoforange.org/residents/historic-preservation<br><br>In 2025, the City of Orange undertook a proactive review of its Mills Act Historic Property Contract program to strengthen oversight and long-term effectiveness. The City temporarily suspended the acceptance of new applications while staff evaluated procedures, updated standards, and identified opportunities to improve administration and compliance. As part of this effort, individualized letters were sent to all current contract holders (428 letters total) reminding them of their contractual responsibilities, maintenance requirements, and reinvestment obligations. These actions were intended to protect historic resources, ensure consistent program accountability, and position the program for a more sustainable and transparent relaunch.<br><br>The Eichler District Story Map is on the City website at: https://storymaps.arcgis.com/stories/c5f913f6197c4e5f96e68a08162e3687.<br>The Eichler District Story Map highlights the history and distinct elements of the City of Orange's three Eichler districts.<br><br>The City continues to incentivize preserving historic residential structures through the Mills Act program and enforcement of the Old Towne Design Standards and Eichler Design Standards for projects located within established historic districts. | Other | 1 | https://www.cityoforange.org/residents/historic-preservation & https://storymaps.arcgis.com/stories/c5f913f6197c4e5f96e68a08162e3687 |
| 2A - The City will continue to conduct an annual implementation review of the Housing Element consistent with HCD's annual reporting requirements. The review includes the following information: a log of new residential development permits and completion reports; inventory of units built in the Extremely Low-, Very Low- and Low-Income categories, an update or inventory of approved projects; an annual estimate of population from the State Department of Finance; and available vacant land and zoning survey. | Annually complete and submit the Annual Progress Report (APR) to HCD. Assess the Housing Element sites and programs every two years and, as needed, make revisions. | 12/31/2025 | 6th Cycle | Completed | The City is herewith submitting the APR. The City's Housing Element update was found to be in substantial conformance with State housing law on January 2, 2024, and every effort is being made to ensure Housing Element goals and polices are implemented. | Other | 1 | Table A, A2, and B of this Report. |
| 2B - The City recognizes the need for housing affordable to all income segments of the population, especially Lower-Income households. The City will continue to support and encourage the development of housing affordable to Lower-Income households through incentives such as density bonuses. Additionally, the City will continue to outreach to the development community, seek partnerships and provide in-kind assistance in developing new affordable housing. | Annually outreach to and meet with the development community to promote the development of affordable housing and seek partnerships. The City has established a goal to develop 65 affordable housing units through partnerships and outreach. | 12/31/2025 | 6th Cycle | Continuous | Through the course of 2025, the City engaged with a number of developers regarding the City's affordable housing goals. The City maintained regular communication with our local CHDO, Orange Housing Development Corporation.<br><br>To create efficiency in the development review process, Staff continues to meet with prospective affordable housing developers in an effort to answer preliminary questions and explain the submittal requirements for all departments and to identify any potential development constraints.<br><br>The City exceeded its 65 affordable housing unit goal early in the RHNA cycle by completing the construction of Katella Terrace, Sisters of St. Joseph, and Valencia Garden affordable housing developments, which provided 185 affordable units (74 units for Katella Terrace, 50 units for Sisters of St. Joseph, and 61 for Valencia Gardens) and exceeds the goal of 65 affordable housing units by 120 units. | Other | 1 | None |

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|---|---|---|---|---|---|---|---|---|
| 2B - The City recognizes the need for housing affordable to all income segments of the population, especially Lower-Income households. The City will continue to support and encourage the development of housing affordable to Lower-Income households through incentives such as density bonuses. Additionally, the City will continue to outreach to the development community, seek partnerships and provide in-kind assistance in developing new affordable housing. | Continue to proactively build relationships with the building community, including nonprofits, and establish an array of regulatory and financial tools to assist residential development with a nonprofit, including utilizing funds available to the City such as former redevelopment agency set aside funds and other local financial resources, donating land, supporting funding applications, assisting entitlements and expediting permit processing. | 12/31/2029 | 6th Cycle | Continuous | The City continues to building relationships with the building community and encourages the development of underutilized parcels for housing development. In 2025, the City launched a new public portal which allows applicants to submit online and all review and communication is done through the portal to help streamline the review process, reducing project costs for developers. | Other | 1 | https://h2.maintstar.co/orange/portal/#/ |
| 2B - The City recognizes the need for housing affordable to all income segments of the population, especially Lower-Income households. The City will continue to support and encourage the development of housing affordable to Lower-Income households through incentives such as density bonuses. Additionally, the City will continue to outreach to the development community, seek partnerships and provide in-kind assistance in developing new affordable housing. | Adopt an amendment to the Density Bonus Ordinance in compliance with Government Code Section 65915 and develop an outreach program to ensure its successful implementation. | 12/31/2029 | 6th Cycle | Completed | On April 23, 2024, the City of Orange City Council adpoted Ordinance No. 05-24 amending Chapter 17.08 and 17.15 of the Orange Municipal Code realting to Densisty Bonus Law. | Other | 1 | https://ecode360.com/43568281 |
| 2B - The City recognizes the need for housing affordable to all income segments of the population, especially Lower-Income households. The City will continue to support and encourage the development of housing affordable to Lower-Income households through incentives such as density bonuses. Additionally, the City will continue to outreach to the development community, seek partnerships and provide in-kind assistance in developing new affordable housing. | Continue to pro-rate adjustments to ADUs over 800 square feet based on the level of impacts. | 12/31/2029 | 6th Cycle | Continuous | The City continues to pro-rate adjustments to ADUs over 800 square feet based on the level of impacts. | Other | 1 | None |
| 2B - The City recognizes the need for housing affordable to all income segments of the population, especially Lower-Income households. The City will continue to support and encourage the development of housing affordable to Lower-Income households through incentives such as density bonuses. Additionally, the City will continue to outreach to the development community, seek partnerships and provide in-kind assistance in developing new affordable housing. | Continue to provide reduced parking standards for senior housing developments and additional reductions when they include affordable units. | 12/31/2029 | 6th Cycle | Continuous | The City accommodates the density bonus statute by granting concessions and waivers when requested by the development community when affordable housing is a project component. | Other | 1 | None |
| 2C - The City will continue to encourage the development of rental and for-sale housing for larger (5 or more persons) families through outreach to private and non-profit housing developers. The City will support developers/builders that incorporate larger bedroom counts (3 or more bedrooms) to accommodate the needs of larger families and reduce incidents of overcrowding in the existing housing stock. The City will identify and adopt regulatory incentives, such as density bonuses, that encourage and support the development of housing for large families. | Annually outreach to and meet with the development community to promote the development of units for large families and receive feedback on potential constraints or resources. | 12/31/2025 | 6th Cycle | Continuous | Through the course of 2025, the City engaged with a number of developers regarding the City's affordable housing goals. The City maintained regular communication with our local CHDO, Orange Housing Development Corporation. | Other | 1 | None |
| 2C - The City will continue to encourage the development of rental and for-sale housing for larger (5 or more persons) families through outreach to private and non-profit housing developers. The City will support developers/builders that incorporate larger bedroom counts (3 or more bedrooms) to accommodate the needs of larger families and reduce incidents of overcrowding in the existing housing stock. The City will identify and adopt regulatory incentives, such as density bonuses, that encourage and support the development of housing for large families. | Promote density bonuses to encourage and support the development of housing for large families. | 12/31/2029 | 6th Cycle | Continuous | The City accommodates the density bonus statute when requested by the development community when affordable housing is a project component to support the development of housing for large families. | Other | 1 | None |
| 2C - The City will continue to encourage the development of rental and for-sale housing for larger (5 or more persons) families through outreach to private and non-profit housing developers. The City will support developers/builders that incorporate larger bedroom counts (3 or more bedrooms) to accommodate the needs of larger families and reduce incidents of overcrowding in the existing housing stock. The City will identify and adopt regulatory incentives, such as density bonuses, that encourage and support the development of housing for large families. | Identify and adopt regulatory incentives to encourage and support the development of housing for large families. | 12/31/2024 | 6th Cycle | Completed | The City accommodates the density bonus statute when requested by the development community when affordable housing is a project component to support the development of housing for large families. In 2025, the City launched a new public portal which allows applicants to submit online and all review and communication is done through the portal to help streamline the review process, reducing project costs for developers. In 2025, the City issued building permits for 23 housing units that were 3+ bedrooms. | Other | 1 | https://h2.maintstar.co/orange/portal/#/ |

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| 2D - The City recognizes the unique needs of its elderly residents and will continue to encourage, through regulatory incentives, the development of senior housing that offers a wide range of housing choices from independent living to assisted living with on-site services and memory care facilities. The City shall analyze the existing provisions in the Zoning Code and then identity and implement additional ability for regulatory relief. | Annually outreach to and meet with the development community to promote the development of senior housing and receive feedback on potential constraints or resources. | 12/31/2025 | 6th Cycle | Continuous | Staff continues to maintain close contact with our CHDO, Orange Housing Development Corporation, and consistently meets with any developers inquiring about sites and provides advice, guidance, funding options, and any options for City staff assistance/project streamlining. Staff dedicated to housing remain available for technical consultation on any infill development proposals. Initial assistance is always at no cost to developers. Staff regularly advertises that senior housing is permitted "by right" in all Residential and Mixed-Use Zoning districts. In addition, staff informs developers that the City utilizes State Law and OMC Chapter 17.15 to accommodate density bonuses and other incentives for affordable housing. Staff also regularly notifies the development community that senior affordable housing is also permitted, subject to Conditional Use Permit approval within commercial zones. The Commercial Code includes development standards (Urban Mixed Use zoning standards) designed to encourage and facilitate infill senior housing development close to goods and services. Staff looks for code streamlining opportunities at the time each code amendment is pursued. | Other | 1 | None |
| 2D - The City recognizes the unique needs of its elderly residents and will continue to encourage, through regulatory incentives, the development of senior housing that offers a wide range of housing choices from independent living to assisted living with on-site services and memory care facilities. The City shall analyze the existing provisions in the Zoning Code and then identity and implement additional ability for regulatory relief. | Evaluate the provisions of the Zoning Code and identify amendments to adopt that further incentivize the development of a variety of senior housing choices. | 6/30/2024 | 6th Cycle | Continuous | City staff continued to apply regulatory incentives permitted under State law, including density bonus provisions, reduced parking standards, and streamlined review for qualifying senior housing projects. Staff also provided ongoing technical assistance and pre-application guidance to senior housing developers to explain applicable zoning standards, incentives, and permitting requirements across residential, mixed-use, and commercial zoning districts. | Other | 1 | None |
| 2E - The City will encourage infill development within feasible development sites for homeownership and rental units. The City will continue to facilitate infill development through implementation of its General Plan and Zoning Code, allowing for higher density housing in appropriate areas of the City where potential exists for infill or site redevelopment and employment and transit are concentrated. The City will also encourage compatible residential development integrated into existing neighborhoods and districts where appropriate. | Within 12 months of adoption of the Housing Element, the City shall evaluate and amend the existing provisions in the Zoning Code to provide additional regulatory relief (i.e., streamlined review, reduced and objective development standards, lot consolidation, and other methods deemed appropriate) to further encourage infill housing development. | 12/31/2023 | 6th Cycle | In Progress | The City of Orange is built out. Hence, nearly all new units in the city are infill construction. The selected housing infill sites demonstrate the City's ability to accommodate City of Orange's RHNA allocation within the 6th Cycle. A surplus of sites has been designed to ensure housing at all income levels can be provided. The City adopted a transfer development rights ordinance and objective design standards ordinance which will facilitate housing development. The City also adopted an update to its ADU ordinance to further the already steady pace of ADU applications.<br><br>In 2025, the City issued building permits to allow the construction of 172 housing units. Finaled building permits for new residential units totaled 140, including 8 extremely low, 42 very-low, and 24 low-income deed restricted units. Please see Table A2 for a complete list of projects that received final building inspection, had building permits issued, and were entitled in 2025.<br><br>The City maintains a map highlighting properties that are identified in the Housing Element as "housing opportunity sites". The map is available to housing developers via the City's website at the following link:<br>https://experience.arcgis.com/experience/830a9a6218fb4d76b6c711c451c85e34<br><br>The City continues to display the General Plan Housing Element on the City website and Appendix B of the element includes the Candidate Sites in map and table format. The Housing Element is located at the following link:<br>https://www.cityoforange.org/home/showdocument?id=4900&t=638344437022900000<br><br>Staff dedicated to housing remain available for technical consolation on any infill development proposals. Initial assistance is always at no cost to developers. | Other | 1 | https://experience.arcgis.com/experience/830a9a6218fb4d76b6c711c451c85e34 & https://www.cityoforange.org/home/showdocument?id=4900&t=638344437022900000 |
| 2E - The City will encourage infill development within feasible development sites for homeownership and rental units. The City will continue to facilitate infill development through implementation of its General Plan and Zoning Code, allowing for higher density housing in appropriate areas of the City where potential exists for infill or site redevelopment and employment and transit are concentrated. The City will also encourage compatible residential development integrated into existing neighborhoods and districts where appropriate. | Identify and adopt an inventory of potential infill sites utilizing the site analysis found in Appendix B of the Housing Element. | 12/31/2025 | 6th Cycle | Continuous | The City continues to display the General Plan Housing Element on the City website and Appendix B of the element includes the Candidate Sites in map and table format. The City maintains a map highlighting properties that are identified in the Housing Element as "housing opportunity sites". The map is available to housing developers via the City's website at the following link:<br>https://experience.arcgis.com/experience/b87909fabf62480da448567aebecd0f1/page/Page?views=Layer-List#widget_63=layer_visibility:%7B%22widget_63-dataSource_1%22%3A%7B%22widget_63-dataSource_1-1945162f6ad-layer-23%22%3Atrue%7D%7D | Other | 1 | https://www.cityoforange.org/home/showdocument?id=4900&t=638344437022900000 & https://experience.arcgis.com/experience/b87909fabf62480da448567aebecd0f1/page/Page?views=Layer-List#widget_63=layer_visibility:%7B%22widget_63-dataSource_1%22%3A%7B%22widget_63-dataSource_1-1945162f6ad-layer-23%22%3Atrue%7D%7D |
| 2E - The City will encourage infill development within feasible development sites for homeownership and rental units. The City will continue to facilitate infill development through implementation of its General Plan and Zoning Code, allowing for higher density housing in appropriate areas of the City where potential exists for infill or site redevelopment and employment and transit are concentrated. The City will also encourage compatible residential development integrated into existing neighborhoods and districts where appropriate. | Seek partnerships with and provide informational material including a copy of the inventory and listing of City incentives and programs to housing developers | 12/31/2029 | 6th Cycle | Continuous | The City maintains a map highlighting properties that are identified in the Housing Element as "housing opportunity sites". The map is available to housing developers via the City's website at the following link:<br>https://experience.arcgis.com/experience/830a9a6218fb4d76b6c711c451c85e34 The City continues to display the General Plan Housing Element on the City website and Appendix B of the element includes the Candidate Sites in map and table format. The Housing Element is located at the following link:<br>https://www.cityoforange.org/home/showdocument?id=4900&t=638344437022900000 | Other | 1 | https://experience.arcgis.com/experience/830a9a6218fb4d76b6c711c451c85e34 & https://www.cityoforange.org/home/showdocument?id=4900&t=638344437022900000 |
| 2E - The City will encourage infill development within feasible development sites for homeownership and rental units. The City will continue to facilitate infill development through implementation of its General Plan and Zoning Code, allowing for higher density housing in appropriate areas of the City where potential exists for infill or site redevelopment and employment and transit are concentrated. The City will also encourage compatible residential development integrated into existing neighborhoods and districts where appropriate. | Monitor the development of Infill candidate housing sites as it relates to the provision of housing affordable to lower-income households. If development does not occur as projected, the City will identify and adopt new incentives, actions, or additional sites to continue maintain compliance with Housing Element requirements for RHNA | 12/31/2029 | 6th Cycle | Continuous | In 2025, the City continued to monitor the development status of infill candidate housing sites identified in the Housing Element and tracked housing production by income category to ensure the continued provision of housing affordable to lower-income households. City staff maintains RHNA housing sites monitoring tools, reviews entitlement and building permit activity, and coordinates with developers to evaluate whether infill development is occurring consistent with Housing Element assumptions.<br>Based on this monitoring, the City determines that development is proceeding at or above projected levels, including multiple 100 percent affordable and deed-restricted infill projects that are completed, under construction, or entitled during the early years of the 6th Cycle. Accordingly, the City does not identify the need to adopt additional incentives or designate new housing opportunity sites in 2025 but continues ongoing monitoring and will identify and adopt additional incentives, actions, or sites as necessary to maintain compliance with RHNA and Housing Element requirements. | Other | 1 | None |

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| 2E - The City will encourage infill development within feasible development sites for homeownership and rental units. The City will continue to facilitate infill development through implementation of its General Plan and Zoning Code, allowing for higher density housing in appropriate areas of the City where potential exists for infill or site redevelopment and employment and transit are concentrated. The City will also encourage compatible residential development integrated into existing neighborhoods and districts where appropriate. | Adopt objective design review standards by March 2024 to provide a ministerial process for review of future projects. These objective design standards will be utilized to evaluate future eligible affordable housing projects on all sites identified in Appendix B, as well as other sites in un-anticipated locations in the city. | 3/31/2024 | 6th Cycle | Completed | On April 23, 2024, the City of Orange City Council adpoted Ordinance No. 05-24 amending Chapter 17.08 and 17.15 of the Orange Municipal Code realting to Densisty Bonus Law. | Other | 1 | https://ecode360.com/43568281 |
| 2E - The City will encourage infill development within feasible development sites for homeownership and rental units. The City will continue to facilitate infill development through implementation of its General Plan and Zoning Code, allowing for higher density housing in appropriate areas of the City where potential exists for infill or site redevelopment and employment and transit are concentrated. The City will also encourage compatible residential development integrated into existing neighborhoods and districts where appropriate. | Adopt the Transfer of Development Rights Ordinance by early 2024, which will allow additional densities in the mixed use areas beyond the 60 units per acre. | 3/31/2024 | 6th Cycle | Completed | On July 23, 2024, the City of Orange City Council adpoted Ordinance No. 19-24 amending Chapter 17.44 of the Orange Municipal Code by adding a new section 17.44.210 to establish a mechanism for the transfer of development rights to create opportunities for housing, open space, and trails. | Other | 1 | https://ecode360.com/43569902#45620624 |
| 2E - The City will encourage infill development within feasible development sites for homeownership and rental units. The City will continue to facilitate infill development through implementation of its General Plan and Zoning Code, allowing for higher density housing in appropriate areas of the City where potential exists for infill or site redevelopment and employment and transit are concentrated. The City will also encourage compatible residential development integrated into existing neighborhoods and districts where appropriate. | Continue to provide the following incentives to infill sites to facilitate the construction of housing, particularly for sites with existing leases or other covenants: allowing densities of 60 dwelling units per acre, providing staff guidance and consultation throughout the development process, density bonuses, and use of the small lot subdivision ordinance. | 12/31/2029 | 6th Cycle | Continuous | In 2024, the City adopted a Transfer of Development Rights which allows densities of 60 dwelling units per acre. Staff continues to provide guidance and consultation throughout the development process to all developers and continues to encourage the use of density bonus when affordable housing is proposed, and staff coninues to offer the use of the small lot subdivision ordinance. | Other | 1 | https://ecode360.com/43569902#45620624 & https://ecode360.com/43568281 & https://ecode360.com/43568256#43568256 |
| 2F - The City will continue to use federal HOME Investment Partnerships Program (HOME) and Community Development Block Grant Program (CDBG) funds and pursue alternative funding and financing sources such as public-private partnerships in order to maximize the opportunities for new housing development. | Seek out and pursue funding opportunities for new housing development. | 12/31/2025 | 6th Cycle | Continuous | The City's only remaining funding sources for housing development are very limited and include Federal HOME Investment Partnerships (HOME) funds and Low and Moderate Income Housing Asset Funds (LMIHA) which are program income from the former Orange Redevelopment Agency Housing Set-Aside funds. However, the City continues to explore grant opportunities to fund projects. The City has retained a consultant to guide staff on the viability of various grants offered through OCCOG, SCAG, transportation agencies, and the State. No viable grant opportunities were identified in 2025 for new housing development. Staff shall continue to research opportunities in 2025.<br><br>In 2025, the City used it CDBG funds for projects supporting programs that include street improvements, handicap, accessibility improvements, after school programs, establishing a business assistance program, and case management support.<br><br>The following table outlines the projects and amount of CDBG funds used on in Fiscal Year (7/1/24 to 6/30/25).<br><br>ProjectsCDBG Amount<br>Fair Housing Foundation$25,000<br>After-School Community Program$39,089<br>Bike Team Program$53,747<br>Operation School Bell$14,658<br>Community Food Orange$14,658<br>ADA Wheelchair Access Ramps$97,723<br>Supportive Housing Services $19,544<br>Business Assitance Program $175,000<br>Wheeler Place and Highland Street Rehabilitation $488,616 | Other | 1 | https://www.cityoforange.org/our-city/departments/community-development/housing/cdbg |
| 2G - Section 3.J.6 of the City's Housing Element lists resources and qualified entities to preserve affordable units at risk of converting to market-rate. The City will continue to seek qualified non-profit organizations for acquisition, construction and rehabilitation of affordable housing. Funds will be made available on an annual basis, contingent on funding availability. | Partner with non-profit organizations for future affordable housing development and preservation of at-risk units. | 12/31/2025 | 6th Cycle | Continuous | The City maintains an affordable housing project compliance spreadsheet which tracks projects nearing the end of their affordability covenant. This list is reviewed annually to identify property owners that the City needs to reach out to in advance to discuss options for extending affordability. The following property is at-risk of converting to market-rate within the planning period:<br><br>Three (3) units at Adams Triplex I (1837-1841 E. Adams) are identified as at-risk of converting to market rate units. These units are being preserved through the Section 8 Annual Renewal Program. The current contract runs through 2027.<br><br>The City will continue to assist in preserving at-risk units by, but not limited to, supporting non-profit applications for funding to purchase at-risk units, work with property owners to maintain affordability and develop preservation strategies, and assist with aforementioned funding options when available. The City will continue to comply with noticing requirements and coordinate with qualified entities to preserve at-risk units. Long-term solutions, including alternative funding options, are continually being sought for retention of all the City's affordable housing stock. | Other | 1 | None |
| 2G - Section 3.J.6 of the City's Housing Element lists resources and qualified entities to preserve affordable units at risk of converting to market-rate. The City will continue to seek qualified non-profit organizations for acquisition, construction and rehabilitation of affordable housing. Funds will be made available on an annual basis, contingent on funding availability. | Promote available funding opportunities. | 12/31/2025 | 6th Cycle | Continuous | The City continues to provide Housing Developer Information and Resources on its City Website as well as Afforable Housing Assistance and the availibility of funding opportunites. | Other | 1 | https://www.cityoforange.org/our-city/departments/community-development/housing/affordable-housing |

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| 2H - The City will continue to require non-residential and mixed use projects in the Urban Mixed Use (UMU) zoning districts only be approved when a finding can be made that the project will not reduce UMU-zoned land available for residential development such that the City can no longer accommodate its remaining RHNA need. The City will continue to track the availability of UMU-zoned sites greater than one half-acre in size through its RHNA Housing Sites Monitoring System. | Annually track development in the UMU zone and availability of sites. | 12/31/2025 | 6th Cycle | Continuous | In 2025, no new development was proposed or approved for the UMU zone. A RHNA Sites Monitoring Database is being consulted and maintained by City staff as development occurs. | Other | 1 | None |
| 2I - The City will coordinate with Chapman University to respond to the housing needs of the growing student population and challenges relating to integration of student-oriented housing in existing residential neighborhoods. As part of this effort, the City will encourage development of on-campus housing through the University's campus master planning process. | Work with the Chapman University to undertake activities that may include, but are not limited to, surveying students to understand off-campus housing needs, identifying appropriate locations for and types of off-campus student housing, and establishing policies and procedures to address any issues with neighborhood integration. | 12/31/2025 | 6th Cycle | Continuous | The City continues to engage in ongoing discussions and efforts with Chapman University to develop more on-site housing for its students. In 2025, the City did not receive an application from Chapman University for development of additional student housing. An amendment to the Chapman University Specific Plan proposes a provision to house 50% of undergraduate students in on-campus housing. The City continues working with the University on an update to the Chapman University Specific Plan within this housing cycle to plan for expansion of future student housing capacity with enrollment growth. | Other | 1 | None |
| 2J - The City of Orange will continue to permit construction of accessory dwelling units consistent with State law. The City has incorporated new legislation regarding ADU development into the Municipal Code and will continue to make updates to the City's Municipal Code to reflect new State laws as required.<br>The City will develop an informational packet to be available to the public at City Hall. The packet will include processes and key information regarding ADU development opportunities. The City will continue to work with property owners who come forward with interest in developing ADUs and/or questions regarding ADUs. | Update Municipal Code to permit ADUs and JADUs in all zones which allow residential uses and update Section 17.13.030 Permitted Uses table to clarify where ADUs and JADUs are permitted in compliance with State law. | 10/30/2025 | 6th Cycle | Completed | On July 23, 2024, the City of Orange City Council adpoted Ordinance No. 20-24 amending Title 17 of the Orange Municipal Code updating Accessory Dwelling Unit provisions of the Orange Muncipal Code in response to changes in State law and guidance from the California Department of Housing and Community Development. | Other | 1 | ADU Infomational Packet: https://www.cityoforange.org/home/showpublisheddocument/5096/638857519486670000 Municipal Code: https://ecode360.com/43569004#43569004 Section 17.13.030: https://ecode360.com/attachment/315536/OR5214-017a%20Table%2017.13.030%20-%20Master%20Land%20Use%20Table.pdf |
| 2K - The City will create a monitoring program to track ADU creation by RHNA affordability levels throughout the planning period. This will allow the City to monitor the development of accessory units at all income levels in relation to the anticipated development within the Housing Element. Additionally, the City will conduct an evaluation of ADU development within 2 years of the adoption of the 6th cycle Housing Element. If ADU development falls below what was assumed in the Housing Element, the City will take action within 6 months of completion of the ADU review to ensure that adequate capacity at each income level in maintained to meet the City's RHNA needs. | Create a monitoring program to track ADU creation by RHNA affordability levels throughout the planning period. | 12/31/2023 | 6th Cycle | Continuous | The City is on track to meet and exceed ADU development assumptions in its Housing Element. In 2025, the City issued building permits for 91 ADU/JADU units, and finaled 64 building permits for ADU/JADU units. The amount of ADUs approved, permitted, and finaled far exceed the estimate found in the Housing Element. | Other | 1 | None |
| 2L - Pursuant to State Housing law, candidate sites identified in this Housing Element to accommodate a portion of the City's low- and very low -income RHNA that were identified in previously adopted Housing Elements must be rezoned to allow residential use by right at specified densities for housing developments in which at least 20 percent of the units are affordable to lower income households. By right shall mean the jurisdiction may not require any of the following discretionary actions, except if the project requires a subdivision:<br>A conditional use permit<br>A planned unit development permit<br>Other discretionary, local-government review or approval that would constitute a "project" as defined in Section 21100 of the Public Resources Code (California Environmental Quality Act "CEQA"). | The City has identified as part of this Housing Element update vacant and nonvacant sites that were used in previous Housing Elements to meet the current RHNA need. To accommodate the provisions of State law, the City shall streamline development review for projects on all nonvacant sites included in a prior Housing Element and all vacant sites included in two or more consecutive planning periods that meet the requirements of State housing law. These sites are identified in Appendix B. | By December 2024. | 6th Cycle | Completed | No projects were submitted in 2025 on any nonvacant sites included in a prior Housing Element or any vacant site included in two or more consecutive planning periods which met the affordability requirements of State housing law.<br><br>The City's adopted objective design standards augment the City's efforts to streamline development of affordable residential developments under state housing law. The identified sites do not need rezoning as residential development is already a permitted use. | Other | 1 | Objective Design Standards for Multi-Family Housing: https://www.cityoforange.org/home/showpublisheddocument/6065/638735915474730000 Objective Design Standards for Mixed-Use Development: https://www.cityoforange.org/home/showpublisheddocument/6063/638735915465170000 |
| 2M - The City recognizes the importance of supporting the development of housing for low and extremely low income households. While the City is not a developer, it is a primary goal of the Housing Element to support developers and increase the feasibility of development of housing for extremely low and low income households. | The City will adopt a program to subsidize application processing fees, when funding is available, for qualifying developments where all units affordable to 80% AMI or lower. | 12/31/2023 | 6th Cycle | Not Yet Started | The City did not formalize a program to subsidize application processing fees in 2025. Progress towards this goal shall occur as soon as funding and qualifying projects are identified. The City continues to explore grant opportunities to fund projects. The City has retained a consultant to guide staff on the viability of various grants offered through OCCOG, SCAG, transportation agencies, and the State. No grants that the City could be competitive for under the grant parameters were identified in 2025 but efforts continue in 2026.<br><br>The City has assisted several projects with TEFRA public hearings and will continue to do so at the City's cost for all applicable future projects. The City utilizes HOME funds as a financial resource for projects and will continue to seek out additional grants that can be leveraged. CDLAC, LHTF, LIHTC, PBS8, RDA, and City fee deferrals are additional financing tools that the City has supported use of in past projects. The City will continue to support the use of these financing tools, along with any other options. | Other | | None |
| 2M - The City recognizes the importance of supporting the development of housing for low and extremely low income households. While the City is not a developer, it is a primary goal of the Housing Element to support developers and increase the feasibility of development of housing for extremely low and low income households. | Promote the benefits of this program to the development community by posting information on its webpage and creating a handout to be distributed with land development applications. | 12/31/2029 | 6th Cycle | Not Yet Started | The City did not formalize a program to subsidize application processing fees in 2025. Progress towards this goal shall occur as soon as funding and qualifying projects are identified. The City continues to explore grant opportunities to fund projects. | Other | | None |

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| 2M - The City recognizes the importance of supporting the development of housing for low and extremely low income households. While the City is not a developer, it is a primary goal of the Housing Element to support developers and increase the feasibility of development of housing for extremely low and low income households. | The City will annually invite nonprofit developers to discuss the city's plans, resources, development opportunities, and requests-for-quotes. | 12/31/2025 | 6th Cycle | Continuous | The City continues to building relationships with the building community and encourages the development of underutilized parcels for housing development. In 2025, the City launched a new public portal which allows applicants to submit online and all review and communication is done through the portal to help streamline the review process, reducing project costs for developers. | Other | 1 | None |
| 2M - The City recognizes the importance of supporting the development of housing for low and extremely low income households. While the City is not a developer, it is a primary goal of the Housing Element to support developers and increase the feasibility of development of housing for extremely low and low income households. | The City will assist in the application for state and federal financial resources. | 12/31/2029 | 6th Cycle | Continuous | The City continues to provide Housing Developer Information and Resources on its City Website as well as Afforable Housing Assistance and the availibility of funding opportunites. | Other | 1 | https://www.cityoforange.org/our-city/departments/community-development/housing/affordable-housing |
| 2M - The City recognizes the importance of supporting the development of housing for low and extremely low income households. While the City is not a developer, it is a primary goal of the Housing Element to support developers and increase the feasibility of development of housing for extremely low and low income households. | Promote the development of 535 units for extremely low income housing units throughout the planning period. | 12/31/2029 | 6th Cycle | Continuous | The City continues to building relationships with the building community and encourages the development of underutilized parcels for housing development. In 2025, the City launched a new public portal which allows applicants to submit online and all review and communication is done through the portal to help streamline the review process, reducing project costs for developers. The City did finalize the contruction of 8 extremely low deed restricted units in 2025, bringing the total of extremely low units completed through the 6th cycle to 40 units. | Units | 8 | Table A2, and Table B of this report |
| 2N - Developer outreach and community engagement has shown that large parcels are perceived to have impediments due to their development characteristics. In order to further promote development of these types of parcels, the City will establish a ministerial process to allow for the subdivision of existing large parcels, such as shopping centers or older apartment communities that have the potential to accommodate more intensive development, recognizing that these projects may need to be phased over 5-10 year periods and that the resultant land parcels may be irregular in shape (i.e., allowing for multifamily development on a former big box store site while the rest of the center remains in use) | The City will establish a ministerial process to allow for the subdivision of existing large parcels, such as shopping centers or older apartment communities that have the potential to accommodate more intensive development, recognizing that these projects may need to be phased over 5-10 year periods and that the resultant land parcels may be irregular in shape (i.e., allowing for multifamily development on a former big box store site while the rest of the center remains in use) | 12/31/2024 | 6th Cycle | Completed | The City utilizes OMC Section 16.12.030, which allows the Community Development Director ministerial approval of land division of four lots or less. | Other | 1 | https://ecode360.com/43566095#43566095 |
| 2O - Should affordable housing unit production not meet the pace of development projected through the Housing Element by 2026 (midway through the planning period), the City will study the development of an inclusionary housing ordinance and consider adoption during the planning period. | The City will monitor the production of residential development for targeted 6th Cycle RHNA goals. | 12/31/2027 | 6th Cycle | Continuous | The City is monitoring the production of all residential development. Katella Terrace (74 units), which is a 100% affordable housing development completed its construction in 2025. The City will significantly accomplish the housing unit goals of this policy during the planning period. Additionally, as reflected in Policy 2K, the City continues to experience a higher than estimated number of applications for ADUs. ADUs continue to be a major part of residential development in the City. | Other | 1 | Table A2, and Table B of this report |
| 3A - The City shall continue to provide the public information related to the development of housing through the continued promotion of educational materials. The information may describe incentives in the Orange Municipal Code that support the development of affordable housing and how the provisions of affordable housing benefits the community. This may take the form of community newsletter articles, information posted on the City's website that is available to the public, and staff available to respond to inquiries. | Annually outreach to the community with information on affordable housing development. | 12/31/2025 | 6th Cycle | Continuous | The City's Housing Element update was found to be in substantial conformance with State housing law on January 2, 2024, and every effort is being made to ensure Housing Element goals and polices are implemented.<br><br>The City maintains a map highlighting properties that are identified in the Housing Element as "housing opportunity sites". The map is available to housing developers via the City's website at the following link: https://experience.arcgis.com/experience/b87909fabf62480da448567aebecd0f1/page/Page?views=Layer-List#widget_63=layer_visibility:%7B%22widget_63-dataSource_1%22%3A%7B%22widget_63-dataSource_1-1945162f6ad-layer-23%22%3Atrue%7D%7D<br><br>Additionally, the City continues to display the General Plan Housing Element on the City website and Appendix B of the element includes the Candidate Sites in map and table format. The Housing Element is located at the following link: https://www.cityoforange.org/home/showdocument?id=4900&t=638344437022900000<br><br>The Housing Element on the City's website includes a Housing Needs Assessment for several focus areas of the City. The focus areas include maps identifying specific parcels that have the potential for redevelopment with housing units.<br><br>In addition, the City continued to maintain an Affordable Housing Map, Find Compliant Affordable Housing Link, and list of site available as housing development opportunities at the following Housing Division link: https://www.cityoforange.org/our-city/departments/community-development/housing<br><br>At the above link the community may also find information about the City's housing programs, HUD programs, information about the City's Housing Successor Agency, Housing and HUD Documents, and an Affordable Housing Resource Toolkit.<br><br>The City will continue to look to expand affordable housing outreach to the community via | Other | 1 | https://experience.arcgis.com/experience/b87909fabf62480da448567aebecd0f1/page/Page?views=Layer-List#widget_63=layer_visibility:%7B%22widget_63-dataSource_1%22%3A%7B%22widget_63-dataSource_1-1945162f6ad-layer-23%22%3Atrue%7D%7D |

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| 3B - Pursuant to Chapter 727, Statues of 2005 (SB 1087), the City of Orange is required to deliver its adopted Housing Element and any amendments thereto to local water and sewer service providers, including the City's own water provider services, Metropolitan Water District (MWD) and the Orange County Sanitation District (OCSD). This legislation allows for coordination between the City and water and sewer providers when considering approval of new residential projects.<br>Additionally, cooperation with local service providers will support the prioritization of water and sewer services for future residential development, including units affordable to lower-income households. The City will submit the adopted Housing Element to local water and sewer service providers for their review and consideration when reviewing new residential projects. | Deliver the adopted Housing Element to local water and sewer service providers. | 10/30/2023 | 6th Cycle | Completed | Subsequent to the HCD finding the City's Housing Element update to be in substantial conformance with State housing law on January 2, 2024, the City provided the adopted Housing Element to local water and sewer service providers. | Other | 1 | None |
| 3C - SB 1035 requires that the City, after the initial revision of the Safety Element to identify flood hazards and address the risk of fire in certain lands upon each revision of the Housing Element, review and, if necessary, revise the Safety Element to identify new information relating to flood and fire hazards that was not previously available during the previous revision of the Safety Element. The City is currently in the process of revising the Safety Element and will take the document to City Council for adoption within 12 months of adoption of the 6th Cycle Housing Element.<br>SB 1000 (2018) requires that the City include an environmental justice component to the General Plan during the 6th Cycle update of the City's Housing Element. The City is currently planning to perform a review of the existing General Plan to determine where environmental justice is currently addressed and where additional language is needed within the appropriate elements. The City will modify the General Plan to include additional Environmental Justice policies within 24 months of adoption of the 6th Cycle Housing Element. | Update the Safety and Environmental Justice Elements. | 6/30/2024 | 6th Cycle | Completed | On January 14, 2025, the City adopted Resolution No. 11589 for an update the General Plan Safety Element to bring the General Plan into compliance with the following legislation: SB 1241 (2014), SB 379 (2017), SB 1035 (2018), and SB 99 (2020).<br><br>The General Plan has environmental justice policies throughout all elements. However, the City's will continue to bolster additional environmental justice language in appropriate elements. | Other | 1 | https://citydocs.cityoforange.org/WebLink/DocView.aspx?id=244375443&searchid=eef74e45-37ed-4596-995b-51ed8a91d51c&dbid=0&repo=CityofOrange |
| 3D - The City has hosted workshops and public meetings throughout the 2021-2029 Housing Element Update to gather public input and feedback as it relates to development of and access to housing. The City will extend outreach efforts throughout the planning period to continue gathering community input on, but not limited to, affordable housing, housing for special needs populations, and ADUs. The continued outreach will be City-wide with a focus on traditionally under-represented communities. | Annually outreach and host a community meeting to discuss housing | 12/31/2025 | 6th Cycle | Continuous | The City continues to meet with commercial shopping mall properties to promote the development of housing at those sites. | Other | 1 | None |
| 3E - In order to ensure the maintenance, preservation, and improvement of housing throughout the City, an estimate of the number of units in need of rehabilitation is necessary. | Yearly implement and assess a survey of the City's housing stock to identify potential rehabilitation needs. Based on the results, the City shall adopt additional policy actions such as, but not limited to, promoting funding opportunities and community outreach and education on available resources. | 12/31/2025 | 6th Cycle | Continuous | The City accomplished this objective by utilizing existing inspection, code enforcement, and compliance monitoring activities to assess the condition of the City's housing stock and identify potential rehabilitation and maintenance needs. City staff maintained and reviewed databases tracking property maintenance complaints, inspection results, and code enforcement activity, and conducted annual inspections of deed-restricted affordable housing developments, with inspections completed for 254 affordable housing units in 2025. This information was used to identify trends related to deferred maintenance and housing conditions, particularly in areas serving lower-income and vulnerable populations.<br>Based on these ongoing assessments, the City continued to promote available funding opportunities, technical assistance, and community resources to support housing rehabilitation and maintenance. Staff coordinated with County and regional partners, fair housing agencies, and community organizations to provide outreach and education on available programs and resources, and continued to seek grant and partnership opportunities to address identified rehabilitation needs. These efforts supported informed policy decisions and ongoing actions to maintain and improve the City's existing housing stock during the reporting year. | Other | 1 | None |
| 3F - Existing shopping center and office complex properties represent much of the future residential redevelopment potential in Orange. As such, the City feels it is important to plan for the possibility that some of these properties may not develop in the timeframe anticipated and the need to identify additional opportunity areas may be necessary. If these properties are not entitled and able to receive building permits for residential uses by mid-2027, the City will identify additional alternative sites within Orange that can accommodate a potential shortfall in housing sites to accommodate the remaining RHNA within 180 days of determination of a shortfall of adequate sites as required by SB 166 (No Net Loss).<br>As part of this process, the City will evaluate their progress towards meeting their RHNA goals in all income categories.<br>If the City is proportionately on pace to meet its goals without inclusion of shopping center properties, the City shall work with HCD to confirm that no further opportunity sites need be identified. | Evaluate progress in the redevelopment of properties at existing shopping centers and office complexes in mid-2027 to determine if additional candidate housing sites are needed to make up a shortfall in meeting the City's RHNA. | 6/30/2027 | 6th Cycle | In Progress | During calendar year 2025, the City continues to implement Program 3F by monitoring progress toward meeting its RHNA obligations across all income categories and tracking residential redevelopment activity at existing shopping center and office complex properties identified as future housing opportunity sites. City staff review entitlement activity, building permit issuance, and development inquiries to assess whether these sites are advancing toward residential reuse within the anticipated timeframe. The City also evaluates overall housing production trends to determine whether it remains proportionately on pace to meet RHNA targets without reliance on these sites. Based on 2025 monitoring, the City determines that housing production is proceeding consistent with Housing Element assumptions, and no shortfall of adequate sites has been identified. Accordingly, no additional candidate housing sites are designated in 2025; however, the City will continue ongoing monitoring and will evaluate redevelopment progress in mid-2027, consistent with SB 166 (No Net Loss), and will coordinate with HCD if additional opportunity sites are determined to be necessary. | Other | 1 | None |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 4A - Pursuant to AB 686, the City will AFFH by taking meaningful actions in addition to resisting discrimination, that overcomes patterns of segregation and foster inclusive communities free from barriers that restrict access to opportunity based on protected characteristic. The HE contains analysis of regional and local contributing factors to fair housing issues within Orange and determined the following factors were applicable:<br>Educational Opportunities: Countywide, there are disparities across racial/ethnic groups in access to educational opportunities as measured by the index. The City of Orange showed lower scores in educational opportunity, low composite education index scores signify low opportunity and resources.<br>Environmental Opportunities: Countywide, there are disparities across racial/ethnic groups in access to environmental opportunities, measured as lower exposure to and effects from pollution. Across all tracts in the County, non-Hispanic Whites exhibit the highest access to environmentally healthy neighborhoods. Orange City is one of the least environmentally healthy, with low scores for the environmental opportunity index, signifying low opportunity and resources.<br>Economic Opportunities: In the County, there are significant disparities in access to economic opportunity. Non-Hispanic White residents have the greatest access. The City of Orange has relatively large disparities by protected class groups, where Hispanic residents have significantly lower access to economic opportunity than other racial/ethnic groups.<br>Regional Opportunity, Place: The City of Orange has two | Please see Housing Element Table 4-1: AFFH Actions on page 205 of the Housing Element at the below link: https://www.cityoforange.org/home/showdocument?id=4137&t=638119648106848609 | 12/31/2025 | 6th Cycle | Continuous | Housing Mobility - Educational Opportunities<br><br>Utilizing CDBG funds, the City funded after school programs in partnership with the Youth Center of Orange at two park sites and two affordable housing sites for children with less educational opportunity and funded the Assistance League of Orange with Operation School Bell which provides clothing and school supplies to under privileged children. The Assistance League assisted 184 children and the Youth Centers assisted 83 children in 2024.<br><br>The City's CDBG Committee and City Council annually consider community input prior to awarding distribution of CDBG funds for assistance programs.<br><br>Housing Choice and Affordability in Areas of Opportunity<br><br>In 2025, the City adopted an Single-Room Occupancy ordinance, and a Farmworker Housing ordinance.<br><br>A Small Lot Subdivision Ordinance was completed in 2021 and staff promotes the ordinance to housing developers as an alternative development option.<br><br>Place-Based Strategies- Conservation and Revitalization<br><br>Note the activities under Housing Mobility - Educational Opportunities above. Additionally, the City's Library also offers free lunches through the Summer Food Service Program administered by the California Department of Education for children and teens under the age of 18. The library also offers a Homework Center for children and teens. The City will continue to provide these programs (contingent on funding availability) to the community which benefit community assets and promote equitable access to community resources.<br><br>In 2025, the City continued to pursue completion of the last leg of the Santiago Creek Trail which provides greater non-motorized mobility options between urbanized areas of the City's south and western reaches and East Orange where there are greater open space recreational | Other | 1 | https://www.cityoforange.org/business/business-resources |
| 4B - The City will continue to support local and inter-jurisdictional efforts to reduce temporary and chronic homelessness. The City shall continue to promote a comprehensive approach to addressing homelessness consistent with the Continuum of Care model. Additionally the City provides support for the Navigation Centers in Buena Park and Placentia in the form of financial assistance for operations. | Coordinate with 2-1-1 Orange County, non-profit entities, the Orange County Housing Authority and other applicable government agencies to provide a range of services and housing opportunities for homeless persons in Orange. | 12/31/2025 | 6th Cycle | Continuous | In 2025, the City continued to participates in the North Services Planning Area (SPA) partnership. The North SPA Partnership is a joint collaboration that includes two full-service Navigation Centers to provide help to the region's homeless – the Buena Park Center and the Placentia Center provides homeless individuals a total of 250 beds, health resources, job skill training, and the ability to reconnect with lost family. These facilities join the two shelters already built by the City of Anaheim, which house another 326 beds. In addition to participating in the North SPA, Orange has undertaken several other initiatives to address the local homelessness issue; including partnering with HomeAid of Orange County to develop the Orange Family Care Center. The Orange Family Care Center specializes in serving the needs of families who are experiencing homelessness and has over 55 beds.<br><br>The Orange Police Department's Homeless Engagement, Assistance & Resource Team (HEART) program has been operating since 2013. HEART Officers engage daily with local homeless individuals, working with them one-on-one to help facilitate their re-entry back into mainstream society. The Police Department also assists in providing resources and assistance through collaborations with local community organizations and agencies.<br><br>Starting in June 2022, the City set up the Hub Resource Center (HRC), managed by The Hub OC. The HRC oversees continuum of care services on behalf of the City of Orange and manages rental facilities including meals, laundry machines, portable showers, hand washing stations, and portable restrooms to help with personal hygiene. The HUB OC manages the recruiting, training, and mobilizing of the team of volunteers from local churches and the community to help meet the needs of homeless residents in partnership with the City of Orange, the HEART team, and LOVE Orange. Services include receiving intake information, coordinated entry system (CES), Homeless management Information System (HMIS), volunteer recruitment and training, distribution of hygiene supplies and management of hygiene resources. Referral services include shelter, mental health, veterinary care, health care, clothing providers, transportation providers, and afterschool care. Additionally, partnerships have begun for classes and workshops related to workforce skills and health-oriented programs. The City intends to continue this program throughout the planning period. Partnership and grant funding is continuously sought to extend the life of the HUB beyond funding available through HOME-ARP | Other | 1 | https://thehubresourcecenter.org/ |
| 4C - The City of Orange currently contracts with the Fair Housing Foundation which provides community education, individual counseling, mediation, and low-cost advocacy with the expressed goal of eliminating housing discrimination and guaranteeing the rights of all people to freely choose the housing for which they qualify in the area they desire. The City refers all inquiries for these services to the Fair Housing Foundation and maintains literature and informational brochures at City Hall available for public distribution. | Provide informational brochures at the City library, Senior Center and other locations frequented by the public. | 12/31/2025 | 6th Cycle | Completed | In 2025 staff continued to provide fair housing literature at City facilities such as libraries, the City Clerk's Office, Police Headquarters, and Fire Department Headquarters. | Other | 1 | - |
| 4C - The City of Orange currently contracts with the Fair Housing Foundation which provides community education, individual counseling, mediation, and low-cost advocacy with the expressed goal of eliminating housing discrimination and guaranteeing the rights of all people to freely choose the housing for which they qualify in the area they desire. The City refers all inquiries for these services to the Fair Housing Foundation and maintains literature and informational brochures at City Hall available for public distribution. | Continue the provision of fair housing assistance including landlord/tenant counseling and amelioration or removal of identified impediments and work with the Fair Housing Foundation to provide community education on fair housing throughout the year. | 12/31/2025 | 6th Cycle | Continuous | In 2025, the Fair Housing Foundation projecting to assist 150 unduplicated Orange clients, received 23 Fair Housing allegations, and opened 8 fair housing cases. | Other | 1 | None |

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|---|---|---|---|---|---|---|---|---|
| 4C - The City of Orange currently contracts with the Fair Housing Foundation which provides community education, individual counseling, mediation, and low-cost advocacy with the expressed goal of eliminating housing discrimination and guaranteeing the rights of all people to freely choose the housing for which they qualify in the area they desire. The City refers all inquiries for these services to the Fair Housing Foundation and maintains literature and informational brochures at City Hall available for public distribution. | Continue to contract with the Fair Housing Foundation or a similar agency for these services. | 12/31/2025 | 6th Cycle | Continuous | In 2025, the City distributed Fair Housing Foundation informational materials at the Community Development public service counter, and also relied on Fair Housing Foundation events for distribution of information. Staff continues to coordinate with Fair Housing and the County of Orange to bring information on resources to these communities. | Other | 1 | None |
| 4D - On behalf of the City, the Orange County Housing Authority currently administers the Section 8 Rental Assistance program which assists renter households in the City. The City of Orange will continue to provide referral services and information to the City's residents. | Assist 484 households annually through the planning period. | 12/31/2025 | 6th Cycle | Completed | 2025 - Total Number of Tenants - City of Orange<br>Program # of Tenant's that Participated<br>Veterans Affairs Supportive Housing (VASH): 30<br>Non - Elderly Persons with Disabilities (NED): 1<br>Family Unification Program (FUP): 16<br>Section 8 Housing Choice Voucher Program (HCVP): 350<br>Continuum of Care Certificate Program (COC): 23<br>Family Self-Sufficiency (FSS): 3<br>Portability-In (Port-In): 64<br>Emergency Housing Voucher (EHV): 11<br>*This data reflects the total number of Tenant's assisted by program, in the City of Orange, through the calendar year of 2025.<br><br>During FY 25-26, the City will continue to support OCHA's applications for Section 8 vouchers as well as the continuation of the HCVP, COC, VASH, NED, FSS, Port-In, EHV and FUP programs. | Persons | 498 | None |
| 4E - The City Staff will support the ability of persons with developmental disabilities to live in integrated community settings. The City will work with the Regional Center of Orange County to identify the housing needs of persons served by the Center, promote opportunities for supportive living services and support efforts to eliminate barriers to housing for persons with developmental disabilities. | Annually outreach to and partner with the Regional Center of Orange County to identify the housing needs of persons served by the Center, promote opportunities for supportive living services and support efforts to eliminate barriers to housing for persons with developmental disabilities. | 12/31/2025 | 6th Cycle | Continuous | In 2025, the City continued its outreach efforts with the Regional Center of Orange County to identify the needs of persons with development disabilities and to promote opportunities and eliminate barriers for housing.<br><br>Additionally, the City continues to offer its Reasonable Accommodation provisions to eliminate barriers to housing for persons with disabilities. | Other | 1 | https://ecode360.com/43567154#43567154 |
| 4F - The City will amend the Orange Municipal Code to be compliant with State law regarding residential care facilities serving seven (7) or more persons in all residential zones, as well as ensure barrier-free housing choices for persons with disabilities. The City will also provide information online and at City Hall on reasonable accommodation with respect to zoning, permit processing, or building laws. | Update the Orange Municipal Code to comply with State law. | 12/31/2023 | 6th Cycle | In Progress | Staff is currently working to evaluate the changes needed to the Orange Municipal Code in order to comply with State law. A ordiance amending the Municipal Code to be in compliance with State law is anticipated to be adopted and implemented in 2026. | Other | | None |
| 4F - The City will amend the Orange Municipal Code to be compliant with State law regarding residential care facilities serving seven (7) or more persons in all residential zones, as well as ensure barrier-free housing choices for persons with disabilities. The City will also provide information online and at City Hall on reasonable accommodation with respect to zoning, permit processing, or building laws. | Provide information online and at City Hall on reasonable accommodation with respect to zoning, permit processing, or building laws. | 12/31/2029 | 6th Cycle | Continuous | On August 25, 2009, the City of Orange City Council adpoted Ordinance No. 06-09 amending Title 17 of the Orange Municipal Code to add provisions for reasonable accomodations for disabled persons in the provision of housing. The standards adopted by this ordinance can be found in the Orange Municipal Code Section 17.10.045, which can be accessed on the City website. | Other | 1 | https://ecode360.com/43567154#43567154 |
| 4G - The City will update the Orange Municipal Code to permit Low Barrier Navigation Center development as a matter of right in appropriate zoning districts, subject to requirements of state law. Per California Government Code Section 65660, low barrier navigation centers are defined as a Housing First, low-barrier, service-enriched shelter focused on moving people into permanent housing that provides temporary living facilities while case managers connect individuals experiencing homelessness to income, public benefits, health services, shelter, and housing. "Low Barrier" means best practices to reduce barriers to entry. These requirements include implementing standards, provisions and limitations governing the permitting, development, siting and management of Low Barrier Navigation Centers. The City of Orange will continue to identify revisions and adopt amendments to the Municipal Code to comply with State law updates. | Adopt an amendment to the Orange Municipal Code to permit Low Barrier Navigation Center in compliance with State law. | 12/31/2023 | 6th Cycle | Not Yet Started | Staff work efforts are underway and an update to the Orange Municipal Code to comply with State law is anticipated to be adopted and implemented in 2026. | Other | | None |
| 4G - The City will update the Orange Municipal Code to permit Low Barrier Navigation Center development as a matter of right in appropriate zoning districts, subject to requirements of state law. Per California Government Code Section 65660, low barrier navigation centers are defined as a Housing First, low-barrier, service-enriched shelter focused on moving people into permanent housing that provides temporary living facilities while case managers connect individuals experiencing homelessness to income, public benefits, health services, shelter, and housing. "Low Barrier" means best practices to reduce barriers to entry. These requirements include implementing standards, provisions and limitations governing the permitting, development, siting and management of Low Barrier Navigation Centers. The City of Orange will continue to identify revisions and adopt amendments to the Municipal Code to comply with State law updates. | Update the Orange Municipal Code to comply with State law. | 12/31/2023 | 6th Cycle | Continuous | The Orange Municipal Code is reviewed Annually for updates in response to changes in State law. | Other | 1 | None |

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| 4H - The City will update the Orange Municipal Code to permit Single-Room Occupancy units in appropriate zoning districts, subject to requirements of state law. These requirements include implementing standards, provisions and limitations governing the permitting, development, siting, and management of Single-Room Occupancy units. The City of Orange will continue to make the appropriate revisions the Municipal Code to comply with California Government Code Section 65583(c)(1). | Update the Orange Municipal Code to comply with State law. | 12/31/2023 | 6th Cycle | Completed | On June 24, 2025, the City of Orange City Council adpoted Ordinance No. 11-25 amending Title 17 of the Orange Municipal Code to make Single-Room Occupancy (SRO) a permitted use in certain zoning districts and by adding definitions and development standards related to SRO development. | Other | 1 | https://ecode360.com/43568487#43568526 |
| 4I - The City of Orange will update the Orange Municipal Code to comply with provisions for farmworker housing in compliance with the Employee Housing Act (Sections 17000-17062.5 of the California Health and Safety Code). | Update the Orange Municipal Code to comply with State law. | 12/31/2023 | 6th Cycle | Completed | On September 23, 2025, the City of Orange City Council adpoted Ordinance No. 14-25 amending Title 17 of the Orange Municipal Code to Comply with the Employee Housing Act (Health and Safety Code Sections 17000-17062.5) regarding Farmworker and Employee Housing. | Other | 1 | https://ecode360.com/OR5214/laws/LF248028.pdf |
| 4J - The City of Orange Municipal Code currently requires emergency shelters to be located at least five hundred feet from any residential use or residentially-zoned property, public or private park, or public or private kindergarten through 12th grade curriculum school, as measures from the closest property line, as well as be located within half-a-mile of a transit stop. These requirements fall outside the scope of allowable standards relating to siting of homeless/emergency shelters per Government Code section 65583, subdivision (a)(4)(A). | Amend the Municipal Code to be consistent with State law. | 12/31/2023 | 6th Cycle | In Progress | Staff is currently working to evaluate the changes needed to the Orange Municipal Code in order to comply with State law. A ordiance amending the Municipal Code to be in compliance with State law is anticipated to be adopted and implemented in 2026. | Other | | None |

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|---|---|---|
| **Jurisdiction** | Orange | |
| **Reporting Period** | 2025 | (Jan. 1 - Dec. 31) |
| **Period** | 6th Cycle | 10/15/2021 - 10/15/2029 |

# ANNUAL ELEMENT PROGRESS REPORT

## Housing Element Implementation

(CCR Title 25 §6202)

Note: "+" indicates an optional field
Cells in grey contain auto-calculation formulas

**Table E**

**Commercial Development Bonus Approved pursuant to GC Section 65915.7**

| Project Identifier | | | | Units Constructed as Part of Agreement | | | | Description of Commercial Development Bonus | Commercial Development Bonus Date Approved |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | 2 | | | | 3 | 4 |
| **APN** | **Street Address** | **Project Name+** | **Local Jurisdiction Tracking ID+** | **Very Low Income** | **Low Income** | **Moderate Income** | **Above Moderate Income** | **Description of Commercial Development Bonus** | **Commercial Development Bonus Date Approved** |
| Summary Row: Start Data Entry Below | | | | | | | | | |
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| Jurisdiction | Orange | |
|---|---|---|
| Reporting Period | 2025 | (Jan. 1 - Dec. 31) |
| Planning Period | 6th Cycle | 10/15/2021 - 10/15/2029 |

# ANNUAL ELEMENT PROGRESS REPORT

## Housing Element Implementation

Note: "+" indicates an optional field

Cells in grey contain auto-calculation formulas

### Table F

### Units Rehabilitated, Preserved and Acquired for Alternative Adequate Sites pursuant to Government Code section 65583.1(c)

Please note this table is optional: The jurisdiction can use this table to report units that have been substantially rehabilitated, converted from non-affordable to affordable by acquisition, and preserved, including mobilehome park preservation, consistent with the standards set forth in Government Code section 65583.1, subdivision (c). Please note, motel, hotel, hostel rooms or other structures that are converted from non-residential to residential units pursuant to Government Code section 65583.1(c)(1)(D) are considered net-new housing units and must be reported in Table A2 and not reported in Table F.

| Activity Type | Units that Do Not Count Towards RHNA+ Listed for Informational Purposes Only | | | | Units that Count Towards RHNA + Note - Because the statutory requirements severely limit what can be counted, please contact HCD at apr@hcd.ca.gov and we will unlock the form which enable you to populate these fields. | | | | The description should adequately document how each unit complies with subsection (c) of Government Code Section 65583.1+. For detailed reporting requirements, see the chcklist here: |
|---|---|---|---|---|---|---|---|---|---|
| | Extremely Low-Income+ | Very Low-Income+ | Low-Income+ | TOTAL UNITS+ | Extremely Low-Income+ | Very Low-Income+ | Low-Income+ | TOTAL UNITS+ | https://www.hcd.ca.gov/community-development/docs/adequate-sites-checklist.pdf |
| Rehabilitation Activity | | | | | | | | | |
| Preservation of Units At-Risk | | | | | | | | | |
| Acquisition of Units | | | | | | | | | |
| Mobilehome Park Preservation | | | | | | | | | |
| Total Units by Income | | | | | | | | | |

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|---|---|---|
| **Jurisdiction** | Orange | |
| **Reporting Period** | 2025 | (Jan. 1 - Dec. 31) |
| **Planning Period** | 6th Cycle | 10/15/2021 - 10/15/2029 |

# ANNUAL ELEMENT PROGRESS REPORT

## Housing Element Implementation

Note: "+" indicates an optional field

Cells in grey contain auto-calculation formulas

### Table F2

### Above Moderate Income Units Converted to Moderate Income Pursuant to Gover

For up to 25 percent of a jurisdiction's moderate-income regional housing need allocation, the planning agency may include the number of units in an existing multifamily building that were converted to unit. Before adding information to this table, please ensure housing developments meet the requirements des

| Project Identifier | | | | | Unit Types | | Affordability by Household Incomes A | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | 2 | 3 | 4 | | | |
| **Prior APN+** | **Current APN** | **Street Address** | **Project Name+** | **Local Jurisdiction Tracking ID** | **Unit Category** (2 to 4,5+) | **Tenure R=Renter** | **Very Low-Income Deed Restricted** | **Very Low-Income Non Deed Restricted** | **Low- Income Deed Restricted** | **Low- Income Non Deed Restricted** |
| Summary Row: Start Data Entry Below | | | | | | | 0 | 0 | 0 | 0 |
| | | | | | | | | | | |
| | | | | | | | | | | |
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**rnment Code section 65400.2**

deed-restricted rental housing for moderate-income households by the imposition of affordability covenants and restrictions for the cribed in Government Code 65400.2(b).

| After Conversion | | | Units credited toward Moderate Income RHNA | | Notes |
|---|---|---|---|---|---|
| | | | 5 | | 6 |
| Moderate-Income Deed Restricted | Moderate-Income Non Deed Restricted | Above Moderate-Income | Total Moderate Income Units Converted from Above Moderate | Date Converted | Notes |
| 0 | 0 | 0 | 0 | | |
| | | | | | |
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|---|---|---|
| **Jurisdiction** | Orange | |
| **Reporting Period** | 2025 | (Jan. 1 - Dec. 31) |
| **Period** | 6th Cycle | 10/15/2021 - 10/15/2029 |

**element sites inventory contains a site which is or was owned by the reporting jurisdiction, and has been sold, leased, or otherwise disposed of during the reporting year.**

Note: "+" indicates an optional field

Cells in grey contain auto-calculation formulas

# ANNUAL ELEMENT PROGRESS REPORT
## Housing Element Implementation

**Table G**

**Locally Owned Lands Included in the Housing Element Sites Inventory that have been sold, leased, or otherwise disposed of**

| **Project Identifier** | | | | | | |
|---|---|---|---|---|---|---|
| **1** | | | | **2** | **3** | **4** |
| **APN** | **Street Address** | **Project Name+** | **Local Jurisdiction Tracking ID+** | **Realistic Capacity Identified in the Housing Element** | **Entity to whom the site transferred** | **Intended Use for Site** |
| Summary Row: Start Data Entry Below | | | | | | |
| | | | | | | |
| | | | | | | |

| | | | |
|---|---|---|---|
| **Jurisdiction** | Orange | **NOTE: This table must contain an inventory of ALL surplus/excess lands the reporting jurisdiction owns** | Note: "+" indicates an optional field<br>Cells in grey contain auto-calculation formulas |
| **Reporting Period** | 2025 (Jan. 1 - Dec. 31) | | |

# ANNUAL ELEMENT PROGRESS REPORT
## Housing Element Implementation

**Table H**
**Locally Owned Surplus Sites**

| Parcel Identifier | | | | Designation | Size | Notes |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **APN** | **Street Address/Intersection** | **Existing Use** | **Number of Units** | **Surplus Designation** | **Parcel Size (in acres)** | **Notes** |
| Summary Row: Start Data Entry Below | | | | | | |
| | | | | | | |
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|---|---|---|
| **Jurisdiction** | Orange | |
| **Reporting Period** | 2025 | (Jan. 1 - Dec. 31) |
| **Planning Period** | 6th Cycle | 10/15/2021 - 10/15/2029 |

**NOTE: STUDENT HOUSING WITH DENSITY BONUS ONLY. This table only needs to be completed if there were student housing projects WITH a density bonus approved pursuant to Government Code65915(b)(1)(F)**

# ANNUAL ELEMENT PROGRESS REPORT

## Housing Element Implementation

Note: "+" indicates an optional field

Cells in grey contain auto-calculation formulas

**Table J**

**Student housing development for lower income students for which was granted a density bonus pursuant to subparagraph (F) of paragraph (1) of subdivision (b) of Section 65915**

| Project Identifier | | | | Project Type | Date | Units (Beds/Student Capacity) Approved | | | | | | | Units (Beds/Student Capacity) Granted | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | 2 | 3 | 4 | | | | | | | 5 | 6 |
| **APN** | **Street Address** | **Project Name+** | **Local Jurisdiction Tracking ID+** | **Unit Category** (SH - Student Housing) | **Date** | **Very Low-Income Deed Restricted** | **Very Low-Income Non Deed Restricted** | **Low- Income Deed Restricted** | **Low- Income Non Deed Restricted** | **Moderate-Income Deed Restricted** | **Moderate-Income Non Deed Restricted** | **Above Moderate-Income** | **Total Additional Beds Created Due to Density Bonus** | **Notes** |
| Summary Row: Start Data Entry Below | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
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|---|---|---|
| **Jurisdiction** | Orange | |
| **Reporting Period** | 2025 | (Jan. 1 - Dec. 31) |
| **Planning Period** | 6th Cycle | 10/15/2021 - 10/15/2029 |

# ANNUAL ELEMENT PROGR

## Table K
## Tenant Preferenc

Local governments are required to inform HCD about any local tenant preference ordinance the local government maintains
Code 7061 (SB 649, 2022, Cortese). Effective January 1, 2023, local governments adopting a tenant preference are required
more than 90 days after the ordinan

| | |
|---|---|
| **Does the Jurisdiction have a local tenant preference policy?** | No |
| **If the jurisdiction has a local tenant preference policy, provide a link to the jurisdiction's webpage containing authorizing local ordinance and supporting materials.** | |
| **Notes** | |

## RESS REPORT

### e Policy

when the jurisdiction submits their annual progress report on housing approvals and production, per Government
to create a webpage on their internet website containing authorizing local ordinance and supporting materials, no
ce becomes operational.

| | | | |
|---|---|---|---|
| **Jurisdiction** | Orange | **NOTE: This table needs to be completed with any sites within your jurisdiction that were newly added to a National, State, or Local register of historic places within the reporting year. If none, leave blank.** | Note: "+" indicates an optional field<br>Cells in grey contain auto-calculation formulas |
| **Reporting Period** | 2025 (Jan. 1 - Dec. 31) | | |

# ANNUAL ELEMENT PROGRESS REPORT
## Housing Element Implementation

**Table L**

**Historical Resources**

| Parcel Identifier | | Designation | | | | Size | Notes |
|---|---|---|---|---|---|---|---|
| 1 | | 2 | | | | 3 | 4 |
| **APN** | **Street Address/Intersection** | **Date of Designation** | **Designation Level** | **Historic Site Period** | **Areas of Significance** | **Parcel Size (in acres)** | **Notes** |
| Summary Row: | | | | | | | |
| | | | | | | | |
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| | | |
|---|---|---|
| **Jurisdiction** | Orange | |
| **Reporting Year** | 2025 | (Jan. 1 - Dec. 31) |

# ANNUAL ELEMENT PROGRESS REPORT
## Local Early Action Planning (LEAP) Reporting
(CCR Title 25 §6202)

*Please update the status of the proposed uses listed in the entity's application for funding and the corresponding impact on housing within the region or jurisdiction, as applicable, categorized bas*

| **Total Award Amount** | $ - | *Total award amount is auto-populated based on amounts* |
|---|---|---|

| Task | $ Amount Awarded | $ Cumulative Reimbursement Requested | Task Status |
|---|---|---|---|
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*Summary of entitlements, building permits, and certificates of occupancy (auto-populated from Table A2)*

| **Completed Entitlement Issued by Affordability Summary** | | |
|---|---|---|
| **Income Level** | | **Current Year** |
| Acutely Low | Deed Restricted | 0 |
| | Non-Deed Restricted | 0 |
| Extremely Low | Deed Restricted | 38 |
| | Non-Deed Restricted | 0 |
| Very Low | Deed Restricted | 0 |
| | Non-Deed Restricted | 0 |
| Low | Deed Restricted | 0 |
| | Non-Deed Restricted | 0 |
| Moderate | Deed Restricted | 0 |
| | Non-Deed Restricted | 46 |
| Above Moderate | | 3 |

| | | |
|---|---|---|
| Total Units | | **87** |

| Building Permits Issued by Affordability Summary | | |
|---|---|---|
| **Income Level** | | **Current Year** |
| Acutely Low | Deed Restricted | 0 |
| | Non-Deed Restricted | 0 |
| Extremely Low | Deed Restricted | 0 |
| | Non-Deed Restricted | 0 |
| Very Low | Deed Restricted | 0 |
| | Non-Deed Restricted | 0 |
| Low | Deed Restricted | 0 |
| | Non-Deed Restricted | 0 |
| Moderate | Deed Restricted | 0 |
| | Non-Deed Restricted | 91 |
| Above Moderate | | 81 |
| Total Units | | **172** |

| Certificate of Occupancy Issued by Affordability Summary | | |
|---|---|---|
| **Income Level** | | **Current Year** |
| Acutely Low | Deed Restricted | 0 |
| | Non-Deed Restricted | 0 |
| Extremely Low | Deed Restricted | 8 |
| | Non-Deed Restricted | 0 |
| Very Low | Deed Restricted | 42 |
| | Non-Deed Restricted | 0 |
| Low | Deed Restricted | 24 |
| | Non-Deed Restricted | 0 |
| Moderate | Deed Restricted | 0 |
| | Non-Deed Restricted | 64 |
| Above Moderate | | 2 |
| Total Units | | **140** |

*sed on the eligible uses specified in Section 50515.02 or 50515.03, as applicable.*

*entered in rows 15-26.*

| | Other Funding | Notes |
|---|---|---|
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# Agenda Item

## Planning Commission

**Item #:** 5.1. 4/20/2026 **File #:** 26-0214

**TO:** **Chair and Members of the Planning Commission**

**THRU:** **Hayden Beckman, Planning Manager**

**FROM:** **Hayden Beckman, Planning Manager**

## 1. SUBJECT

A public hearing to consider a request to establish a Planned Unit Development (PUD) and subdivide a 2.02-acre parcel into 11 single-family homes at 647 N. Rancho Santiago Boulevard and finding of CEQA Exemption (ZC No. 1318, TTM No. 0052, CUP No. 3203, DR No. 5119, and MNSP No. 1137).

## 2. SUMMARY

The proposed project would establish a Planned Unit Development (PUD) and subdivide a 2.02-acre parcel into 14 lots: 11 numbered lots, each with a separate single-family home, and three lettered lots for front yard setback areas, a private road, and common open space area. The project will result in the construction of 11 new two-story single-family homes and shared common space. As part of this proposal, a zone change is requested from the existing zoning designation of Single Family Residential 10,000 sq. ft. (R1-10) to Single Family Residential 10,000 sq. ft. (R1-10 [PUD 3203]).

## 3. RECOMMENDED ACTION

1. Conduct and close the Public Hearing.

2. Adopt Planning Commission Resolution No. 11-26 entitled: A Resolution of the Planning Commission of the City of Orange recommending City Council approval of Zone Change No. 1318, Tentative Tract Map No. 0052, Conditional Use Permit No. 3203, Design Review No. 5119, and Major Site Plan Review No. 1137, rezoning the property located at 647 N. Rancho Santiago Boulevard to Single Family Residential 10,000 square feet - PUD No. 3203 (R1-10 [PUD 3203]) to establish an 11-unit planned unit development.

3. Find the request categorically exempt from the California Environmental Quality Act (CEQA) in accordance with Section 15183 of the State CEQA Guidelines (Projects consistent with a Community Plan, General Plan, or Zoning).

## 4. PROJECT BACKGROUND

| **Property Information** | |
|---|---|
| Applicant | George Keith Mitchell, III, Rancho Ridge, LLC |
| Property Owner | George Keith Mitchell, IIII, Rancho Ridge, LLC |
| Property Location | 647 N. Rancho Santiago Boulevard |
| Existing General Plan Land Use Element Designation | Low Density Residential (LDR) |
| Existing Zoning Classification | Single-Family Residential-10 (R1-10) |
| Old Towne | No |
| Specific Plan/PC | N/A |
| Site Size | 1.91 Acres |
| Circulation | The existing site includes an existing paved dr Rancho Santiago Blvd. |
| Existing Conditions | The site is currently vacant and undeveloped w driveway. |
| Surrounding Land Uses and Zoning | **North:** Single-Family Residential-10 (R1-10); Presbyterian Church |
| | **South:** Single-Family Residential-10 (R1-10); residence |
| | **East:** Single-Family Residential-6 (R1-6); Sing residences |
| | **West:** Single-Family Residential-7 (R1-7) (Acr Santiago Blvd.) Single family residences |
| Previous Applications/Entitlements | N/A |

## 5. PROJECT DESCRIPTION

The proposed project includes the following components:

Subdivision:

The project proposes subdividing the existing site into 14 new lots; 11 numbered lots for new residences and three letter lots for access, open space, and landscaping. The numbered lots will have an average lot area of 4,489 square feet and will be accessible by a private road that connects to Rancho Santiago Boulevard. The proposed lettered lots will be composed of the front yard setback areas, the private road, and common open space area. Gated access is not proposed.

Residential Homes and Private Road:

Each numbered lot will have a new 2-story single-family home with an attached 2-car garage and a

private backyard. The buildings each maintain a 10-foot setback from the private road and 5-foot side yard setbacks. The homes will have the option of three conceptual floor plans with three bedrooms each and the ability to convert the den into a fourth bedroom. In addition to the required two parking spaces per unit, 17 guest spaces are provided through onee space on the driveway for each property and 6 spots in the common open space area in the rear of the lot.

Landscaping and Common Space Area

The project also offers a shared common space with benches, a covered structure, and a grass field at the rear of the property. The common space will have pedestrian access through a walkway along the private road. The private road and common space comply with applicable development requirements, and the overall project site will be adequately maintained with shrubs and trees to enhance the visual impact of their intended use.

## 6. PROJECT ANALYSIS

Staff believe that the proposed infill residential development will be compatible with the scale, massing, orientation, and articulation of the surrounding neighborhood. The subdivision layout including proposed drive aisle, driveway, and garage orientations are similar to surrounding residential areas. Each unit meets required off-street parking requirements, maintains 5-foot side yard setbacks for building separation, and the project's common open space area is located in the rear of the property to enhance privacy from the street.

**Planned Unit Development (PUD)**

The current parcel is an irregular lot measuring approximately 133 feet of street frontage along N Rancho Santiago and 626 feet in depth, currently designated R1-10. Under current zoning requirements, existing conditions would allow two single family units, as the street frontage would be the limiting factor. As such, the applicant proposes establishing a PUD designation, which would allow for the subdivision and construction of 11 units, enabling a creative way to maximize the usage of the land. The proposal of 11 units is also consistent with the density allowed under the General Plan designation of Low Density Residential. The new private road would allow each property to have street frontage and unobstructed access.

**Development Standards**

The development standards for a PUD remain consistent with the development standards of the R1-10 zoning code standards and are applied to the overall site and not each individual subdivision. A PUD also implements additional development standards such as setbacks to interior streets, building separation, landscaping, open space amenities, pedestrian paths, and private streets. Staff have reviewed and worked with the applicant to reach code compliance with the PUD development standards applicable to the proposed project.

**Project Design**

The project design has been reviewed under the findings required by the Administrative Design Review findings set forth in the Municipal code and the Infill Design Guidelines. The surrounding neighborhood does not have any specific architectural style nor specific design guidelines. The proposed units will have a Mediterranean architectural style that includes stucco walls, tile roofs, wrought iron, and an asymmetrical layout. Three color plans are proposed, and all units will face the private drive. The project design upholds community aesthetics through the use of a consistent

architectural design theme.

## 7. AUTHORIZING GUIDELINES

Orange Municipal Code (OMC) Table 17.08.020 and Sections 17.10.030.D and 17.16.020 authorize the Planning Commission to review and recommend action to the City Council on a request for a Planned Unit Development (PUD) to allow alternative to standard residential development wherein the exisitng general plan densities are preserved. OMC Section 17.08.020 also notes that when more than one type of application is filed for a single project, the application requiring the highest level of approval shall dictate the review process for the entire group of applications. Therefore, the Planning Commission is authorized to recommend action on the associated applications.

## 8. ENVIRONMENTAL REVIEW

The proposed project is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) per State CEQA Guidelines Section 15183 (Projects Consistent with a Community Plan, General Plan, or Zoning) because the project is consistent with the existing General Plan density and zoning. An initial study was provided in justification to verify consistency with the existing certified General Plan EIR (Attachment 4). There is no environmental public review or notice required for this exemption.

## 9. ADVISORY BOARD ACTION

**Staff Review Committee:**

On September 4, 2024, and December 4, 2024, the City's interdepartmental Staff Review Committee (SRC) reviewed the proposed plans and supplemental documents. On March 3, 2025, the SRC found the plans code compliant and recommended approval of the project.

## 10. ATTACHMENTS

- Attachment 1 Planning Commission Resolution No. PC 11-26
- Attachment 2 Project Plans (Architectural, Landscaping, Preliminary Civil, and Renderings)
- Attachment 3 Vicinity Map
- Attachment 4 California Environmental Quality Act (CEQA) Initial Study
- Attachment 5 Existing and Proposed Zoning Map

# Agenda Item

## Planning Commission

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**TO:** **Chair and Members of the Planning Commission**

**THRU:** **Hayden Beckman, Planning Manager**

**FROM:** **Hayden Beckman, Planning Manager**

## 1. SUBJECT

Public Hearing to consider a request to establish a Planned Unit Development (PUD) and subdivide a 2.02-acre parcel into 11 single-family homes at 647 N. Rancho Santiago Boulevard and finding of CEQA Exemption (Zone Change No. 1318, Tentative Tract Map No. 0052, Conditional Use Permit No. 3203, Design Review No. 5119, and Major Site Plan Review No. 1137).

## 2. SUMMARY

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3. Find the request categorically exempt from the California Environmental Quality Act (CEQA) in accordance with Section 15183 of the State CEQA Guidelines (Projects consistent with a Community Plan, General Plan, or Zoning).

## 4. PROJECT BACKGROUND

**Property Information**

| | |
|---|---|
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| Property Owner | George Keith Mitchell, IIII, Rancho Ridge, LLC |
| Property Location | 647 N. Rancho Santiago Boulevard |
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| Existing Zoning Classification | Single-Family Residential-10 (R1-10) |
| Old Towne | No |
| Specific Plan/PC | N/A |
| Site Size | 1.91 Acres |
| Circulation | The existing site includes an existing paved dr Rancho Santiago Blvd. |
| Existing Conditions | The site is currently vacant and undeveloped v driveway. |
| Surrounding Land Uses and Zoning | **North:** Single-Family Residential-10 (R1-10); Presbyterian Church |
| | **South:** Single-Family Residential-10 (R1-10); residence |
| | **East:** Single-Family Residential-6 (R1-6); Sing residences |
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The proposed project includes the following components:

Subdivision:

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Residential Homes and Private Road:

Each numbered lot will have a new 2-story single-family home with an attached 2-car garage and a private backyard. The buildings each maintain a 10-foot setback from the private road and 5-foot side yard setbacks. The homes will have the option of three conceptual floor plans with three bedrooms each and the ability to convert the den into a fourth bedroom. In addition to the required two parking spaces per unit, 17 guest spaces are provided through onee space on the driveway for each property and 6 spots in the common open space area in the rear of the lot.

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The project also offers a shared common space with benches, a covered structure, and a grass field at the rear of the property. The common space will have pedestrian access through a walkway along the private road. The private road and common space comply with applicable development requirements, and the overall project site will be adequately maintained with shrubs and trees to enhance the visual impact of their intended use.

# 6. PROJECT ANALYSIS

Staff believe that the proposed infill residential development will be compatible with the scale, massing, orientation, and articulation of the surrounding neighborhood. The subdivision layout including proposed drive aisle, driveway, and garage orientations are similar to surrounding residential areas. Each unit meets required off-street parking requirements, maintains 5-foot side yard setbacks for building separation, and the project's common open space area is located in the rear of the property to enhance privacy from the street.

**Planned Unit Development (PUD)**

The current parcel is an irregular lot measuring approximately 133 feet of street frontage along N Rancho Santiago and 626 feet in depth, currently designated R1-10. Under current zoning requirements, existing conditions would allow two single family units, as the street frontage would be the limiting factor. As such, the applicant proposes establishing a PUD designation, which would allow for the subdivision and construction of 11 units, enabling a creative way to maximize the usage of the land. The proposal of 11 units is also consistent with the density allowed under the General Plan designation of Low Density Residential. The new private road would allow each property to have street frontage and unobstructed access.

**Development Standards**

The development standards for a PUD remain consistent with the development standards of the R1-10 zoning code standards and are applied to the overall site and not each individual subdivision. A PUD also implements additional development standards such as setbacks to interior streets, building separation, landscaping, open space amenities, pedestrian paths, and private streets. Staff have reviewed and worked with the applicant to reach code compliance with the PUD development standards applicable to the proposed project.

**Project Design**

The project design has been reviewed under the findings required by the Administrative Design Review findings set forth in the Municipal code and the Infill Design Guidelines. The surrounding neighborhood does not have any specific architectural style nor specific design guidelines. The proposed units will have a Mediterranean architectural style that includes stucco walls, tile roofs, wrought iron, and an asymmetrical layout. Three color plans are proposed, and all units will face the private drive. The project design upholds community aesthetics through the use of a consistent architectural design theme.

# 7. AUTHORIZING GUIDELINES

Orange Municipal Code (OMC) Table 17.08.020 and Sections 17.10.030.D and 17.16.020 authorize the Planning Commission to review and recommend action to the City Council on a request for a Planned Unit Development (PUD) to allow alternative to standard residential development wherein

the exisitng general plan densities are preserved. OMC Section 17.08.020 also notes that when more than one type of application is filed for a single project, the application requiring the highest level of approval shall dictate the review process for the entire group of applications. Therefore, the Planning Commission is authorized to recommend action on the associated applications.

## 8. ENVIRONMENTAL REVIEW

The proposed project is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) per State CEQA Guidelines Section 15183 (Projects Consistent with a Community Plan, General Plan, or Zoning) because the project is consistent with the existing General Plan density and zoning. An initial study was provided in justification to verify consistency with the existing certified General Plan EIR (Attachment 4). There is no environmental public review or notice required for this exemption.

## 9. ADVISORY BOARD ACTION

**Staff Review Committee:**

On September 4, 2024, and December 4, 2024, the City's interdepartmental Staff Review Committee (SRC) reviewed the proposed plans and supplemental documents. On March 3, 2025, the SRC found the plans code compliant and recommended approval of the project.

**Design Review Committee:**

On April 16, 2025, a public meeting was held for the Design Review Committee (DRC) to review the plans. The DRC recommended approval of the project to the Planning Commission with additional conditions regarding the proposed landscaping on the site.

## 10. ATTACHMENTS

- Attachment 1 Planning Commission Resolution No. PC 11-26
- Attachment 2 Project Plans (Architectural, Landscaping, Preliminary Civil, and Renderings)
- Attachment 3 Vicinity Map
- Attachment 4 California Environmental Quality Act (CEQA) Initial Study
- Attachment 5 Existing and Proposed Zoning Map

**ZONE CHANGE NO. 1318**
**TENTATIVE TRACT MAP NO. 0052**
**CONDITIONAL USE PERMIT NO. 3203**
**DESIGN REVIEW NO. 5119**
**MAJOR SITE PLAN REVIEW NO. 1137**

**RESOLUTION NO. PC 11-26**

**A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ORANGE RECOMMENDING CITY COUNCIL APPROVAL OF ZONE CHANGE NO. 1318, TENTATIVE TRACT MAP NO. 0052, CONDITIONAL USE PERMIT NO. 3203, DESIGN REVIEW NO. 5119, AND MAJOR SITE PLAN REVIEW NO. 1137, REZONING THE PROPERTY LOCATED AT 647 N. RANCHO SANTIAGO BOULEVARD TO SINGLE FAMILY RESIDENTIAL 10,000 SQUARE FEET – PUD NO. 3203 (R1-10 [PUD 3203]) TO ESTABLISH AN 11-UNIT PLANNED UNIT DEVELOPMENT.**

**APPLICANT: Rancho Ridge LLC – George Keith Mitchell, III**

**WHEREAS**, the Planning Commission has authority pursuant to Orange Municipal Code (OMC) Table 17.08.020 and Sections 17.10.030.D and 17.16.020 to review and recommend action on Zone Change No. 1318, Tentative Tract Map No. 0052, Conditional Use Permit No. 3203, Design Review No. 5119, and Major Site Plan Review No. 1137, to establish a Planned Unit Development (PUD) and subdivide a 2.02-acre parcel into 11 separate parcels each with a new single-family home, located at 647 N. Rancho Santiago Boulevard.

**WHEREAS,** the application for Zone Change No. 1318, Tentative Tract Map No. 0052, Conditional Use Permit No. 3203, Design Review No. 5119, and Major Site Plan Review No. 1137, was filed by Rancho Ridge LLC – George Keith Mitchell, III, in accordance with the provisions of the OMC; and

**WHEREAS,** the application for Zone Change No. 1318, Tentative Tract Map No. 0052, Conditional Use Permit No. 3203, Design Review No. 5119, and Major Site Plan Review No. 1137, was processed in the time and manner prescribed by State and local law; and

**WHEREAS,** Zone Change No. 1318, Tentative Tract Map No. 0052, Conditional Use Permit No. 3203, Design Review No. 5119, and Major Site Plan Review No. 1137 are exempt from the provisions of the California Environmental Quality Act (CEQA) per State CEQA Guidelines Section 15183 (Projects Consistent with a Community Plan, General Plan, or Zoning) because the project proposed is consistent with the existing general plan density and zoning. An initial study was provided in justification to verify consistency with the existing certified General Plan EIR. There is no environmental public review or notice required for this exemption; and

**WHEREAS,** the Planning Commission conducted one duly advertised public hearing on April 6, 2025, at which time interested persons had an opportunity to testify either in support of, or opposition to, the proposed Zone Change No. 1318, Tentative Tract Map No. 0052, Conditional Use Permit No. 3203, Design Review No. 5119, and Major Site Plan Review No. 1137.

**NOW, THEREFORE, BE IT RESOLVED** that the Planning Commission of the City of Orange hereby recommends approval to the City Council Zone Change No. 1318, Tentative Tract Map No. 0052, Conditional Use Permit No. 3203, Design Review No. 5119, and Major Site Plan Review No. 1137, to establish a Planned Unit Development (PUD) and subdivide a 2.02-acre parcel into 11 separate parcels each with a new single-family home, located at 647 N. Rancho Santiago Boulevard., based on the following findings:

**SECTION 1 – FINDINGS**

*General Plan Finding:*

1. *The project must be consistent with the goals and policies stated within the City's General Plan.*

   The proposed project is consistent with the City's General Plan Land Use as the development of 11 new single-family residential units is on a previously vacant and underutilized site. The project remains compliant to the existing density allowed for the General Plan designation of Low Density Residential. This project will contribute to the goal of overall housing development and contribute to the economic health of the city by introducing new residents.

*Zone Change Findings:*

1. *There are no required findings for a Zone Change since it is a legislative action.*

   The proposal for a zone change is a procedural action to revise the subject property's existing zoning designation of Residential Single Family 10,000 square feet to Residential Family Single Family 10,000 (PUD 3203). The zone change will not result in allowing different land uses and regulations for the subject site, and the general plan land use designation will remain unchanged.

*Tentative Tract Map Findings:*

1. *The proposed division of land complies with all requirements of the Subdivision Map Act and Title 16, Subdivisions, of the Orange Municipal Code, and all other resolutions and ordinances of this City, including, but not limited to, requirements concerning area, improvements and design, floodwater drainage control, appropriate improved public roads, sanitary disposal facilities, water supply availability, public safety facilities and environmental protection.*

   The proposed Tentative Tract Map for 11 new single-family homes complies with the requirements of the Subdivision Map Act and Title 16, Subdivisions, of the Orange Municipal Code and all other resolutions and ordinances of this City. The Tentative Tract Map for 11

new single-family homes proposes to subdivide the property into 14 parcels. Three of the parcels will serve as reciprocal access easements through a private driveway, pedestrian sidewalk, and shared open space The other 11 parcels will serve each proposed single-family home. Planning requirements related to area, improvements and design, floodwater drainage control, appropriate improved public roads, sanitary disposal facilities, water supply availability, public safety facilities and environmental protection have been addressed either via project design components shown on the proposed plans or through conditions of approval. Therefore, the project meets this finding.

*Conditional Use Permit Findings:*

1. *A Conditional Use Permit shall be granted upon sound principles of land use and in response to services required by the community.*

   The granting of this Conditional Use Permit is based upon sound principles of land use and in response to services required by the community. Consideration has been given as to whether the proposed use will detrimentally affect adjacent land uses. The new units will not detrimentally affect the surrounding land uses as the area is a single-family residential neighborhood and the proposed number of units fits within the allowed density under the general plan.

2. *A Conditional Use Permit shall not be granted if it will cause deterioration of bordering land uses or create special problems for the area in which it is located.*

   The request to have a 11 single-family units at the proposed location is not anticipated to have any adverse effects to bordering land uses or create special problems, because the site is located within the Residential Single Family 10,000 square feet (R1-10) zoning district, which is intended to have residential land uses.

3. *A Conditional Use Permit must be considered in relationship to its effect on the community or neighborhood plan for the area in which it is located.*

   The proposed 11 single family homes will follow the existing community patterns of the neighborhood as a single-family residential community. The project includes a private road and shared parking to be maintained by an established HOA which will remediate the additional parking demand.

4. *A Conditional Use Permit, if granted, shall be made subject to those conditions necessary to preserve the general welfare, not the individual welfare of any particular applicant.*

   All project conditions maintain a purpose of preserving the general welfare of the City and community. Conditions specifically serve to manage project construction impacts, provide for site maintenance, address water quality, accommodate disabled person site access, protect or improve the public right-of-way, protect or improve utilities and accommodate aesthetics.

*Planned Unit Development Findings:*

1. *The project conforms to the general plan in regard to land use designation and density.*

   The proposed project conforms to the general plan land use designation of Low Density Residential 2-6 du/ac. The 11 proposed units comply with the density allowed.

2. *The project utilizes creative and imaginative planning and design features to create a quality living environment, equal to or better than what might be accomplished under the base zone designation.*

   The proposed project allows for a higher quality project than what could be accomplished under the existing zone due to the amount of street frontage the existing lot has. Under the base zone designation, a maximum of 2 units would be possible due to code requirements. By establishing a PUD, the project can maximize the potential for housing on the parcel by creating a private road, guest parking spaces, and a shared common area. This project also establishes a consistent design theme for all the proposed units which will enhance the neighborhood appearance.

3. *The project preserves unique physical, topographical or environmental features, where applicable.*

   The site does not have unique physical, topographical, or environmental features.

*Design Review Findings:*

1. *The project design upholds community aesthetics through the use of an internally consistent, integrated design theme and is consistent with all adopted specific plans, applicable design standards and their required findings.*

   The subject property is not located within any specific plan area nor does it have applicable design standards. However, the project proposes a consistent Mediterranean design theme for all the proposed units. The scale and massing of the proposed units also match the neighborhood as the existing neighborhood has multiple single- and two-story single family homes.

*Major Site Plan Review Findings:*

1. *The project design is compatible with surrounding development and neighborhoods.*

   The surrounding development consists of residential and residential adjacent uses. The proposed project will provide new landscaping and additional single-family housing to the residential neighborhood.

2. *The project conforms to City development standards and any applicable special design guidelines or specific plan requirements.*

The project complies with the City's development standards for Residential Single Family 10,000 square feet zoning and the Planned Unit Development standards.

3. *The project provides for safe and adequate vehicular and pedestrian circulation, both on and off site.*

   The project proposes an open-access private road from N. Rancho Santiago Boulevard to be maintained by an established HOA which provides access to each single-family unit. Each unit will have 2 enclosed parking spaces and a driveway for one additional guest parking space. The site also offers an additional 6 parking spaces at the end of the private road with a pedestrian sidewalk to access them. The proposal of the private road will not deteriorate the existing area and ample parking is provided.

4. *City services are available and adequate to serve the project.*

   A review of the project with all City departments concludes that City services will be available and adequate to serve this site, including water, sewer, police and fire services.

5. *The project has been designed to fully mitigate or substantially minimize adverse environmental effects.*

   No environmental effects have been identified for the project. The project is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) per State CEQA Guidelines Section 15183 (Projects Consistent with a Community Plan, General Plan, or Zoning) because the project proposed is consistent with the existing general plan density and zoning. An initial study was provided in justification to verify consistency with the existing certified General Plan EIR.

**SECTION 2 – ENVIRONMENTAL REVIEW**

The proposed Project is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) per State CEQA Guidelines Section 15183 (Projects Consistent with a Community Plan, General Plan, or Zoning) because the project proposed is consistent with the existing general plan density and zoning. An initial study was provided in justification to verify consistency with the existing certified General Plan EIR. There is no environmental public review or notice required for this exemption.

**SECTION 3 – APPROVAL AND CONDITIONS OF APPROVAL**

The Planning Commission hereby imposes the following conditions for Zone Change No. 1318, Tentative Tract Map No. 0052, Conditional Use Permit No. 3203, Design Review No. 5119, and Major Site Plan Review No. 1137:

*General Conditions:*

1. This project is approved as a precise plan. All work shall conform in substance and be maintained in general conformance with the plans (date stamped approved April 6, 2026, and

in the project case file), including modifications required by the conditions of approval, and as recommended for approval by the Planning Commission. After the application has been approved, if changes are proposed regarding the location or alteration of any use or structure, a changed plan may be submitted to the Community Development Director for approval. If the Community Development Director determines that the proposed change complies with the provisions and the spirit and intent of the approval action, and that the action would have been the same for the changed plan as for the approved plan, the Community Development Director may approve the changed plan without requiring a new public meeting. If the Community Development Director determines that any proposed change is substantial, he may refer the plans to the Planning Commission for subsequent review and determination.

2. The applicant agrees, as a condition of City's approval of Zone Change No. 1318, Tentative Tract Map No. 0052, Conditional Use Permit No. 3203, Design Review No. 5119, and Major Site Plan Review No. 1137, to indemnify, defend, and hold harmless, at applicant's expense, the City, its officers, agents, and employees ("City") from and against any claim, action or proceeding brought against the City, including, but not limited to, any claim, action or proceeding commenced within the time period provided in Government Code Section 66499.37 to attack, review, set aside, void or annul the City's approval, to challenge the determination made by the City under the California Environmental Quality Act ("CEQA") or to challenge the reasonableness, legality or validity of any condition attached hereto. City shall promptly notify applicant of any such claim, action or proceeding to which the City receives notice and to cooperate fully with the applicant in the defense thereof. Applicant shall reimburse the City for any and all costs and expenses, including, but not limited to, court costs and attorney's fees that the City may be required to pay, including any expenses ordered by a court or expenses incurred through the Office of the City Attorney in connection with said claim, action or proceeding. City may, in its sole discretion, participate in the defense of any claim, action or proceeding but such participation shall not relieve applicant of the obligations of this condition. In the event the applicant is required to defend City in connection with such claim, action or proceeding, City shall have the right to approve counsel to so defend the City, approve all significant decisions concerning the manner in which the defense is conducted and approve any all settlements, which approval(s) shall not be unreasonably withheld. The obligations set forth herein remain in full force and effect throughout all stages of litigation including any and all appeals of any lower court judgment rendered in the proceeding. Further, applicant agrees to indemnify, defend and hold harmless the City for all costs and expenses incurred in enforcing this provision.

3. The applicant shall comply with all federal, state, and local laws, including all City regulations. Violation of any of those laws in connection with the use may be cause for revocation of this permit.

4. The final approved conditions of approval shall be reprinted on the construction documents when submitting to the Building Division for the plan check process.

5. Building permits shall be obtained for all construction work, as required by the City of Orange, Community Development Department's Building and Safety Services. Failure to obtain the required building permits may be cause for revocation of this entitlement.

6. In conjunction with construction, all activity will be limited to the hours between 7:00 a.m. and 8:00 p.m. Monday through Saturday. No construction activity will be permitted on Sundays and Federal holidays.

7. Change No. 1318, Tentative Tract Map No. 0052, Conditional Use Permit No. 3203, Design Review No. 5119, and Major Site Plan Review No. 1137 shall become void if not vested within two years from the date of approval. Time extensions may be granted as specified in Title 17 of the Orange Municipal Code.

Planning Division:

8. A community association or other means acceptable to the City must be established to maintain all commonly held property. Copies of conditions, covenants and restrictions that will apply to the proposed development shall be submitted to the Community Development Department and City Attorney for review prior to the issuance of the building permit for the project.

Police Department:

9. Security and design measures that employ defensible space concepts shall be utilized in development and construction plans. These measures incorporate the concepts of Crime Prevention through Environmental Design (CPTED), which involves considerations such as placement and orientation of structures, access and visibility of common areas, placement of doors, windows, addressing, and landscaping. CPTED promotes public safety, physical security and allows citizens the ability to monitor activity. It is based on five concepts to provide non-invasive and permanent measures to prevent and reduce crime: territoriality, natural surveillance, access control, activity support, and maintenance. The project shall also comply with the requirements contained in the City of Orange Municipal Code Chapter 15.52, Building Security Construction Standards reference Ordinance #6-22.

Fire Department:

10. Onsite fire department access will require easement recording prior to issuance of Rough Grading Permit and shall be reviewed by Fire prior to approval.

11. Structures are within the Very High Fire Hazard Severity Zone. Precise Fuel Modification plans will be required at Building plan submittal. A fire behavior analysis will be required when structure cannot meet prescriptive code requirement of 170 feet total distance of combined zones. Visit orangecityfire.org for the Vegetation Management Guideline.

12. Onsite fire department access will require reciprocal easement recording prior to issuance of Rough Grading Permit and shall be reviewed by Fire prior to approval. The easement shall include reciprocal access amongst all properties. Recording shall include a Declaration of Restrictions in perpetuity, to include impact and liability being created by the shared obligation of all property owners and future individuals with interest to each property. All maintenance of, including but not limited to roadways, utility mains, fire lane signage, markings, fire lines, fire hydrants testing and service, and all equipment thereto within the reciprocal easement.

13. Onsite fire hydrants required to comply with CFC Chapter 5.

Building Division:

14. Provide on-site fire hydrants and mains capable of supplying the required fire flows. The hydrant model and on-site locations shall be approved by the Fire Department and have a three foot minimum clearance around the circumference of the fire hydrant.

Subdivision:

15. All works within public right-of-way and public utility easements will require Encroachment Permits, including sidewalk and driveway constructions and utility main and lateral constructions.

16. All public infrastructures, including street sections, sidewalk, driveway apron, and utilities shall comply with City of Orange Standard Plans and Specifications.

17. Utilities serving the development, such as electric, cable television, street lighting and communication shall be installed underground, completed and approved by the appropriate utility provider.

18. Driveway aprons shall conform to Public Works Standard Plan 116A for residential driveway with ADA accessibility.

19. The developer shall be required to upgrade existing sidewalks to meet current standard along N. Rancho Santiago Blvd. per City of Orange Engineering Standard Plan 118.

20. Sanitary sewer system connecting from the buildings to public mainline shall be private and maintained by the property owner

21. Pavement restorations on streets, under Moratorium or with a Pavement Condition Index of 75 or greater, shall be done per Instruction 15 of the Encroachment Permit.

22. The applicant shall submit a grading plan in compliance with City standards for review and approval by the Public Works Director. All grading and improvements on the subject property shall be made in accordance with the Manual of Grading and Standard Plans and Specifications to the satisfaction of the Public Works Director. The applicant may be required to include Phased Erosion and Sediment Control Plans, Site Demolition Plan, and Utility Plan as parts of the grading plan

23. Prior to grading permit issuance, the project proponent shall complete a right-of-way dedication with Public Works Department for an additional 6 feet of street frontage along N. Rancho Santiago Blvd.

24. A Hydrology Study/Report or Drainage Assessment Letter shall be submitted for review and approval by Public Works. The Hydrology Study/Report shall comply with the Orange County Hydrology Manual and Addenda (OCHM). Design Storm Frequency at a minimum, shall be 10-year storm (25-year in a sump condition), and a 100-year storm event. Proposed

improvements shall comply with freeboard requirements per OCHM and County Local Drainage Manuals.

25. Site grading shall conform to the latest California Building Code Section 1804. The ground immediately adjacent to the foundation shall be sloped away from the building at a slope of 5% for pervious surfaces, and 2% for impervious surfaces, at a minimum distance of 10 feet.

26. The contractor shall obtain a Grading Permit from Public Works Department prior to start of any site demolition, clearing and grubbing, and grading.

27. Any soil imported or exported shall require a Transportation Permit from Public Works Traffic Division.

28. Upon submittal of grading plan for plan check, the applicant shall a deposit to cover plan check and inspection services related to the grading activities.

29. The grading plan shall detail all of the locations where retaining walls will be constructed. Geometric detail of retaining walls shall be shown on the grading plan, including material type, dimensions, backfill, and subdrains. A building permit is also required for retaining walls over 4 feet in height measured from the bottom of the footing to the top of the wall prior to construction. Structural details and design calculations shall be submitted as a separate document and will be reviewed and permitted by City Building Division.

30. Any grading outside of the owner's property boundary shall require the applicant to either obtain a temporary construction easements or permission by adjacent property owners in a form suitable to the Public Works Director.

31. Show all structural BMPs for water quality purpose on Grading Plan. Water quality features shown on the Grading Plan must match WQMP.

32. Prior to building foundation construction, a Certificate Letter of Line and Grade shall be submitted to Public Works Construction Inspector demonstrating that the site grading and pad elevation are completed according to the grading plan.

33. Arborist report and tree removal permit will be required prior to any tree removal.

34. Prior to issuance of building permits, the applicant shall submit an address number request, including an addressing plan, to Public Works Department for review and approval.

Water:

35. Prior to approval of the water improvement plan, the applicant must satisfy all water construction bond requirements for the installation of the public water system improvements as determined by the Water Division.

36. Prior to approval of a water improvement plan, the applicant must satisfy all water main connection, plan check, and inspections charges as determined by the Water Division.

37. Prior to issuance of building permit, for the first phase of work, the applicant will be responsible for obtaining approval of all necessary encroachment permits from affected agencies for all public water construction work.

38. Prior to issuance of any grading permit or building permit, the applicant must submit improvement plans to the Water Division for review and approval for any new fire hydrants, domestic water services, fire services, landscape services, backflow prevention devices, and any other proposed improvements or relocations affecting the public water system facilities.

39. Prior to issuance of building permit, construction documents must show that permanent signs, awning, surface water quality management features or other structures are not built over water mains, laterals, services, meters, or fire hydrants as required by the Water Division.

40. Prior to issuance of building permit, the applicant must submit construction documents that show that an eight-foot minimum clearance is provided between City water mains, laterals, services, meters, fire hydrants, signs, or trees or other substantial shrubs and plants as required by the Water Division. The Water Division will review and approve the construction documents.

41. Prior to issuance of building permit, the applicant must submit construction documents must show that a six foot minimum horizontal clearance and a one foot minimum vertical clearance would be maintained between City water mains, laterals, services, meters, fire hydrants and all other utilities except sewer. The Water Division will review and approve the construction documents.

42. Prior to issuance of building permit, the applicant must submit construction documents must show that the installation of sewer mains in the vicinity of water mains is done per the Department of Public Works Water Division Standard No. 113 and will be approved by the Water Division.

43. Prior to issuance of building permit, the Water Division will approve the type and location of landscaping services, fire services, and backflow prevention devices for proposed City services.

44. Prior to issuance of certificate of occupancy, the applicant will be responsible for the installation of necessary fire hydrants and fire services as approved by the Fire Department and Water Division.

45. To meet the required fire flow demands, commercial and industrial areas with 6-inch diameter water mains or smaller will be upgraded to 10 or 12-inch diameter water mains. Similarly, in residential areas, 4-inch diameter water mains will be upgraded to 8-inch diameter water mains.

46. Prior to issuance of any grading permit or building permit, the applicant will be responsible for the installation and/or relocation of the proposed or existing public water system facilities to a location and of a design per the improvement plans approved by the Water Division.

47. Prior to issuance of any grading permit, the applicant must construct all public and/or private improvements to the satisfaction of the Water Division. The applicant may be required to enter into an agreement with the City of Orange, and post security in a form and amount acceptable to the City Engineer and/or Water Division to ensure construction of said improvements.

48. Prior to issuance of certificate of occupancy, the applicant must furnish and install individual pressure regulators on new services where the incoming pressure exceeds eighty pounds per square inch.

49. Prior to issuance of encroachment permit, the applicant must prepare and provide product material submittals consistent with the water improvement plans for all proposed public water system facilities to the Water Division per the City of Orange Standard Specifications and Plans For the Construction of Water System for review and approval.

50. Plans submitted during plan check must show that the minimum separation requirements are met and that each of the various designer's plan sets match. The applicant's consultant preparing the improvement and utility plans must coordinate their plans with the consultants preparing the landscape, architectural, surface water quality management, fire master and/or fire suppression plans so that all designs are consistent.

51. Plans submitted during plan check must show that the water improvement plans are consistent with the fire suppression plans and or fire master plan. The applicant's consultant preparing the water improvement plans must coordinate their plans with the consultant preparing the fire suppression plans and/or fire master plan so that their designs concur.

Water Quality:

52. Prior to recordation of the final map, a copy of the project's CC&Rs shall be provided to the Public Works Department for review and approval that includes requirements for maintenance and funding of the project's structural and treatment water quality best management practices as approved by the City in the project's WQMP.

53. Prior to issuance of grading permits the applicant shall demonstrate that coverage has been obtained under the State's General Permit for Storm water Discharges Associated with Construction Activity (Construction General Permit) by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) Number or other proof of filing. A copy of the current SWPPP required by the General Permit shall be kept at the project site and be available for review by City representatives upon request.

54. The project applicant shall maintain all structural, treatment and low impact development BMPs at the frequency specified in the approved WQMP. Upon transfer of ownership or management responsibilities for the project site, the applicant shall notify the City of Orange Public Works Department of the new person(s) or entity responsible for maintenance of the BMPs.

55. Prior to issuance of grading permits the applicant shall submit a Priority Project WQMP for review and approval to the Public Works Department that:

    A. Prioritizes the use of Low Impact Development principles as follows: preserves natural features; minimizes runoff and reduces impervious surfaces; and utilizes infiltration of runoff as the method of pollutant treatment. Infiltration BMPs to be considered include the use of permeable materials such as concrete and concrete pavers, infiltration trenches, infiltration planters, and other infiltration BMPs as applicable,
    B. Incorporates the applicable Site Design, Routine Source, Structural Control and Low Impact BMPs as defined in the Model Water Quality Management Plan and Technical Guidance Document,
    C. Maintains the hydrologic characteristics of the site by matching time of concentration, runoff, velocity, volume and hydrograph for a 2-year storm event,
    D. Minimizes the potential increase in downstream erosion and avoids downstream impacts to physical structures, aquatic and riparian habitat,
    E. Generally describes the long-term operation and maintenance requirements for structural and Treatment Control BMPs,
    F. Identifies the entity or employees that will be responsible for long-term operation, maintenance, repair and or replacement of the structural and Treatment Control BMPs and the training that qualifies them to operate and maintain the BMPs,
    G. Describes the mechanism for funding the long-term operation and maintenance of all structural and Treatment Control BMPs,
    H. Includes a copy of the forms to be used in conducting maintenance and inspection activities,
    I. Meets recordkeeping requirements (forms to be kept for 5 years).
    J. Includes a copy of the form to be submitted annually by the project owner to the Public Works Department that certifies that the project's structural and treatment BMPs are being inspected and maintained in accordance with the project's WQMP.

56. Prior to issuance of certificates for use and occupancy, the applicant shall demonstrate the following to the Public Works Department:
    A. That all structural and treatment control best management practices (BMPs) described in the Project WQMP have been constructed and installed in conformance with the approved plans and specifications,
    B. That the applicant is prepared to implement all non-structural BMPs described in the Project WQMP,
    C. That an adequate number of copies of the project's approved final Project WQMP are available for the future occupiers.

57. Prior to issuance of certificates for use of occupancy or final signoff by the Public Works Department, the applicant shall demonstrate to the satisfaction of Public Works, that the preparer of the WQMP has reviewed the BMP maintenance requirements in Section V of the WQMP with the responsible person and that a copy of the WQMP has been provided to that person. A certification letter from the WQMP preparer may be used to satisfy this condition.

58. Prior to issuance of building permits, the applicant shall review the approved Water Quality Management Plan (WQMP) and grading plan to ensure the structure's downspouts or drainage outlet locations are consistent with those documents. Copies of the building or architectural plans specifically showing the downspouts and drainage outlets shall be submitted to the Public Works Department for review.

Traffic:

59. In addition to other impact fees that may be applicable, the proposed project may be responsible for paying Transportation Systems Improvement Program (TSIP) fees based on the net increase trips (100 daily vehicles), that will be required to be paid prior to Certificate of Occupancy.

60. The fees are calculated based on the additional traffic added to the local circulation system from a proposed project.

61. In addition to other impact fees that may be applicable, the proposed project will be responsible for paying Transportation Corridor Agencies (TCA) fees, prior to Certificate of Occupancy, based on a net increase of residential units with a greater than 750 square foot footprint. For more information on TCA fees, and what fees will apply please visit the Development Impact Fee Program website: https://thetollroads.com/about/about-tca/development-impact-fee-program/

**ADOPTED** this 20th day of April 2026.

Isaiah Leslie
Planning Commission Chair

I hereby certify that the foregoing Resolution was adopted by the Planning Commission of the City of Orange at a regular meeting thereof held on the 20th day of April2026, by the following vote:

AYES:
NOES:
RECUSED:
ABSENT:

Hayden Beckman
Planning Manager





Note: Artist's conception; colors, materials, application, and landscape treatment may vary.

## Table of Contents


**Civil**

Tentative Tract Map ..... C-01
Conceptual Utility Plan ..... C-02
Preliminary Grading Plan ..... C-03
Conceptual Striping and Signage Detail ..... C-04

**Fire Planning**

Fire Master Plan | Site Overview ..... FMP-1
Fire Access Site Plan ..... FMP-2
Fire Lane Signage and Access ..... FMP-3
Required Letters ..... FMP-4

**Architecture**

Architectural Site Plan ..... SP-1
Residential Project Summary Table ..... SP-2
Trash Staging Plan ..... SP-3
2022 Calgreen Residential Checklist ..... SP-3
2022 Calgreen Residential Checklist ..... SP-4
2022 Calgreen Residential Checklist ..... SP-5
Plan 1 | Conceptual Perspective ..... A-1
Plan 1 | Conceptual Elevations ..... A-2
Plan 1 | Conceptual Floor Plans ..... A-3
Plan 1 | Conceptual Roof Plan ..... A-4
Plan 1R | Conceptual Elevations ..... A-5
Plan 1R | Conceptual Floor Plans ..... A-6
Plan 1R | Conceptual Roof Plan ..... A-7
Plan 2 | Conceptual Perspective ..... A-8
Plan 2 | Conceptual Elevations ..... A-9
Plan 2 | Conceptual Floor Plans ..... A-10
Plan 2 | Conceptual Roof Plan ..... A-11
Plan 2R | Conceptual Elevations ..... A-12
Plan 2R | Conceptual Floor Plans ..... A-13
Plan 2R | Conceptual Roof Plan ..... A-14
Exterior Colors and Materials ..... CM-1
Exterior Colors and Materials ..... CM-2

**Landscape**

Schematic Landscape Plan ..... L-1
Schematic Enlargement Plan - Community Open Space ..... L-2
Schematic Wall & Fence Plan ..... L-3
Schematic Planting Plan ..... L-4
Plant Images - Trees ..... L-5
Plant Images - Shrubs, Ground Cover and Vines ..... L-6
Amenity & Site Furnishings Specification Sheets ..... L-7
Schematic Lighting Plan ..... L-8


# *647 N. Rancho Santiago Blvd*

*Orange, CA*

2021327 | 06-30-2025


**RANCHO RIDGE, LLC.**

**Rancho Ridge, LLC.**
Contact: Maile Green
949.508.0340
www.minx75@gmail.com

**WHA.** Architects . Planners . Designers .
Contact: Nick Manea
680 Newport Center Drive, Suite 300, Newport Beach, CA 92660
949.250.0607 | www.WHAinc.com

**Hunsaker & Associates, Inc.**
Contact: Robert Glessner
3 Hughes, Irvine. 92618
949.583.1010 | www.hunsaker.com

**Studio PAD**
Contact: Peter Duarte
23195 La Cadena Dr., Suite 103 Laguna Hills, CA 92653
949.770.8530 | www.studio-pad.com

**DUDEK**
Contact: Kase Arkeder
605 Third Street
Encinitas, CA 92024
760.942.5147 | www.dudek.com


Submittal Log

| | |
|---|---|
| Formal City Submittal 1 | 05/03/2023 |
| Formal City Submittal 2 | 06/14/2024 |
| Formal City Submittal 3 | 09/05/2024 |
| Formal City Submittal 4 | 04/18/2025 |
| Formal City Submittal 5 | 06/30/2025 |
| | 11/24/2025 (Updated) |

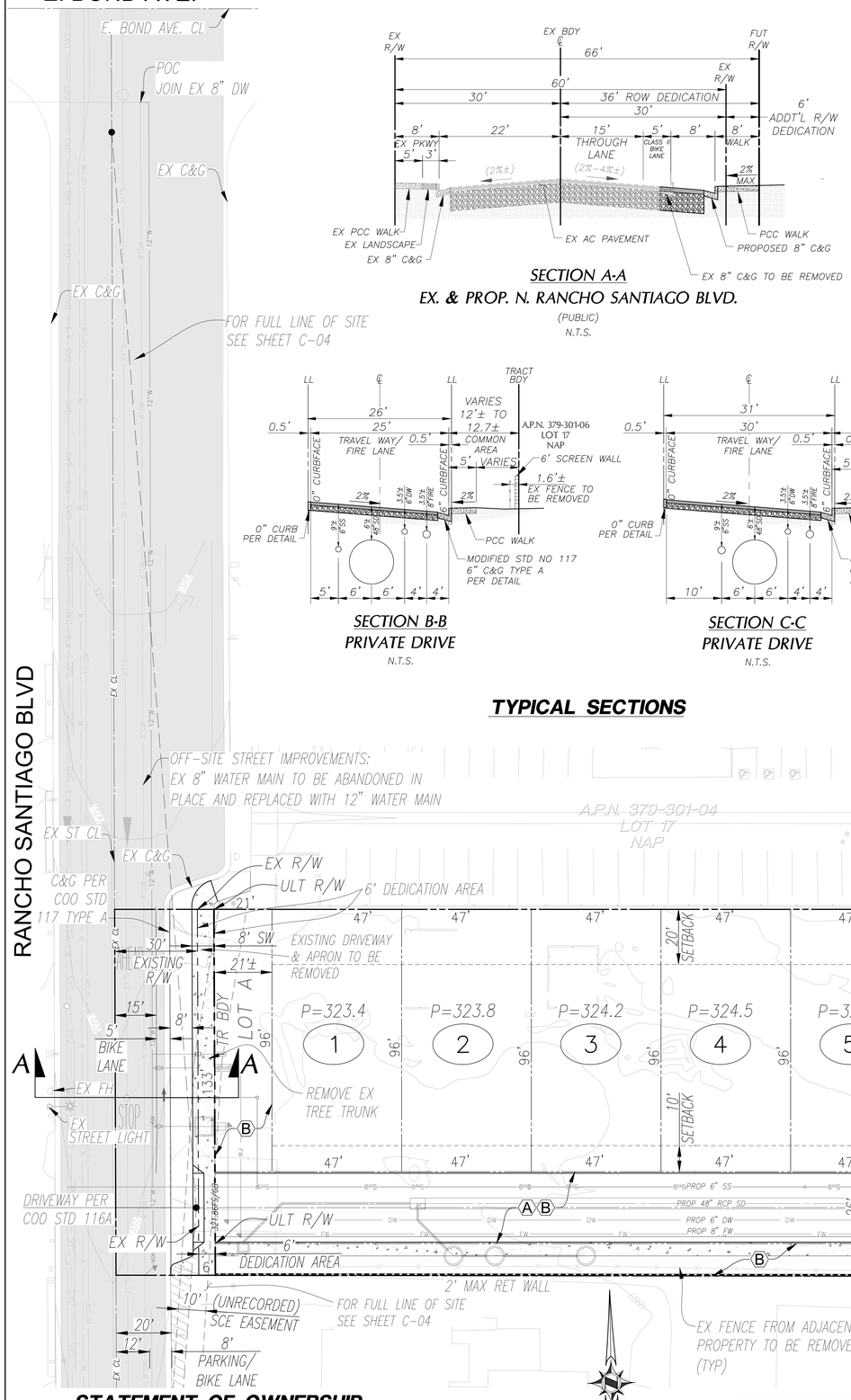
Design Review Project No.:

# TENTATIVE TRACT MAP NO. 19279

## FOR SINGLE FAMILY DWELLING RESIDENTIAL UNITS

## "RANCHO RIDGE"

IN THE CITY OF ORANGE, COUNTY OF ORANGE, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS: THE SOUTHERLY 10.00 FEET OF THE NORTH HALF OF THE NORTH HALF AND THE SOUTH 5 ACRES OF THE NORTH HALF OF LOT 17, BLOCK B, OF THE LAND OF OGE AND BOND AS SHOWN ON A MAP RECORDED IN BOOK 3, PAGES 430 AND 431 OF MISCELLANEOUS RECORDS OF LOS ANGELES COUNTY, CALIFORNIA. EXCEPTING THEREFROM THE SOUTHERLY 210.00 FEET THEREOF. ALSO, EXCEPTING THEREFROM THE WESTERLY 25.00 FEET OF SAID SOUTHERLY 10.00 FEET.







### SECTION A-A

EX. & PROP. N. RANCHO SANTIAGO BLVD.

(PUBLIC)

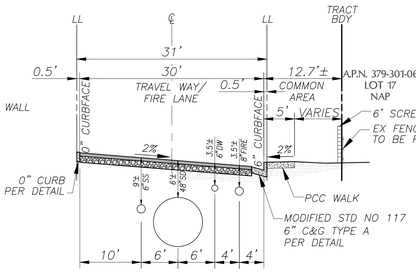
N.T.S.




### SECTION B-B

PRIVATE DRIVE

N.T.S.




### SECTION C-C

PRIVATE DRIVE

N.T.S.

## TYPICAL SECTIONS

## LEGEND

| | |
|---|---|
| 1 / A A | LOT NUMBER |
| | SECTION FLAG |
| | EX. STREET LIGHT |
| | EX. FIRE HYDRANT |
| | EX. POWER POLE |
| NAP | NOT A PART |
| TOP | TOP OF SLOPE |
| TOE | TOE OF SLOPE |
| | DAYLIGHT LINE |
| 580 | EXISTING CONTOUR |
| | LOT LINE |
| | TRACT BOUNDARY |
| | PROPOSED RIGHT-OF-WAY |
| | EXISTING RIGHT-OF-WAY |
| | EXISTING STREET |
| | MODIFIED LINE OF SIGHT |
| SD | PROPOSED STORM DRAIN |
| | PROPOSED WATER QUALITY |
| DW | PROPOSED DOMESTIC WATER |
| FW | PROPOSED FIRE WATER |
| S | PROPOSED SEWER |
| | PROPOSED CURB |
| | FLOW LINE |
| | EASEMENT |
| | PROPOSED FIRE HYDRANT |
| | PROPOSED FIRE DEPARTMENT CONNECTION AND BLOWOFF |
| | PROPOSED CATCH BASIN |
| | PROPOSED DRYWELL |
| | PROPOSED SEWER MANHOLE |
| | PROPOSED SEWER CLEANOUT |
| | PROPOSED DOMESTIC WATER METER |
| | PROPOSED DOMESTIC WATER BACKFLOW |
| | PROPOSED DOMESTIC WATER BLOWOFF |

## ABBREVIATIONS

| | |
|---|---|
| AB | AGGREGATE BASE |
| AC | ASPHALT CONCRETE |
| BC | BEGIN CURVE |
| BCR | BEGIN CURVE RETURN |
| BDY | BOUNDARY |
| BF | BACKFLOW |
| BO | BLOWOFF |
| BW | BACK OF WALK |
| CB | CATCH BASIN |
| C&G | CURB & GUTTER |
| ℄ | CENTERLINE |
| CMB | CRUSHED MISCELLANEOUS BASE |
| CO | CLEANOUT |
| COO | CITY OF ORANGE |
| DW | DOMESTIC WATER |
| DWY | DRIVEWAY |
| EC | END CURVE |
| ECR | END CURVE RETURN |
| EP | EDGE OF PAVEMENT |
| ESM'T | EASEMENT |
| EX | EXISTING |
| FF= | FINISH FLOOR ELEVATION |
| FG | FINISH GRADE |
| FH | FIRE HYDRANT |
| FL | FLOWLINE ELEV. |
| FS | FINISH SURFACE |
| FW | FIRE WATER |
| GB | GRADE BREAK |
| INV | INVERT OF DRAIN |
| LAT | LATERAL |
| LL | LOT LINE |
| NTS | NOT TO SCALE |
| OCSD | ORANGE COUNTY SANITATION DISTRICT |
| P= | PAD ELEVATION |
| PCC | POINT OF COMPOUND CURVATURE |
| PKWY | PARKWAY |
| POC | POINT OF CONNECTION |
| PROP | PROPOSED |
| PVC | POLYVINYL CHLORIDE |
| RCP | REINFORCED CONCRETE PIPE |
| RG | ROUGH GRADE |
| R/W | RIGHT OF WAY |
| RW | RECYCLED WATER |
| SCE | SOUTHERN CALIFORNIA EDISON |
| SD | STORM DRAIN |
| SCGC | SOUTHERN CALIFORNIA GAS COMPANY |
| SL | STREET LIGHT |
| SS | SANITARY SEWER |
| STA | STATION |
| TC | TOP OF CURB |
| TR | TRACT |
| TYP | TYPICAL |
| ULT | ULTIMATE |
| WM | WATER METER |

## UTILITY TABLE

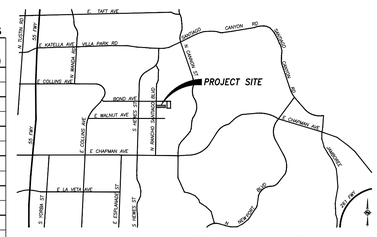
| | | |
|---|---|---|
| FIRE WATER | 284 | LF |
| STORM DRAIN | 525 | LF |
| WATER QUALITY | 163 | LF |
| SANTIARY SEWER (PRIVATE) | 521 | LF |
| SANTIARY SEWER (OFF-SITE) | 47 | LF |
| DOMESTIC WATER (PRIVATE) | 648 | LF |
| DOMESTIC WATER (OFF-SITE) | 460 | LF |

## LOT SUMMARY

LAND USE SUMMARY - NUMBERED LOTS

| LOT | GROSS AREA (S.F.) | GROSS LOT SIZE (ACRES) |
|---|---|---|
| 1 | 4,473 | 0.10 |
| 2 | 4,473 | 0.10 |
| 3 | 4,473 | 0.10 |
| 4 | 4,473 | 0.10 |
| 5 | 4,473 | 0.10 |
| 6 | 4,473 | 0.10 |
| 7 | 4,473 | 0.10 |
| 8 | 4,473 | 0.10 |
| 9 | 4,473 | 0.10 |
| 10 | 4,438 | 0.10 |
| 11 | 4,689 | 0.11 |
| *A | 1,985 | 0.05 |
| *B | 12,919 | 0.30 |
| *C | 19,039 | 0.44 |
| TOTAL | 83,332 | 1.91 |

*HOA MAINTAINED




## VICINITY MAP

N.T.S.

## LAND USE SUMMARY

| CATEGORY | ACREAGE |
|---|---|
| GROSS PROJECT AREA | 2.02 |
| 36' RIGHT-OF-WAY DEDICATION | 0.11 |
| NET PROJECT AREA | 1.91 |
| COMMON AREA - LOT A | 0.05 |
| OS/ PARK AREA - LOT B | 0.30 |
| ACCESS AND PUBLIC UTILITIES - LOT C | 0.44 |
| NET RESIDENTIAL AREA | 0.78 |
| DENSITY (11 DU/1.91 ACRES) | 5.8 DU/AC |

## PARKING SUMMARY

REQUIRED PER PUD *: 39 SPACES (3.5 SP./UNIT)
(22) 2 SP./UNIT
(17) 1.5 GUEST SP. /UNIT
(1 SP. ALLOWED ON INDIVIDUAL LOT)

PROVIDED: 39 SPACES (3.5 SP./UNIT)
- GARAGE: 22 SPACES (2 SP./UNIT)
- GUEST: 17 SPACES (1 SP. ON DRIVEWAY)

1. * PARKING STANDARDS IS BASED ON ZONING CODE TABLE 17.34.060 (A).

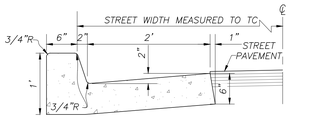
## NOTES

1. EXISTING GENERAL PLAN LAND USE DESIGNATION: LDR-LOW DENSITY RESIDENTIAL
2. PROPOSED GENERAL PLAN LAND USE DESIGNATION: LDR-LOW DENSITY RESIDENTIAL
3. EXISTING ZONING: R-1-10
4. PROPOSED ZONING: R-1-10/PUD
5. ASSESSOR PARCEL NUMBER: 379-301-05
6. UTILITY/SERVICE PROVIDERS:
   GAS – SOUTHERN CALIFORNIA GAS COMPANY
   ELECTRIC – SOUTHERN CALIFORNIA EDISON
   CABLE TELEVISION/INTERNET – COX COMMUNICATION
   PHONE – AT&T
   WATER – CITY OF ORANGE
   SEWER – CITY OF ORANGE
   STORM DRAIN – PRIVATE SD (HOA)
   TRASH – CR&R
   FIRE – CITY OF ORANGE FIRE DEPARTMENT
   POLICE – CITY OF ORANGE POLICE DEPARTMENT
7. THE PROPERTY IS LOCATED WITHIN ORANGE UNIFIED SCHOOL DISTRICT.
8. THE PROPOSED SITE DEVELOPMENT AREA IS LOCATED WITHIN ZONE X.
9. ALL PROPOSED IMPROVEMENTS SHALL COMPLY WITH CITY OF ORANGE STANDARD PLANS AND SPECIFICATIONS OR AS SPECIFIED ON THIS TENTATIVE MAP.
10. PROPOSED GRADING AND DRAINAGE SHALL COMPLY WITH GRADING AND EXCAVATION CODE OF THE CITY OF ORANGE MUNICIPAL CODE.
11. AREA CALCULATIONS ARE APPROXIMATE AND PRELIMINARY AND SUBJECT TO CHANGE IN FINAL DESIGN.
12. PROJECT IS A PROPOSED PLANNED UNIT DEVELOPMENT DEVELOPMENT (PUD).
13. ALL BACKFLOW DEVICES WILL BE CITY APPROVED.

## EASEMENT NOTES

Ⓐ INDICATES A PROPOSED EASEMENT FOR EMERGENCY ACCESS AND PUBLIC SERVICE VEHICLE INGRESS AND EGRESS PURPOSES DEDICATED TO THE CITY OF ORANGE

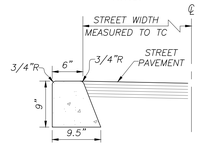
Ⓑ INDICATES A PROPOSED EASEMENT FOR HOMEOWNERS ASSOCIATION COMMON AREA, INCLUDING ROADWAY, PEDESTRIAN ACCESS, LANDSCAPING MAINTENANCE, AND UTILITIES MAINTENANCE, DEDICATED TO THE CITY OF ORANGE




### MODIFIED 6" CURB AND GUTTER DETAIL

STANDARD PLAN NO. 117 TYPE A

N.T.S.

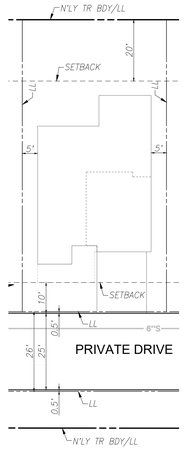



### 0" CURB DETAIL

N.T.S.

NOTES:
1. ALL CURBS AND GUTTERS SHALL BE PORTLAND CEMENT CONCRETE CLAS 520-C-2500.
2. WEAKENED PLANE JOINTS TO BE CONSTRUCTED AT 12' INTERVALS EXCEPT THROUGH DRIVEWAY, PURSUANT TO SECTION 303-5.4.3 OF THE GREENBOOK

## DETAILS




## TYPICAL LOT DETAIL

NTS

## STATEMENT OF OWNERSHIP

I HEREBY STATE THAT THIS MAP WAS PREPARED UNDER MY SUPERVISION AND THAT THE OWNER OF RECORD HAS KNOWLEDGE OF AND CONSENTS TO THE FILING OF THIS MAP.

DOUGLAS L. STALEY — DATE 12/1/2025

20 10 0 20 40

GRAPHIC SCALE 1"=20'

| NO. | DATE | REVISIONS | APPROVED |
|---|---|---|---|
| | | | |

DRAWN BY: DP
DESIGNED BY: AO
CHECKED BY: AO


PREPARED FOR:
RANCHO RIDGE LLC
11625 WANDER LANE
DALLAS, TX 75230
TEL: 949-508-0340
FAX: 949-382-7801

PREPARED BY:
HUNSAKER & ASSOCIATES IRVINE, INC.
157 Technology Drive ▪ Irvine, CA 92618 ▪ PLANNING ▪ ENGINEERING ▪ SURVEYING (949) 583-1010


TENTATIVE TRACT NO. 19279
RANCHO RIDGE
647 N. RANCHO SANTIAGO BOULEVARD

TTM 0052-23

SHEET 1 OF 4

C-01

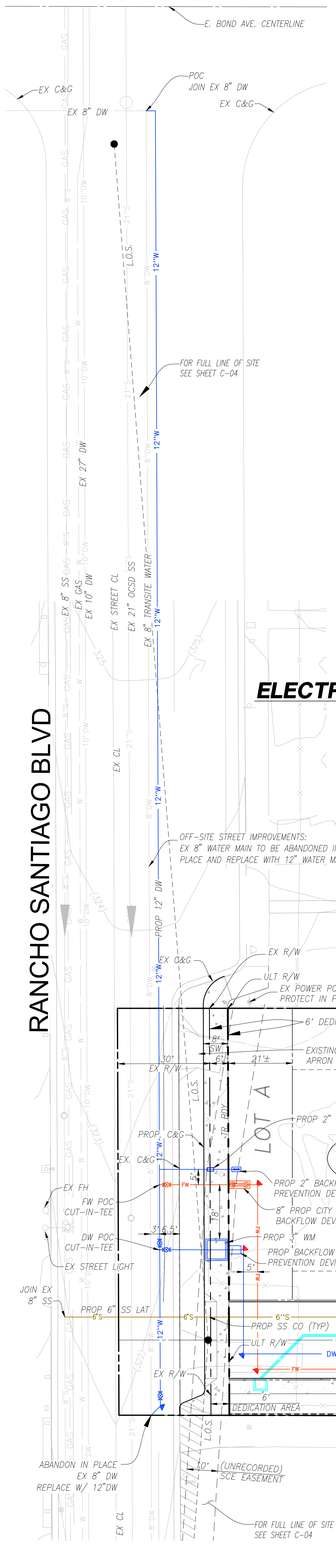
W.O.# 4511-1 TENTATIVE TRACT NO. 19279 – RANCHO RIDGE


PLOTTED BY: Gabriela M. Sayed DATE: Dec. 04, 2025 04:58:30 PM FILE: F:\1250\Engineering\TR_19279\TTM\TR19279_C-01-TTM.dwg

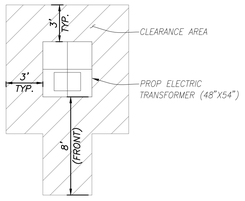
# CONCEPTUAL UTILITY PLAN

## FOR SINGLE FAMILY DWELLING RESIDENTIAL UNITS

## "RANCHO RIDGE"

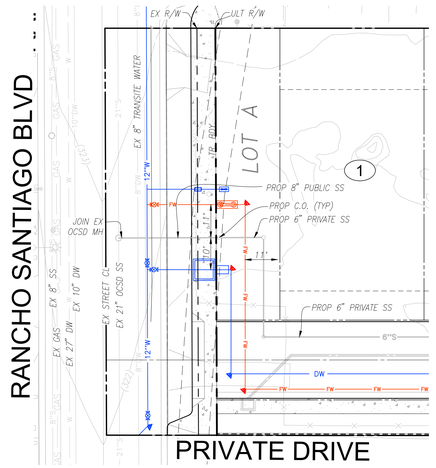



## ELECTRIC TRANSFORMER DETAIL




## ALTERNATE SEWER CONNECTION

SCALE: 1"=20'




## LEGEND

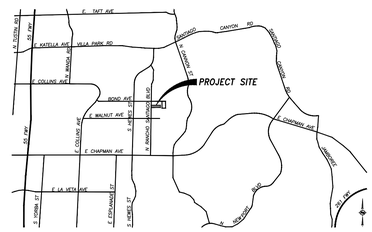
| | |
|---|---|
| 1 | LOT NUMBER |
| A A | SECTION FLAG |
| | EX STREET LIGHT |
| | EX FIRE HYDRANT |
| | EX POWER POLE |
| NAP | NOT A PART |
| | TOP OF SLOPE |
| | TOE OF SLOPE |
| | DAYLIGHT LINE |
| 580 | EXISTING CONTOUR |
| | LOT LINE |
| | TR BDY |
| | PROPOSED RIGHT OF WAY |
| | EXISTING RIGHT OF WAY |
| | PROPOSED CURB |
| | FIRE ACCESS TURNAROUND |
| | EXISTING STREET |
| | MODIFIED LINE OF SIGHT |
| | FLOW LINE |
| | EASEMENT |
| SD | PROPOSED STORM DRAIN |
| | PROPOSED WATER QUALITY |
| DW | PROPOSED DOMESTIC WATER |
| FW | PROPOSED FIRE WATER |
| S | PROPOSED SEWER |
| | PROPOSED FIRE HYDRANT |
| | PROPOSED FIRE DEPARTMENT CONNECTION AND BLOWOFF |
| | PROPOSED CATCH BASIN |
| | PROPOSED DRYWELL |
| | PROPOSED SEWER MANHOLE |
| | PROPOSED SEWER CLEANOUT |
| | PROPOSED DOMESTIC WATER METER |
| | PROPOSED DOMESTIC WATER BACKFLOW |
| | PROPOSED DOMESTIC WATER BLOWOFF |

## ABBREVIATIONS

| | |
|---|---|
| AB | AGGREGATE BASE |
| AC | ASPHALT CONCRETE |
| BC | BEGIN CURVE |
| BCR | BEGIN CURVE RETURN |
| BDY | BOUNDARY |
| BF | BACKFLOW |
| BO | BLOWOFF |
| BW | BACK OF WALK |
| CB | CATCH BASIN |
| C&G | CURB & GUTTER |
| ℄ | CENTERLINE |
| CMB | CRUSHED MISCELLANEOUS BASE |
| CO | CLEANOUT |
| COO | CITY OF ORANGE |
| DW | DOMESTIC WATER |
| DWY | DRIVEWAY |
| EC | END CURVE |
| ECR | END CURVE RETURN |
| EP | EDGE OF PAVEMENT |
| ESM'T | EASEMENT |
| EX | EXISTING |
| FF= | FINISH FLOOR ELEVATION |
| FG | FINISH GRADE |
| FH | FIRE HYDRANT |
| FL | FLOWLINE ELEV. |
| FS | FINISH SURFACE |
| FW | FIRE WATER |
| GB | GRADE BREAK |
| INV. | INVERT OF DRAIN |
| LAT | LATERAL |
| LL | LOT LINE |
| NTS | NOT TO SCALE |
| OCSD | ORANGE COUNTY SANITATION DISTRICT |
| P= | PAD ELEVATION |
| PCC | POINT OF COMPOUND CURVATURE |
| PKWY | PARKWAY |
| POC | POINT OF CONNECTION |
| PROP | PROPOSED |
| PVC | POLYVINYL CHLORIDE |
| RCP | REINFORCED CONCRETE PIPE |
| RG | ROUGH GRADE |
| R/W | RIGHT OF WAY |
| RW | RECYCLED WATER |
| SCE | SOUTHERN CALIFORNIA EDISON |
| SD | STORM DRAIN |
| SCGC | SOUTHERN CALIFORNIA GAS COMPANY |
| SS | SANITARY SEWER |
| STA | STATION |
| TC | TOP OF CURB |
| TR | TRACT |
| TYP | TYPICAL |
| ULT | ULTIMATE |
| WM | WATER METER |

## NOTES

1. EXISTING GENERAL PLAN LAND USE DESIGNATION: LDR-LOW DENSITY RESIDENTIAL
2. PROPOSED GENERAL PLAN LAND USE DESIGNATION: LDR-LOW DENSITY RESIDENTIAL
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4. PROPOSED ZONING: R-1-6/PUD
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   - GAS – SOUTHERN CALIFORNIA GAS COMPANY
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## VICINITY MAP

N.T.S.

GRAPHIC SCALE 1"=20'

| NO. | DATE | REVISIONS | APPROVED |
|---|---|---|---|
| | | | |

| | |
|---|---|
| DRAWN BY: | DP |
| DESIGNED BY: | AO |
| CHECKED BY: | AO |

PREPARED FOR:

RANCHO RIDGE LLC
11625 WANDER LANE
DALLAS, TX 75230
TEL: 949-508-0340
FAX: 949-382-7801

PREPARED BY:

HUNSAKER & ASSOCIATES IRVINE, INC.
PLANNING ▪ ENGINEERING ▪ SURVEYING
157 Technology Drive ▪ Irvine, CA 92618 ▪ (949) 583-1010

TENTATIVE TRACT NO. 19279
RANCHO RIDGE
647 N. RANCHO SANTIAGO BOULEVARD
CONCEPTUAL UTILITY PLAN
TTM 0052-23

SHEET 2 OF 4

C-02

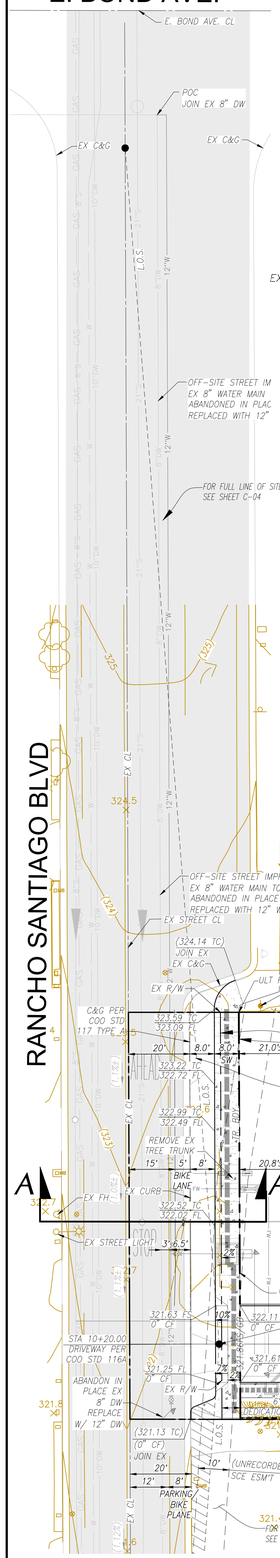
W.O.# 4511-1 TENTATIVE TRACT NO. 19279 – RANCHO RIDGE

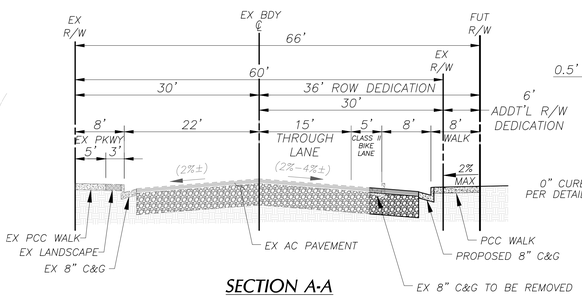
PLOTTED BY: Gabriela M. Sayed DATE: Dec. 04, 2025 04:58:32 PM FILE: F:\1250\Engineering\TR_19279\TTM\TR19279_C-02-Conceptual Utilities.DWG

# PRELIMINARY GRADING PLAN

## FOR SINGLE FAMILY DWELLING RESIDENTIAL UNITS

## "RANCHO RIDGE"



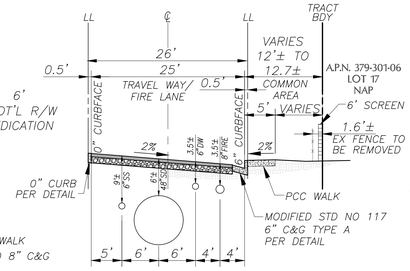




### SECTION A-A

### EX. & PROP. N. RANCHO SANTIAGO BLVD.

(PUBLIC)

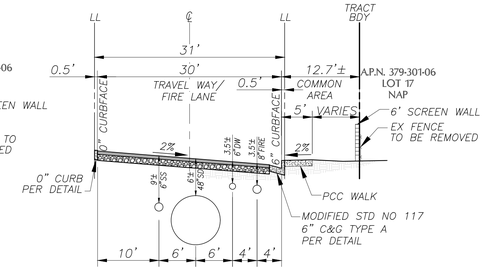
N.T.S.




### SECTION B-B

### PRIVATE DRIVE

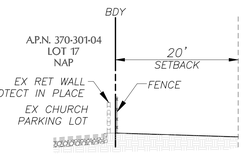
N.T.S.




### SECTION C-C

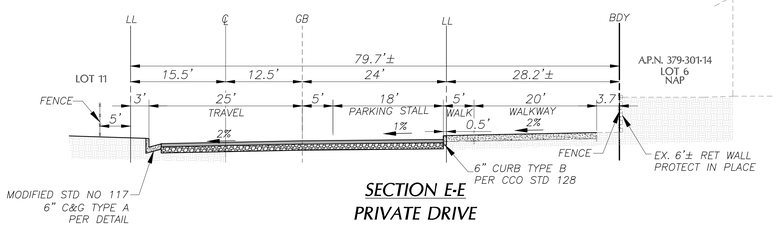
### PRIVATE DRIVE

N.T.S.



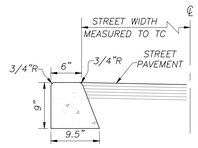

### SECTION D-D

N.T.S.




### SECTION E-E

### PRIVATE DRIVE




### 0" CURB DETAIL

N.T.S.

NOTES:

1. ALL CURBS AND GUTTERS SHALL BE PORTLAND CEMENT CONCRETE CLAS 520-C-2500.
2. WEAKENED PLANE JOINTS TO BE CONSTRUCTED AT 12' INTERVALS EXCEPT THROUGH DRIVEWAY, PURSUANT TO SECTION 303-5.4.3 OF THE GREENBOOK




### MODIFIED 6" CURB AND GUTTER DETAIL

### STANDARD PLAN NO. 117 TYPE A

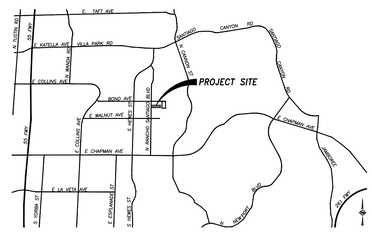
N.T.S.

## ABBREVIATIONS

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| ℄ | CENTERLINE |
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| CO | CLEANOUT |
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| DWY | DRIVEWAY |
| EC | END CURVE |
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| EP | EDGE OF PAVEMENT |
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| FS | FINISH SURFACE |
| FW | FIRE WATER |
| GB | GRADE BREAK |
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| LL | LOT LINE |
| NTS | NOT TO SCALE |
| OCSD | ORANGE COUNTY SANITATION DISTRICT |
| P= | PAD ELEVATION |
| PCC | POINT OF COMPOUND CURVATURE |
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| PVC | POLYVINYL CHLORIDE |
| PVMT | PAVEMENT |
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| SCGC | SOUTHERN CALIFORNIA GAS COMPANY |
| SS | SANITARY SEWER |
| STA | STATION |
| TC | TOP OF CURB |
| TR | TRACT |
| TYP | TYPICAL |
| ULT | ULTIMATE |
| WM | WATER METER |

## LEGEND

| | |
|---|---|
| 1 | LOT NUMBER |
| A A | SECTION FLAG |
| | EX. STREET LIGHT |
| | EX. FIRE HYDRANT |
| | EX. POWER POLE |
| NAP | NOT A PART |
| | TOP OF SLOPE |
| | TOE OF SLOPE |
| | DAYLIGHT LINE |
| 580 | EXISTING CONTOUR |
| | LOT LINE |
| | TRACT BOUNDARY |
| | PROPOSED RIGHT-OF-WAY |
| | EXISTING RIGHT-OF-WAY |
| | PROPOSED CURB |
| | FLOW LINE |
| | EASEMENT |
| | ADA PATH OF TRAVEL |
| | FIRE ACCESS TURNAROUND |
| | EXISTING STREET |
| | MODIFIED LINE OF SIGHT |
| SD | PROPOSED STORM DRAIN |
| WQ | PROPOSED WATER QUALITY |
| DW | PROPOSED DOMESTIC WATER |
| FW | PROPOSED FIRE WATER |
| S | PROPOSED SEWER |
| | PROPOSED FIRE HYDRANT |
| | PROPOSED FIRE DEPARTMENT CONNECTION AND BLOWOFF |
| | PROPOSED CATCH BASIN |
| | PROPOSED DRYWELL |
| | PROPOSED SEWER MANHOLE |
| | PROPOSED SEWER CLEANOUT |
| | PROPOSED DOMESTIC WATER METER |
| | PROPOSED DOMESTIC WATER BACKFLOW |
| | PROPOSED DOMESTIC WATER BLOWOFF |




## VICINITY MAP

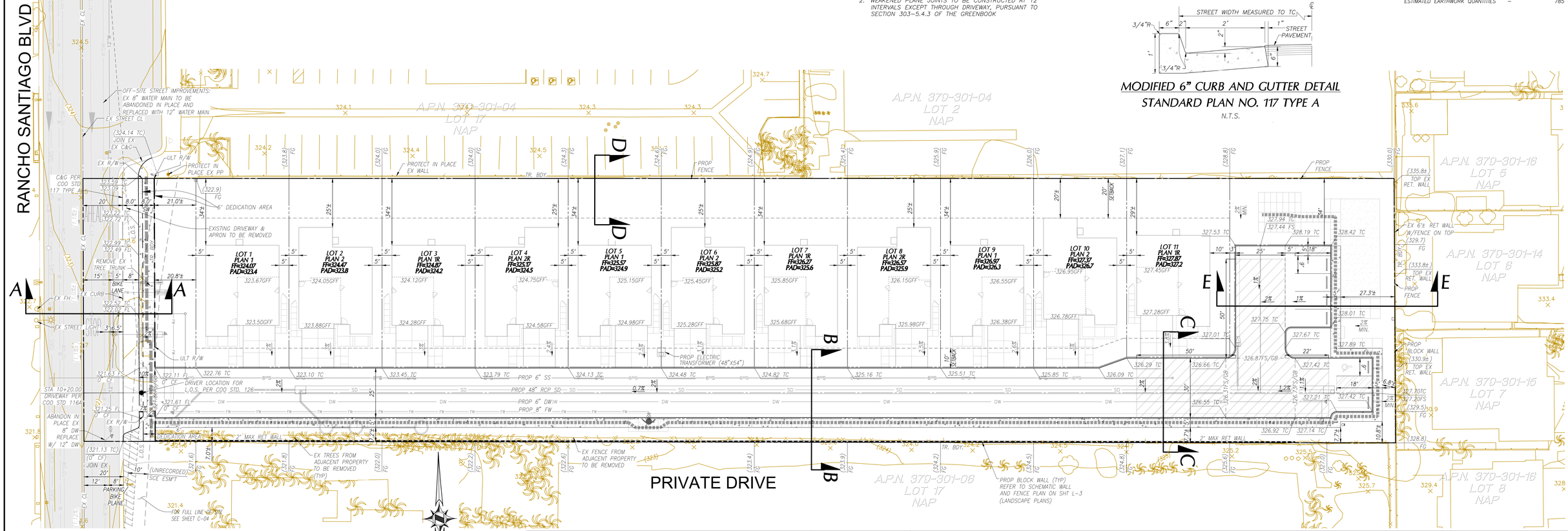
N.T.S.

## NOTES

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2. PROPOSED GENERAL PLAN LAND USE DESIGNATION: LDR-LOW DENSITY RESIDENTIAL
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4. PROPOSED ZONING: R-1-6/PUD
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   CABLE TELEVISION/INTERNET – COX COMMUNICATION
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12. PROJECT IS A PROPOSED PLANNED UNIT DEVELOPMENT (PUD).
13. ALL BACKFLOW DEVICES WILL BE CITY APPROVED.

## EARTHWORK

| | CUT | FILL |
|---|---|---|
| RAW VOLUME | 753 CYS | 1,538 CYS |
| ESTIMATED EARTHWORK QUANTITIES | – | 785 CYS |




| NO. | DATE | REVISIONS | APPROVED |
|---|---|---|---|
| | | | |

DRAWN BY: DP
DESIGNED BY: AO
CHECKED BY: AO


PREPARED FOR:
RANCHO RIDGE LLC
11625 WANDER LANE
DALLAS, TX 75230
TEL: 949-508-0340
FAX: 949-382-7801

PREPARED BY:
HUNSAKER & ASSOCIATES
IRVINE, INC.
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TENTATIVE TRACT NO. 19279
RANCHO RIDGE
647 N. RANCHO SANTIAGO BOULEVARD
PRELIMINARY GRADING PLAN
TTM 0052-23

SHEET 3 OF 4
C-03

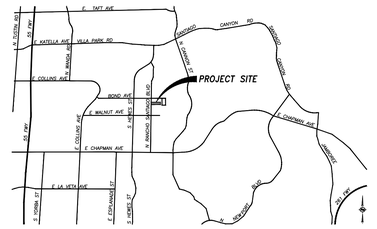
TENTATIVE TRACT NO. 19279 – RANCHO RIDGE
W.O.# 4511-1


PLOTTED BY: Gabriela M. Sayed DATE: Dec. 04, 2025 04:58:35 PM FILE: F:\1250\Engineering\TR_19279\TTM\TR19279_C-03-Preliminary Grading.DWG

# CONCEPTUAL STRIPING AND SIGNAGE DETAIL

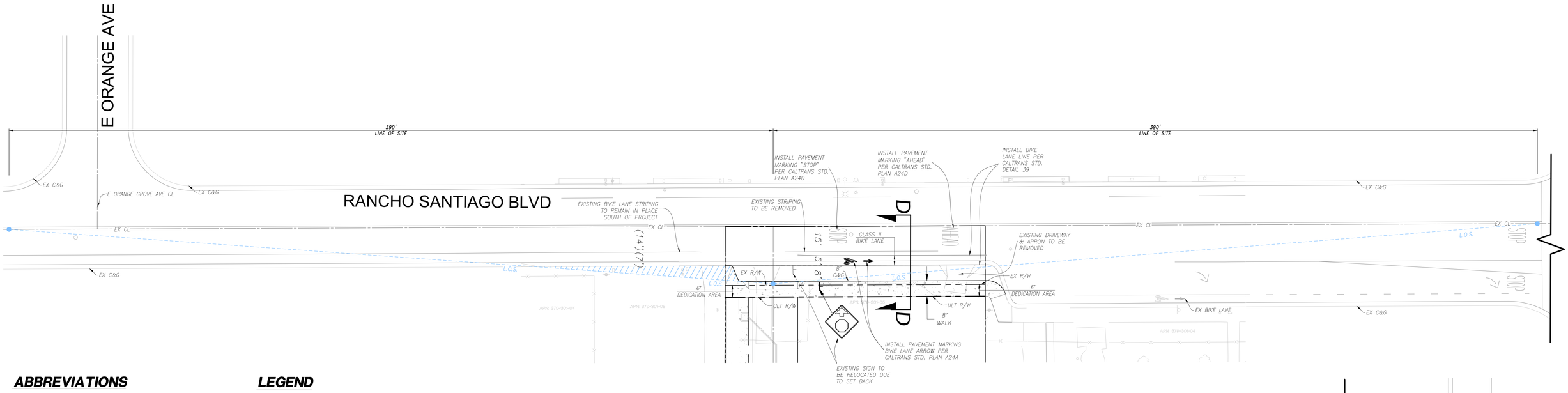
## FOR SINGLE FAMILY DWELLING RESIDENTIAL UNITS

## "RANCHO RIDGE"




VICINITY MAP

N.T.S.




## ABBREVIATIONS

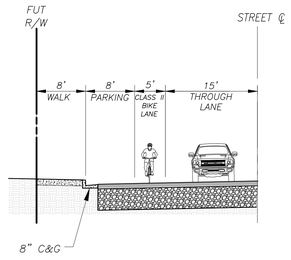
| | |
|---|---|
| AB | AGGREGATE BASE |
| AC | ASPHALT CONCRETE |
| BC | BEGIN CURVE |
| BCR | BEGIN CURVE RETURN |
| BDY | BOUNDARY |
| BF | BACKFLOW |
| BO | BLOWOFF |
| BW | BACK OF WALK |
| CB | CATCH BASIN |
| C&G | CURB & GUTTER |
| ℄ | CENTERLINE |
| CMB | CRUSHED MISCELLANEOUS BASE |
| CO | CLEANOUT |
| COO | CITY OF ORANGE |
| DW | DOMESTIC WATER |
| DWY | DRIVEWAY |
| EC | END CURVE |
| ECR | END CURVE RETURN |
| EP | EDGE OF PAVEMENT |
| ESM'T | EASEMENT |
| EX | EXISTING |
| FF= | FINISH FLOOR ELEVATION |
| FG | FINISH GRADE |
| FH | FIRE HYDRANT |
| FL | FLOWLINE ELEV. |
| FS | FINISH SURFACE |
| FW | FIRE WATER |
| GB | GRADE BREAK |
| INV. | INVERT OF DRAIN |
| LAT | LATERAL |
| LL | LOT LINE |
| L.O.S. | LINE OF SIGHT |
| NTS | NOT TO SCALE |
| OCSD | ORANGE COUNTY SANITATION DISTRICT |
| P= | PAD ELEVATION |
| PCC | POINT OF COMPOUND CURVATURE |
| PKWY | PARKWAY |
| POC | POINT OF CONNECTION |
| PROP | PROPOSED |
| PVC | POLYVINYL CHLORIDE |
| RCP | REINFORCED CONCRETE PIPE |
| RG | ROUGH GRADE |
| R/W | RIGHT OF WAY |
| RW | RECYCLED WATER |
| SCE | SOUTHERN CALIFORNIA EDISON |
| SD | STORM DRAIN |
| SCGC | SOUTHERN CALIFORNIA GAS COMPANY |
| SS | SANITARY SEWER |
| STA | STATION |
| TC | TOP OF CURB |
| TR | TRACT |
| TYP | TYPICAL |
| ULT | ULTIMATE |
| WM | WATER METER |

## LEGEND

| | |
|---|---|
| 1 | LOT NUMBER |
| A A | SECTION FLAG |
| | EX STREET LIGHT |
| | EX FIRE HYDRANT |
| | EX POWER POLE |
| | LOT LINE |
| | TR BDY |
| | PROPOSED RIGHT OF WAY |
| | EXISTING RIGHT OF WAY |
| | PROPOSED CURB |
| | MODIFIED LINE OF SIGHT |

## STRIPING AND SIGN DETAIL

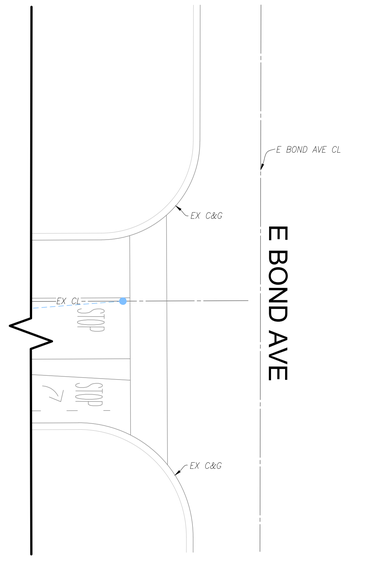
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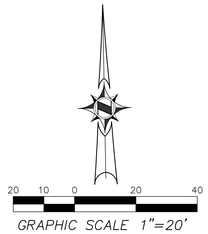



## SECTION D-D

### CLASS II BIKE LANE

N.T.S.




| NO. | DATE | REVISIONS | APPROVED |
|---|---|---|---|
| | | | |

DRAWN BY: DP
DESIGNED BY: AO
CHECKED BY: AO

PREPARED FOR:
RANCHO RIDGE LLC
11625 WANDER LANE
DALLAS, TX 75230
TEL: 949-508-0340
FAX: 949-382-7801

PREPARED BY:
HUNSAKER & ASSOCIATES
IRVINE, INC.
PLANNING ▪ ENGINEERING ▪ SURVEYING
157 Technology Drive ▪ Irvine, CA 92618 ▪ (949) 583-1010

TENTATIVE TRACT NO. 19279
RANCHO RIDGE
647 N. RANCHO SANTIAGO BOULEVARD
CONCEPTUAL STRIPING AND SIGNAGE DETAIL
TTM 0052-23

SHEET 4 OF 4

C-04

W.O.# 4511-1 TENTATIVE TRACT NO. 19279 – RANCHO RIDGE

PLOTTED BY: Gabriela M. Sayed DATE: Dec. 04, 2025 04:58:38 PM FILE: F:\1250\Engineering\TR_19279\TTM\TR19279_C-04-Conceptual Striping.DWG

# ORANGE CITY FIRE DEPARTMENT NOTES

### INSPECTION REQUIREMENTS

1. OFD site inspections are required for this project. Please schedule all field inspections at least 48 hours in advance. Call the Fire Prevention office at (714) 288-2541 for Inspection Scheduling.
2. A lumber drop inspection shall be performed prior to delivery to the site. All-weather access roads capable of supporting 68,000 lbs., topped with asphalt, concrete, or equivalent shall be in place and hydrants operational at time of lumber drop inspection.
3. For projects with fuel modification, a vegetation clearance inspection is required prior to a lumber drop inspection. To schedule an appointment, call the Fire Prevention office at (714) 288-2541.
4. Phased installation of fire access roads requires additional inspections.
5. An original approved, signed, wet-stamped OFD fire master plan shall be available on-site.
6. Access roads and hydrants shall be maintained and remain clear of obstructions at all times.
7. Areas where parking is not permitted shall be clearly identified.
8. Obstruction of fire lanes and hydrants may result in cancellation or suspension of inspections and a notice of correction or citation will be issued.
9. Temporary fuel tanks of 60 or more gallons shall be reviewed, inspected, and permitted by the OFD prior to installation and use.
10. The project address shall be clearly posted and visible from the public road during.
11. All gates which are required for fire department access shall be equipped with either a Knox or fire department padlock.
12. Buildings of four or more stories shall be provided with stairs and a standpipe before reaching 40 feet in height.

### GENERAL REQUIREMENTS

13. Fire Lane widths shall be measured from top face of the curb to top face of the curb for fire lanes with standard curbs and gutters and from flowline to flowline for fire lanes with modified curb designs (e.g., rolled, ramped, etc). The developer is responsible to verify that all approved public works or grading department street improvement plans or precise grading plans conform to the minimum street width measurements per the approved OFD Fire Master Plan.
14. Permanent, temporary, and phased emergency access roads shall be designed and maintained to support an imposed load of 68,000 lbs. and surfaced to provide all-weather driving capabilities.

### GENERAL REQUIREMENTS

15. Additional fire lane markings may be required at the time of inspection depending on field conditions.
16. Address numbers shall be located and be of a color and sized to be plainly visible and legible from the roadway.
17. Access gates shall be approved prior to installation and shall follow Chapter 5 of the CFC.
18. Approved access walkways shall be provided to all required openings and all rescue windows.
19. Vegetation shall be selected and maintained in such a manner as to allow immediate access to all hydrants, valves, fire department connections, pull stations, extinguishers, sprinkler risers, alarm control panels, rescue windows, and other devices or areas used for firefighting purposes. Vegetation or building features shall not obstruct address numbers or inhibit the functioning of alarm bells, horns, or strobes.
20. Dumpsters and trash containers larger than 1.5 cubic yards shall not be stored in buildings or placed within 5 feet of combustible walls, openings or combustible roof eave lines unless protected by an approved sprinkler system.
21. Any future modification to the approved Fire Master Plan or approved site plan, including but not limited to road width, grade, speed humps, turning radii, gates, or other obstructions, shall require review, inspection, and approval by the OFD.
22. Approval of this plan shall not be construed as approval of any information or project conditions other than those items and requirements identified in related portions of the 2022 CFC and CBC and Orange Municipal Code. This project may be subject to additional requirements not stated herein upon examination of actual site and project conditions or disclosure of additional information.

### PROJECT-SPECIFIC REQUIREMENTS

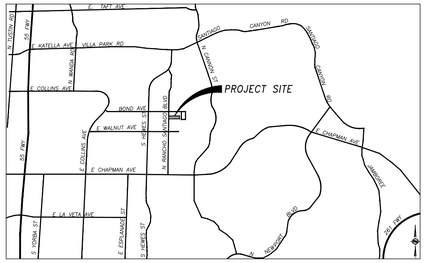
23. An underground piping plan is required for the installation of an automatic fire sprinkler system or for a private fire hydrant system. A separate plan submittal is required.
24. A chemical classification and hazardous materials compliance plan shall be approved by the OFD prior to any hazardous materials being stored or used on site. A separate plan submittal is required.

## Fire Master Plan Submittal Checklist

| | | |
|---|---|---|
| **PROJECT INFORMATION** | | |
| Scope of project is clearly defined on the plan? | ☒ Yes | |
| Tract/Tentative Tract/Parcel Map Number has been provided? | ☒ Yes | |
| Standard OFD fire master plan notes are included? | ☒ Yes | (Notes are tailored to this project, where applicable) |
| Building area, construction, occupancy, sprinklers noted on plan? | ☒ Yes | |
| Allowable area calculation provided on plan? | ☐ Yes | ☐ N/A (Building less than 3,000 sq. ft.) |
| AM&M request letter scanned onto plan? | ☐ Yes | ☒ N/A (No alternate methods proposed) |
| Sheets not relevant to fire master plan removed from plan set? | ☒ Yes | |
| Access/hydrant phasing plan provided? | ☐ Yes | ☐ N/A (No phasing of access/hydrant installation) |
| Operations incident planning CD/electronic file provided? | ☐ Yes | ☒ No (Will provide prior to plan approval) |
| **WATER AND HYDRANTS** | | |
| Water availability form completed and provided? | ☒ Yes | ☐ No (In process; or no change in demand) |
| All hydrants within 400' of the site are shown on plan? | ☒ Yes | |
| Are hydrants provided/spaced per CFC Appendix C? | ☒ Yes | |
| **ACCESS AND ROADWAYS** | | |
| Extent of the access roadway is clearly shown on the plan? | ☒ Yes | |
| Turning radii and width (incl. road sections) shown on the plan? | ☒ Yes | |
| Exterior of all structures within 150' hose pull distance? | ☒ Yes | ☐ N/A (AM&M proposed) |
| Engineer's certification provided for new paving? | ☒ Yes | ☐ N/A (No new paving) |
| Walkable surface provided to required openings? | ☒ Yes | |
| Road and walkway grades >12% shown on plan? | ☐ Yes | ☒ N/A |
| **FIRE LANE IDENTIFICATION** | | |
| Red curbs are identified with bold or dashed lines? | ☒ Yes | ☐ N/A (Signs provided) |
| Location of each "Fire Lane—No Parking" sign shown? | ☐ Yes | ☒ N/A (Red curbs provided) |
| Fire lane entrance sign provided at each vehicle entrance? | ☒ Yes | |
| Detail drawings of red curbs/"No Parking"/entrance signs shown? | ☒ Yes | |
| **GATES AND OBSTRUCTIONS** | | |
| Are all gates, fences, and planters shown? | ☒ Yes | |
| Are vehicle gates identified as manual or electric? | ☐ Yes | ☒ N/A (No gates) |
| Manual vehicle gates have "No Parking" sign noted? | ☐ Yes | ☒ N/A (No manual gates) |
| Knox boxes/locks/switches are noted on plans? | ☒ Yes | ☐ N/A (No gates) |
| OFD gate notes/specifications included on plan? | ☒ Yes | ☐ N/A (No gates) |
| **OTHER REQUIREMENTS** | | |
| Premises ID/address monument location shown on plan? | ☐ Yes | ☒ N/A (Single family homes) |
| Trash enclosures are located at least 5' from buildings? | ☐ Yes | ☒ N/A |
| Two entry points provided for 29 or more residences? | ☐ Yes | ☒ N/A (11 dwelling units) |
| Buildings >75' to highest occupiable floor called out? | ☐ Yes | ☒ N/A (No high-rise structures) |
| Parking enforcement letter provided? | ☒ Yes | ☐ N/A (Public streets only) |

*NOTE: This is only a listing of basic Fire Master Plan submittal requirements. Other information or requirements may be necessary depending on conditions specific to each project.*

***APPLICANT NOTE:** Form Responses modified by Applicant highlighted in yellow.*



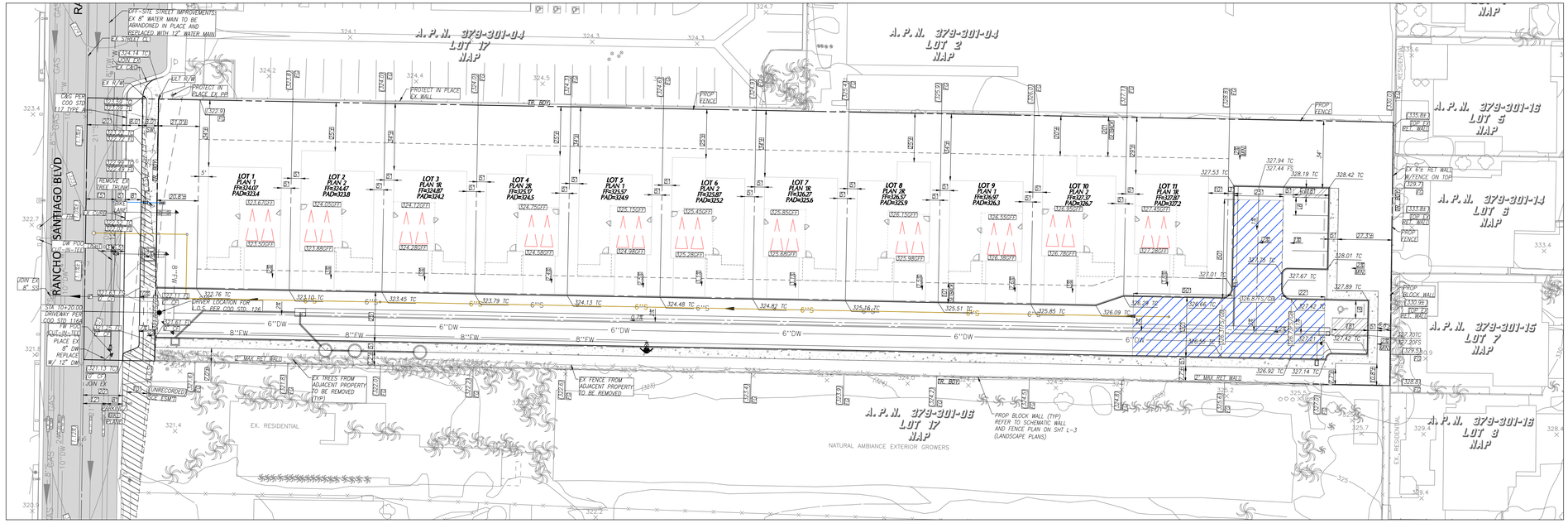

## VICINITY MAP

## GENERAL NOTES

1. EXISTING GENERAL PLAN LAND USE DESIGNATION: LDR-LOW DENSITY RESIDENTIAL
2. PROPOSED GENERAL PLAN LAND USE DESIGNATION: LDR-LOW DENSITY RESIDENTIAL
3. EXISTING ZONING: R-1-10
4. PROPOSED ZONING: R-1-6/PUD
5. ASSESSOR PARCEL NUMBER: 379-301-05
6. UTILITY/SERVICE PROVIDERS:
   - GAS - SOUTHERN CALIFORNIA GAS COMPANY
   - ELECTRIC - SOUTHERN CALIFORNIA EDISON
   - CABLE TELEVISION/INTERNET - COX COMMUNICATION
   - PHONE - AT&T
   - WATER - CITY OF ORANGE
   - SEWER - CITY OF ORANGE
   - STORM DRAIN - PRIVATE SD (HOA)
   - TRASH - C&R
   - FIRE - CITY OF ORANGE FIRE DEPARTMENT
   - POLICE - CITY OF ORANGE POLICE DEPARTMENT
7. ALL PROPOSED IMPROVEMENTS SHALL COMPLY WITH CITY OF ORANGE STANDARD PLANS AND SPECIFICATIONS OR AS SPECIFIED ON THIS TENTATIVE MAP.
8. PROPOSED GRADING AND DRAINAGE SHALL COMPLY WITH GRADING AND EXCAVATION CODE OF THE CITY OF ORANGE MUNICIPAL CODE.
9. AREA CALCULATIONS ARE APPROXIMATE AND PRELIMINARY AND SUBJECT TO CHANGE IN FINAL DESIGN.
10. PROJECT IS A PROPOSED PLANNED UNIT DEVELOPMENT (PUD).

## PLAN SHEET SET


| SHT NO. | DESCRIPTION |
|---|---|
| FMP-1 | TITLE SHEET-SITE OVERVIEW, FIRE CHECK LIST, AND FIRE DEPARTMENT NOTES |
| FMP-2 | FIRE ACCESS SITE PLAN |
| FMP-3 | FIRE LANE SIGNAGE AND ACCESS |
| FMP-4 | REQUIRED LETTERS |


**NOTE:**

AFTER THE RECENT CAL FIRE – OFFICE OF THE STATE FIRE MARSHAL (OSFM) UPDATES TO THE LOCAL RESPONSIBILITY AREA (LRA) FIRE HAZARD SEVERITY ZONE MAPS, THE RANCHO RIDGE PROJECT IS NOW DESIGNATED AS BEING IN A LRA – VERY HIGH FIRE HAZARD SEVERITY ZONE (VHFHSZ) AS DESIGNATED BY CAL FIRE – OSFM. COMPLIANCE WITH CHAPTER 7A/WUI CODE WILL BE REQUIRED.


**PREPARED FOR:**
RANCHO RIDGE LLC
11625 WANDER LANE
DALLAS, TX 75230
TEL: 949-508-0340

**PREPARED WITH:**
WILLIAM HEZMALHALCH ARCHITECTS, INC. DBA WHA.
Contacts: Nick Manea
nickm@whainc.com

**PREPARED WITH:**
HUNSAKER & ASSOCIATES IRVINE, INC.
Contact: Robert Glessner
RGlessner@hunsaker.com

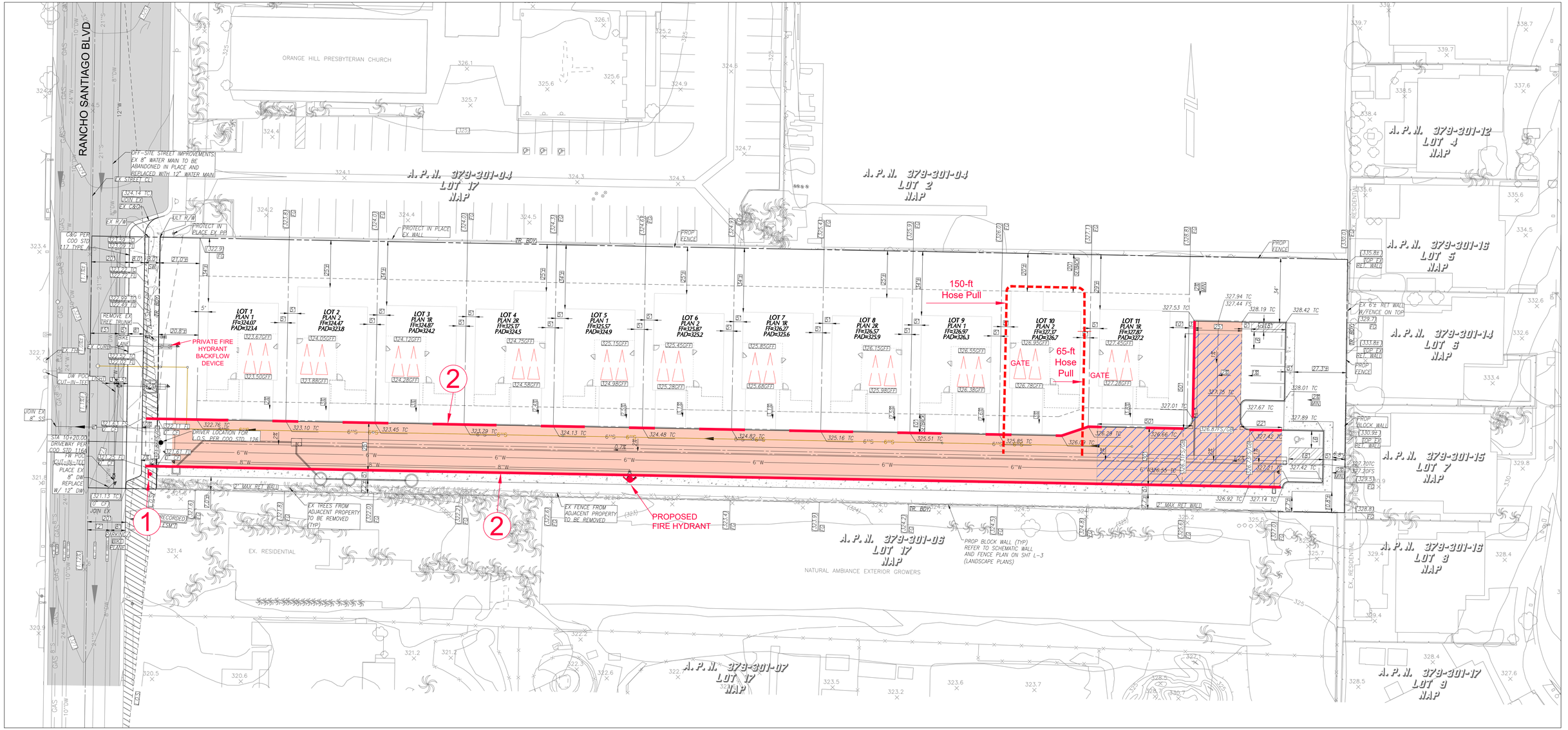
PREPARED BY:
DUDEK
605 THIRD STREET
ENCINITAS, CA 92024
Contact: Kase Arkeder
karkeder@dudek.com


# FIRE MASTER PLAN FOR RANCHO RIDGE
## Title Sheet - Site Overview
647 N Rancho Santiago Blvd
Orange, CA

**SHEET**
**FMP-1**
Job No. 15761
Date 4-02-2025



PLOTTED BY: Paul Caligiuri DATE: Jul. 02, 2025 08:05:35 AM FILE: \\dudek.int\data\GISData\Projects\j1576100\MAPDOC\DOCUMENT\FMP\FMP APR2025 SUBMITTAL\Fire Master Plan FMP-01.dwg




48' 24' 12' 0

## LEGEND

- FIRE LANE ACCESS - NO PARKING
- FIRE ACCESS TURNAROUND
- EXISTING ROAD
- PROPOSED ONSITE FIRE HYDRANT
- FIRE LANE ENTRANCE SIGN
- RED CURB FIRE LANE IDENTIFICATION
- HOSE PULL

## FIRE MASTER PLAN NOTES

1. INSTALL "FIRE LANE ENTRANCE SIGN" PER DETAIL ON SHEET 3
2. FIRE LANE--RED CURB PER DETAIL ON SHEET 3

ALL HOUSES WILL HAVE SIDE YARD GATES INSTALLED ON BOTH SIDES OF HOUSE.

## BUILDING INFO

BUILDING HEIGHT: 27 FEET

OCCUPANCY TYPE: R3

CONSTRUCTION TYPE: VB

SPRINKLER TYPE: NFPA 13D

NOTE:

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TEL: 949-508-0340

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Contacts: Nick Manea
nickm@whainc.com

HUNSAKER & ASSOCIATES IRVINE, INC.
PLANNING • ENGINEERING • SURVEYING
Contact: Robert Glessner
RGlessner@hunsaker.com

PREPARED BY:
DUDEK
605 THIRD STREET
ENCINITAS, CA 92024
Contact: Kase Arkeder
karkeder@dudek.com


# FIRE MASTER PLAN FOR RANCHO RIDGE
## Fire Access Site Plan
647 N Rancho Santiago Blvd
Orange, CA

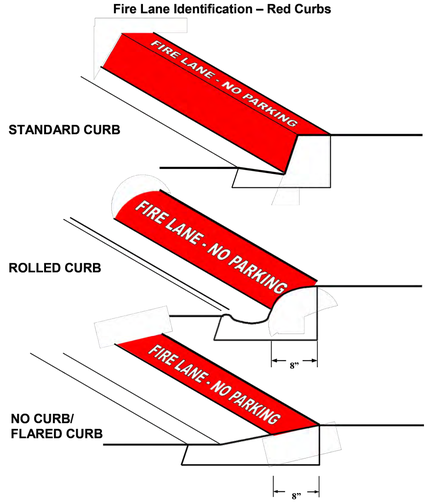
**SHEET**
**FMP-2**

Job No. 15761
Date 4-02-2025


PLOTTED BY: Paul Caligiuri DATE: Jul. 02, 2025 08:05:45 AM FILE: \\dudek.int\data\GISData\Projects\j1576100\MAPDOC\DOCUMENT\FMP\FMP APR2025 SUBMITTAL\Fire Master Plan FMP-02.dwg

## ATTACHMENT 9

**Fire Lane Identification – Red Curbs**




1. Fire Lane entrance sign(s) shall also be provided per Attachment 10 or 11.
2. Curbs shall be painted OSHA safety red.
3. "FIRE LANE – NO PARKING" shall be painted on top of curb in 3" white lettering at a spacing of 30' on center or portion thereof.

Revised 08/2022



## ATTACHMENT 10

**Specifications for**
**Fire Lane Entrance Signs**
**To be used only at *vehicle entry points***
**to areas that contain "Fire Lane—No Parking" signs or red curbs**




All sign and lettering dimensions shown are minimums. "Arial Narrow" font used is used in sample above though other legible sans-serif fonts may be acceptable.

This sign shall be posted at all vehicle entrances to areas marked with either red curbs or fire lane "No Parking" signs. Signs shall be securely mounted facing the direction of travel and clearly visible to oncoming traffic entering the designated area. Signs shall be made of durable material and installed per Attachments 13 and 14.

Towing company contact information is required for all properties with a standing written agreement for services with a towing company per the California Vehicle Code.

Revised 08/2022



## ATTACHMENT 11

**Specifications for**
**Alternate Location of**
**Towing Company Information**




Towing company contact information is required for all properties with a standing written agreement for services with a towing company per the California Vehicle Code.

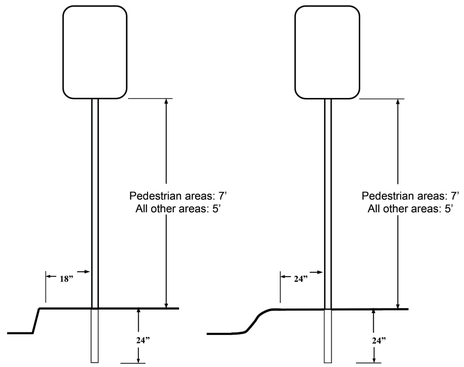
To facilitate periodic changes in towing company contracts, the towing company contact information may be posted on a separate sign mounted directly below the fire lane entrance sign instead of on the entrance sign itself. The method of attachment to the post shall not obscure the wording on either sign.

Revised 08/2022



## ATTACHMENT 14

**Mounting Specifications for**
**Fire Lane Entrance and No Parking Signs**

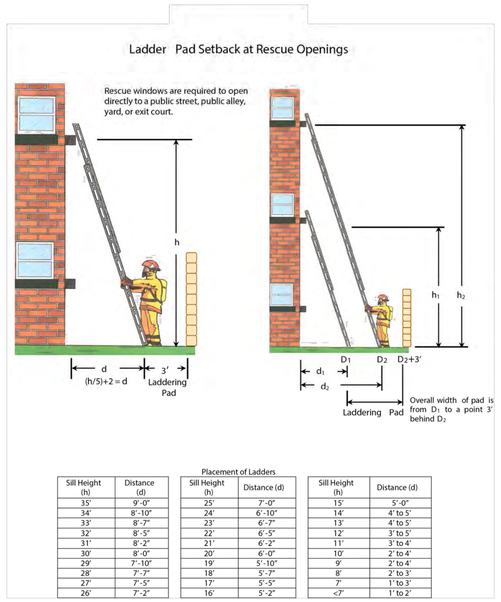



Signs shall be mounted facing the direction of vehicular travel.

Signs may be mounted on existing posts or buildings where the centerline of the sign is no more than 24" from the edge of the roadway.

Depth of bury shall be a *minimum* of 24" and rebar, a concrete footing, or another method to prevent removal of the sign is recommended. Footings for signs located in the public right-of-way shall be per the local jurisdiction's requirements.

Revised 08/2022




Placement of Ladders

| Sill Height (h) | Distance (d) |
|---|---|
| 35' | 9'-0" |
| 34' | 8'-10" |
| 33' | 8'-7" |
| 32' | 8'-5" |
| 31' | 8'-2" |
| 30' | 8'-0" |
| 29' | 7'-10" |
| 28' | 7'-7" |
| 27' | 7'-5" |
| 26' | 7'-2" |

| Sill Height (h) | Distance (d) |
|---|---|
| 25' | 7'-0" |
| 24' | 6'-10" |
| 23' | 6'-7" |
| 22' | 6'-5" |
| 21' | 6'-2" |
| 20' | 6'-0" |
| 19' | 5'-10" |
| 18' | 5'-7" |
| 17' | 5'-5" |
| 16' | 5'-2" |

| Sill Height (h) | Distance (d) |
|---|---|
| 15' | 5'-0" |
| 14' | 4' to 5' |
| 13' | 4' to 5' |
| 12' | 3' to 5' |
| 11' | 3' to 4' |
| 10' | 2' to 4' |
| 9' | 2' to 4' |
| 8' | 2' to 3' |
| 7' | 1' to 3' |
| <7' | 1' to 2' |

NOTE:

AFTER THE RECENT CAL FIRE – OFFICE OF THE STATE FIRE MARSHAL (OSFM) UPDATES TO THE LOCAL RESPONSIBILITY AREA (LRA) FIRE HAZARD SEVERITY ZONE MAPS, THE RANCHO RIDGE PROJECT IS NOW DESIGNATED AS BEING IN A LRA – VERY HIGH FIRE HAZARD SEVERITY ZONE (VHFHSZ) AS DESIGNATED BY CAL FIRE – OSFM. COMPLIANCE WITH CHAPTER 7A/WUI CODE WILL BE REQUIRED.

**PREPARED FOR:**
RANCHO RIDGE LLC
11625 WANDER LANE
DALLAS, TX 75230
TEL: 949-508-0340

**PREPARED WITH:**
WILLIAM HEZMALHALCH
ARCHITECTS, INC. DBA WHA.
Contacts: Nick Manea
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**PREPARED WITH:**
HUNSAKER & ASSOCIATES IRVINE, INC.
PLANNING ■ ENGINEERING ■ SURVEYING
Contact: Robert Glessner
RGlessner@hunsaker.com

PREPARED BY:
DUDEK
605 THIRD STREET
ENCINITAS, CA 92024
Contact: Kase Arkeder
karkeder@dudek.com

# FIRE MASTER PLAN FOR RANCHO RIDGE
## Fire Lane Signage and Access
647 N Rancho Santiago Blvd
Orange, CA

SHEET
**FMP-3**

Job No. 15761
Date 4-02-2025

PLOTTED BY: Paul Caligiuri DATE: Jul. 02, 2025 08:05:52 AM FILE: \\dudek.int\data\GISData\Projects\j1576100\MAPDOC\DOCUMENT\FMP\FMP APR2025 SUBMITTAL\Fire Master Plan FMP-03.dwg

# FIRE APPARATUS ACCESS RD CERTIFICATION

June 7, 2024
J.N.: 3090.01

Ms. Maile Green
Rancho Ridge, LLC
11625 Wander Lane
Dallas, Texas 75230

**Subject:** **Pavement Suitability for Fire Equipment Access, Proposed Residential Development, 647 North Rancho Santiago Boulevard, Orange, California**

Reference: *Preliminary Geotechnical Investigation, Proposed Residential Development, 647 North Rancho Santiago Boulevard, Orange, California*, prepared by Albus & Associates, Inc., dated August 9, 2022 (J.N. 3090.00)

Dear Ms. Green,

We have prepared this correspondence to comment on the future pavement areas and their capacity to support emergency vehicle loads at the subject site. We understand that certain paved areas may be used by the Orange Fire Department (OFD) for emergency vehicle access, and that OFD emergency vehicle loads may be as much as 68,000 pounds.

Preliminary structural sections have been provided in our referenced report. Final pavement section design recommendations will be provided prior to pavement construction based on testing of soils exposed after grading. These recommendations will be developed using the City of Orange Standard Plans and Specifications Design Manual. The final pavement section design recommendations by this firm will be geotechnically suitable to accommodate the OFD emergency vehicle load of 68,000 pounds under all weather conditions.

We appreciate this opportunity to be of service to you. If you should have any questions regarding the contents of this correspondence, please do not hesitate to call.

Sincerely,

***ALBUS & ASSOCIATES, INC.***

David E. Albus
Principal Engineer
GE 2455

REGISTERED PROFESSIONAL ENGINEER DAVID E. ALBUS No. 2455 Exp. 12/31/24 CIVIL STATE OF CALIFORNIA

*1011 N. Armando Street, Anaheim, CA 92806-2606 (714) 630-1626*

## Fire Master Plans for Commercial & Residential Development

### Parking Enforcement Letter

May 10, 2024

Fire Prevention Bureau
Orange City Fire Department
1176 E. Chapman Ave.
Orange, CA 92866

Re: Rancho Ridge, LLC - 647 N. Rancho Santiago Blvd, Orange CA
Parking Enforcement Plan

The fire lane parking enforcement plan for the above referenced project is stated as follows:

All fire lanes within Tentative Tract No. 19279, located at 647 N. Rancho Santiago Blvd, Orange, CA, shall be maintained and in no event shall parking be permitted along any portion of a street or driveway that requires fire lanes or any area designated as a fire lane for turn-around purposes either during construction or after occupancy.

Rancho Ridge Homeowners Association shall adopt reasonable rules and regulations regarding the parking of vehicles along the streets, roads and or drives within the project that are not in conflict with applicable law.

In furtherance thereof, Rancho Ridge Homeowners Association, through its officers, committees, and agents, will establish the "parking" and "no parking" areas within the property in accordance with Section 22658.2 of the California Vehicle Code and OMC 15.32.010. The law shall be enforced through such rules and regulations by all lawful means, including, written warnings, citing, levying fines, and towing vehicles in violation.

Rancho Ridge Homeowners Association will contract with a certified patrol and towing company to remove vehicles that violate no parking restrictions. First time violators will receive a written warning and with subsequent violations, the vehicle shall be subject to towing. The vehicle owner shall be responsible for all costs incurred in remedying such violation, including without limitation towing cost, citations, and legal fees.

RANCHO RIDGE, LLC

Keith Mitchell, Manager

**SoCal Flow Testing**
**3741 Rose Dr, Yorba Linda, CA 92886**
**714-261-5716**
**email: info@socalflowtest.com**

## Hydrant Flow Test Report

Project
Address **647 N Rancho Santiago Blvd** Test date **12/13/22**
City **Orange** State **CA** Test time **10:30**
File no.

Test hydrant location **1st hydrant south of Bond Ave on east side of Rancho Santiago Blvd**
Hydr # **H-L13-2235** Elev (ft +/-) **Grade**
Flow hydrant location **Northeast corner of Bond Ave & Hidden Tr**
Hydr # **H-L13-3107** Elev (ft +/-) **Grade**

Static Pressure **70** PSI Report Date **12/13/22**

| Outlet | C-value | Diam | Pitot | Volume |
|---|---|---|---|---|
| A | 0.9 | 2.0 | **0** PSI | **0** GPM |
| B | 0.9 | 2.5 | **33** PSI | **964** GPM |
| C | 0.9 | 3.0 | **0** PSI | **0** GPM |
| D | 0.83 | 4.0 | **0** PSI | **0** GPM |

Residual Pressure **67** PSI at an observed volume of **964** GPM

Projected Pressure 20 PSI calculates to a volume of **4404** GPM

Although the results are accurate for the date and time given, they may not accurately reflect higher or lower readings which vary due to seasonal conditions and time of day.
Per NFPA 24-10, Table C.4.10.1(a), note 1, $Q=29.84 \times c(d)^2 (p)^{0.5}$
Per NFPA 24-10, Paragraph C.4.10.1.2, $Q_r = Q_t \times (h_r/h_t)^{0.54}$
Test by: Hildebrandt

Witness George Jediny
Fire Safety Specialist
City of Orange Fire Dept

Client Robert Glessner
Hunsaker & Associates

cc: gjediny@cityoforange.org
rglessner@hunsaker.com
koconnor@hunsaker.com

Symbols
T = Test hydrant
F = Flow hydrant
North




# California Fire Code Appendix B Minimum Required Fire Flow

TABLE B105.1(1)
REQUIRED FIRE FLOW FOR ONE- AND TWO-FAMILY DWELLINGS, GROUP R-3 AND R-4 BUILDINGS AND TOWNHOUSES

| FIRE-FLOW CALCULATION AREA (square feet) | AUTOMATIC SPRINKLER SYSTEM (Design Standard) | MINIMUM FIRE FLOW (gallons per minute) | FLOW DURATION (hours) |
|---|---|---|---|
| 0–3,600 | No automatic sprinkler system | 1,000 | 1 |
| 3,601 and greater | No automatic sprinkler system | Value in Table B105.1(2) | Duration in Table B105.1(2) at the required fire-flow rate |
| 0–3,600 | Section 903.3.1.3 of the *California Fire Code* or Section 313.3 of the *California Residential Code* | 500 | ½ |
| 3,601 and greater | Section 903.3.1.3 of the *California Fire Code* or Section 313.3 of the *California Residential Code* | ½ value in Table B105.1(2) | 1 |

For SI: 1 square foot = 0.0929 m², 1 gallon per minute = 3.785 L/m

NOTE:
AFTER THE RECENT CAL FIRE – OFFICE OF THE STATE FIRE MARSHAL (OSFM) UPDATES TO THE LOCAL RESPONSIBILITY AREA (LRA) FIRE HAZARD SEVERITY ZONE MAPS, THE RANCHO RIDGE PROJECT IS NOW DESIGNATED AS BEING IN A LRA – VERY HIGH FIRE HAZARD SEVERITY ZONE (VHFHSZ) AS DESIGNATED BY CAL FIRE – OSFM. COMPLIANCE WITH CHAPTER 7A/WUI CODE WILL BE REQUIRED.

**PREPARED FOR:**
RANCHO RIDGE LLC
11625 WANDER LANE
DALLAS, TX 75230
TEL: 949-508-0340

**PREPARED WITH:**
WILLIAM HEZMALHALCH ARCHITECTS, INC. DBA WHA.
Contacts: Nick Manea
nickm@whainc.com

**PREPARED WITH:**
HUNSAKER & ASSOCIATES IRVINE, INC.
PLANNING ■ ENGINEERING ■ SURVEYING
Three Hughes ■ Irvine, CA 92618 ■ PH: (949) 583-1010 ■ FX: (949) 583-0759
Contact: Robert Glessner
RGlessner@hunsaker.com

PREPARED BY:
DUDEK
605 THIRD STREET
ENCINITAS, CA 92024
Contact: Kase Arkeder
karkeder@dudek.com

# FIRE MASTER PLAN FOR RANCHO RIDGE
## Required Letters
647 N Rancho Santiago Blvd
Orange, CA

SHEET
**FMP-4**
Job No. 15761
Date 4-02-2025

## Zoning Summary

Assessor Parcel Number (APN): 379-301-05

| | |
|---|---|
| Existing General Plan: | LDR - Low Density Residential |
| Proposed General Plan: | LDR - Low Density Residential |
| Existing Zoning: | R-1-10 |
| Proposed Zoning: | R-1-10/PUD |
| Minimum Lot Area: | 10,000 SF |
| Building Setbacks: | Front Yard (Garage): 20'<br>Interior Side Yard: 5'<br>Street Side Yard: 10'<br>Rear Yard: 20' |
| Max. Building Height: | 32' and 2 Stories |
| Max. FAR: | Lot <10,000 SF, Max FAR 0.60<br>Lot <40,000 SF, Max FAR 0.40 |
| Minimum Usable Open Space: | 1,000 SF / Unit |

## Lot Coverage and FAR Calculation

| Lot Num | Lot Area (SF) | Building Footprint (SF) | Building Floor Area (SF) | Lot Coverage | FAR | Max. FAR | Allowable Floor Area * |
|---|---|---|---|---|---|---|---|
| 1 | 4,473 | 1,560 | 3,113 | 0.35 | 0.70 | 0.60 | 2,683.80 |
| 2 | 4,473 | 1,702 | 3,678 | 0.38 | 0.82 | 0.60 | 2,683.80 |
| 3 | 4,473 | 1,560 | 3,113 | 0.35 | 0.70 | 0.60 | 2,683.80 |
| 4 | 4,473 | 1,702 | 3,678 | 0.38 | 0.82 | 0.60 | 2,683.80 |
| 5 | 4,473 | 1,560 | 3,113 | 0.35 | 0.70 | 0.60 | 2,683.80 |
| 6 | 4,473 | 1,702 | 3,678 | 0.38 | 0.82 | 0.60 | 2,683.80 |
| 7 | 4,473 | 1,560 | 3,113 | 0.35 | 0.70 | 0.60 | 2,683.80 |
| 8 | 4,473 | 1,702 | 3,678 | 0.38 | 0.82 | 0.60 | 2,683.80 |
| 9 | 4,473 | 1,560 | 3,113 | 0.35 | 0.70 | 0.60 | 2,683.80 |
| 10 | 4,438 | 1,702 | 3,678 | 0.38 | 0.83 | 0.60 | 2,662.80 |
| 11 | 4,689 | 1,560 | 3,113 | 0.33 | 0.66 | 0.60 | 2,813.40 |
| Lot 1-11 Subtotal | 49,384 | 17,870 | 37,068 | 0.36 | 0.75 | | |
| Lot A | 1,985 | | | | | | |
| Lot B | 12,919 | | | | | | |
| Lot C | 19,039 | | | | | | |
| TOTAL | 83,332 | 17,870 | 37,068 | 0.21 | 0.44 | 0.40 | 33,332.80 |

*Note: Allowable Floor Area is calculated by multiplying the lot area by the maximum FAR.*

## Project Summary

**Total Site Area:** ± 1.93 Acres (± 84,130 SF) Ex. ROW
± 1.91 Acres (± 83,331 SF) Ultimate ROW

**Total Units:** 11 Homes
- (6) Plan 1: ± 2,419 SF (Sellable), 3 Bedroom, 3 Bath
- (5) Plan 2: ± 2,724 SF (Sellable), 3 Bedroom w/loft, 3 Bath

**Density:** 5.8 Homes per Acre (11 Units / 1.91 Acre)

**Parking:**
Required per PUD *: 39 Spaces (3.5 Sp./Unit)
(22) 2 Sp./Unit
(17) 1.5 Guest Sp. /Unit
(1 sp. allowed on individual lot)
Provided: 39 Spaces (3.5 Sp./Unit)
- Garage: 22 Spaces (2 Sp./Unit)
- Guest: 17 Spaces (1 sp. on driveway)

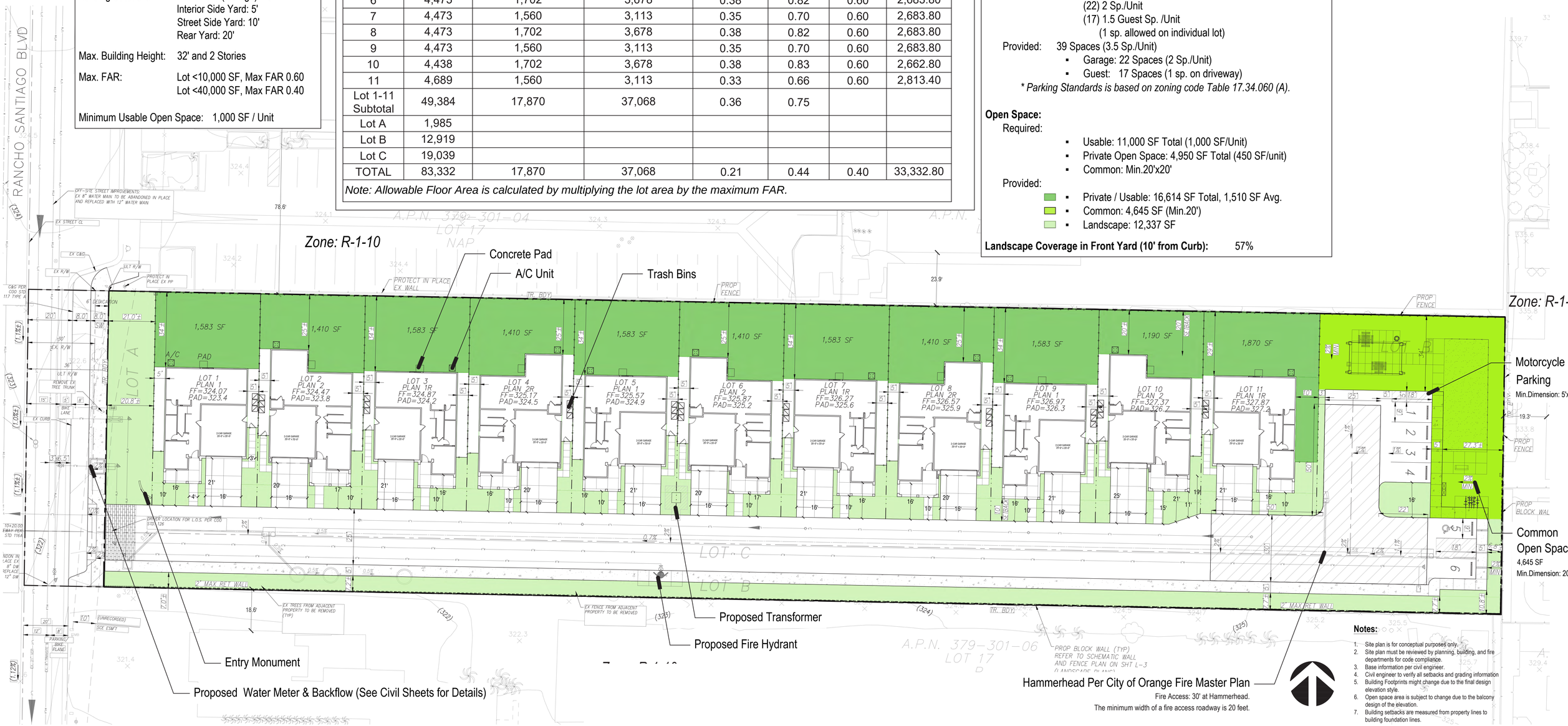
** Parking Standards is based on zoning code Table 17.34.060 (A).*

**Open Space:**
Required:
- Usable: 11,000 SF Total (1,000 SF/Unit)
- Private Open Space: 4,950 SF Total (450 SF/unit)
- Common: Min.20'x20'

Provided:
- Private / Usable: 16,614 SF Total, 1,510 SF Avg.
- Common: 4,645 SF (Min.20')
- Landscape: 12,337 SF

**Landscape Coverage in Front Yard (10' from Curb):** 57%

| | |
|---|---|
| **Occupancy Group:** | R3 |
| **Type of Construction:** | Type V-B |
| **Sprinkler Building:** | NFPA 13D |
| **Building Height:** | 27' |
| **Number of Stories:** | 2 |




**Notes:**

1. Site plan is for conceptual purposes only.
2. Site plan must be reviewed by planning, building, and fire departments for code compliance.
3. Base information per civil engineer.
4. Civil engineer to verify all setbacks and grading information
5. Building Footprints might change due to the final design elevation style.
6. Open space area is subject to change due to the balcony design of the elevation.
7. Building setbacks are measured from property lines to building foundation lines.

# CONCEPTUAL SITE PLAN

**RANCHO RIDGE, LLC.**

## 647 N. RANCHO SANTIAGO BLVD.

ORANGE, CA

SP-1

0 10 20 40

DESIGN REVIEW SUBMITTAL

© 2025 WILLIAM HEZMALHALCH ARCHITECTS, INC. DBA WHA. | 2021327 | 06-30-25

ARCHITECTS . PLANNERS . DESIGNERS

WHA.

ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO

## RESIDENTIAL PROJECT SUMMARY TABLES

| EXISTING USE | PROPOSED USE | ZONING DESIGNATION | GENERAL PLAN LAND USE DESIGNATION | OVERLAY DISTRICT |
|---|---|---|---|---|
| Vacant | Single-Family Residences (11 units) | Current – R-1-10<br>Proposed – R-1-10 (PUD) | Low Density Residential | None |

| ZONING STANDARDS | | | | | |
|---|---|---|---|---|---|
| **DESCRIPTION** | **OMC SECTION** | **REQUIRED** | **EXISTING** | **PROPOSED** | **CONFORMS (yes/no)** |
| LOT AREA | 17.14.070 & 17.14.080 | 10,000 ft² | 84,130 ft² | 83,331 ft² | Yes |
| LOT WIDTH | 17.14.070 & 17.14.080 | 80′ | 134′ | 134′ | Yes |
| LOT DEPTH | 17.14.070 & 17.14.080 | 100′ | 634′ | 626′ | Yes |
| MAX. BUILDING HEIGHT (Note: use average finished grade as defined in the "Building Height" definition from OMC Section 17.04.021) | 17.14.070 (& 17.14.100 FOR R-3 & R-4) | 32′<br>2 stories | n/a | 27′<br>2 stories | Yes |
| **SETBACKS:** | 17.14.070 & 17.14.090 | | | | |
| Front Yard | 17.14.070 & 17.14.090 | 20′ | n/a | 25.8′ | Yes |
| Rear Yard | 17.14.070 & 17.14.090 | 20′ | n/a | 44′-7″ | Yes |
| Side Yard (north) | 17.14.070 & 17.14.090 | 5′ | n/a | 12′-3″ | Yes |
| Side Yard (south) | 17.14.070 & 17.14.090 | 5′ | n/a | 47.2′ | Yes |
| Interior Street | 17.16.060 | 10′ | n/a | 10′ | Yes |
| Garage Door to Interior Street | 17.16.060 | 20′ | n/a | 20′ | Yes |
| Habitable Structure to Boundary | 17.16.060 | 10′ | n/a | 20′ | Yes |
| LOT COVERAGE | 17.14.070 | Not Required | n/a | 21% | Yes |
| FLOOR AREA RATIO (FAR) UTILIZING GROSS FLOOR AREA (INCLUDE ALL ACCESSORY STRUCTURES) | 17.14.070 | Not Required per PUD<br>0.4 for base zone | n/a | 0.44 | Yes |
| **Required Open Space:** | 17.14.070 & 17.14.110 | | | | |
| Private | 17.16.060 | 1,100 ft² | n/a | 16,614 ft² (1,510 ft² avg per unit) | Yes |
| Common | 17.14.110 | 20′ by 20′ area (400 ft²) | n/a | 4,645 ft² (minimum dimension 27.3′) | Yes |
| | | | | | |

| ZONING STANDARDS | | | | | |
|---|---|---|---|---|---|
| **DESCRIPTION** | **OMC SECTION** | **REQUIRED** | **EXISTING** | **PROPOSED** | **CONFORMS (yes/no)** |
| **LANDSCAPING**: For landscaping standards refer to Page 26-28 of the City of Orange Landscape Standards and Specifications | 16.50 | | | | |
| Front Yard | 16.50 & 17.12.040(E) | 10′ | n/a | 20.8 | Yes |
| Rear Yard | 16.50 & 17.12.040(E) | 4′ | n/a | 6.8′ | Yes |
| Interior Side Yard (north) | 16.50 & 17.12.040(E) | 4′ | n/a | 20′ | Yes |
| Interior Side Yard (south) | 16.50 & 17.12.040(E) | 4′ | n/a | 7.2′ | Yes |
| Street Side Yard (if applicable) | 16.50 & 17.12.040(E) | n/a | n/a | n/a | |
| Trees to be removed | 16.50 | | | 12 | |
| Existing trees to be preserved | 16.50 | | | 0 | |
| Trees to be added | 16.50 | | | 74 | |
| 25 percent of required trees shall be 24-inch box and 75 percent shall be in 15 gallon containers (Multi-Family only) | 16.50 | | | 48″ Box = 8%<br>24″ box = 68%<br>15 gallon = 24% | Yes |
| IRRIGATED AREA TOTAL | 16.50 | | 87,991 ft² | 37,679 ft² | |
| Irrigated area added | 16.50 | | | 0 | |
| Irrigated area removed | 16.50 | | | 50,312 ft² | |
| FENCE HEIGHT | 17.12.070 | | | | |
| Front Yard | 17.12.070(B) | 3′-6″ | | 3′6″ | Yes |
| Interior Side Yard(s) | 17.12.070(B) | 6′ | | 5′-9″ | |
| Street Side Yard | 17.12.070(B) | | | | |
| Rear Yard | 17.12.070(B) | 6.′ | | 5-9″ | Yes |
| PARKING | 17.14.200 & 17.34 | 22 spaces within garage<br>17 guest spaces<br>**Total = 39 spaces** | 0 | 22 spaces within garages<br>11 spaces on driveway counter towards guest spaces<br>6 open guest parking spaces<br>**Total = 39 spaces** | Yes |
| LIGHTING | 17.12.030 | | | | |
| Kelvins | 17.12.030 | | | 2700K | |
| Fixture Type/Blinder | 17.12.030 | | | Bollard, wall, pole, and landscaping | |
| Parking lot footcandles | 15.52.080(J) | | | ≥ 0.5 footcandles | |

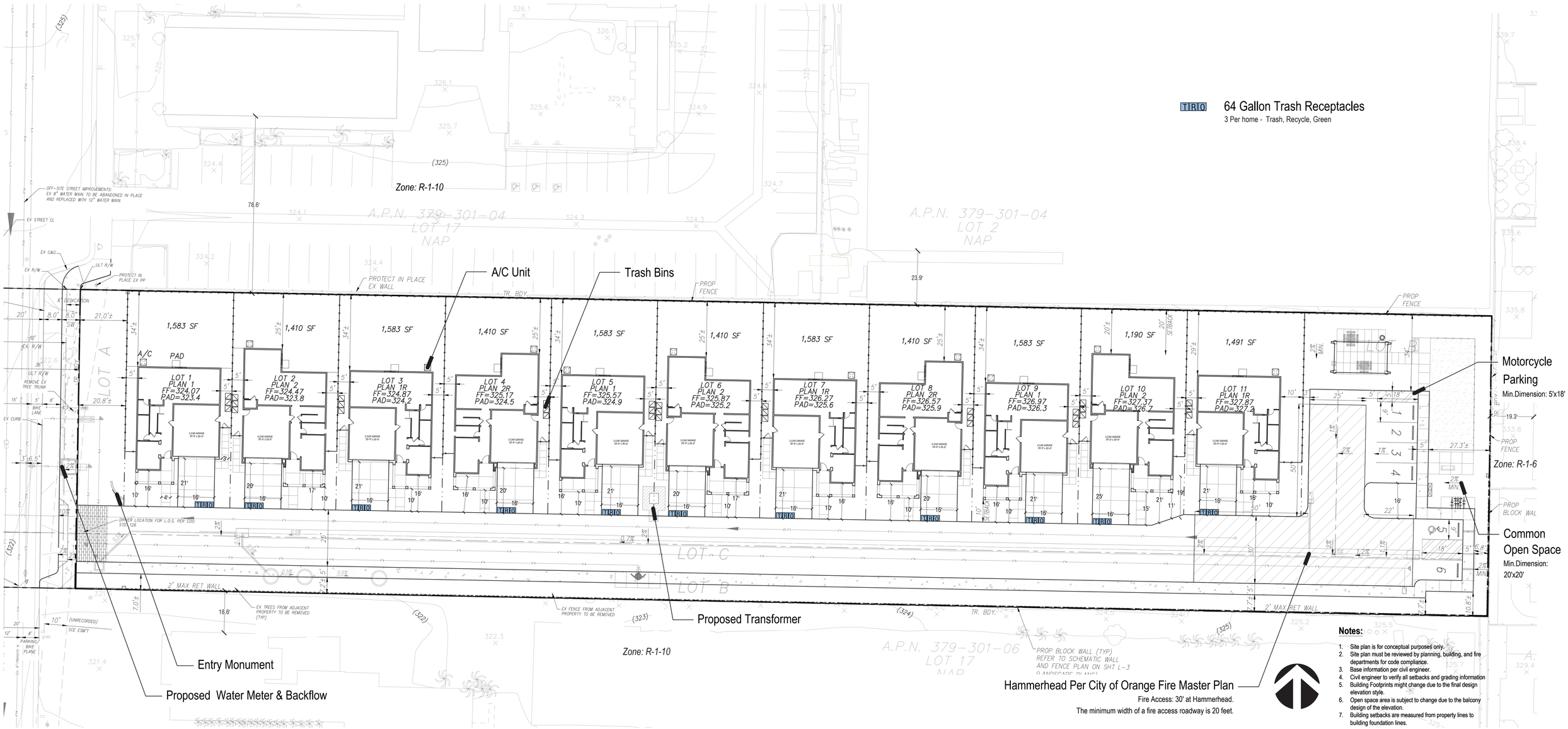


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T|R|O 64 Gallon Trash Receptacles
3 Per home - Trash, Recycle, Green

**Notes:**

1. Site plan is for conceptual purposes only.
2. Site plan must be reviewed by planning, building, and fire departments for code compliance.
3. Base information per civil engineer.
4. Civil engineer to verify all setbacks and grading information
5. Building Footprints might change due to the final design elevation style.
6. Open space area is subject to change due to the balcony design of the elevation.
7. Building setbacks are measured from property lines to building foundation lines.

# TRASH STAGING PLAN

**RANCHO RIDGE, LLC.**

## 647 N. RANCHO SANTIAGO BLVD.

ORANGE, CA

SP-3

0 10 20 40

DESIGN REVIEW SUBMITTAL | DRAFT

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# CHAPTER 3
# GREEN BUILDING

## SECTION 301 GENERAL

**301.1 SCOPE.** BUILDINGS SHALL SHALL BE DESIGNED TO INCLUDE THE GREEN BUILDING MEASURES SPECIFIED AS MANDATORY IN THE APPLICATION CHECKLISTS CONTAINED IN THIS CODE. VOLUNTARY GREEN BUILDING MEASURES ARE ALSO INCLUDED IN THE APPLICATION CHECKLISTS AND MAY BE INCLUDED IN THE DESIGN AND CONSTRUCTION OF STRUCTURES COVERED BY THIS CODE, BUT ARE NOT REQUIRED UNLESS ADOPTED BY A CITY, COUNTY, OR CITY AND COUNTY AS SPECIFIED IN SECTION 101.7.

**301.1.1 ADDITIONS AND ALTERATIONS. [HCD]** THE MANDATORY PROVISIONS OF CHAPTER 4 SHALL BE APPLIED TO ADDITIONS OR ALTERATIONS OF EXISTING RESIDENTIAL BUILDINGS WHERE THE ADDITION OR ALTERATION INCREASES THE BUILDING'S CONDITIONED AREA, VOLUME, OR SIZE. THE REQUIREMENTS SHALL APPLY ONLY TO AND/OR WITHIN THE SPECIFIC AREA OF THE ADDITION OR ALTERATION.

THE MANDATORY PROVISION OF SECTION 4.106.4.2 MAY APPLY TO ADDITIONS OR ALTERATIONS OF EXISTING PARKING FACILITIES OR THE ADDITION OF NEW PARKING FACILITIES SERVING EXISTING MULTIFAMILY BUILDINGS. SEE SECTION 4.106.4.3 FOR APPLICATION.

**NOTE:** REPAIRS INCLUDING, BUT NOT LIMITED TO, RESURFACING, RESTRIPING AND REPAIRING OR MAINTAINING EXISTING LIGHTING FIXTURES ARE NOT CONSIDERED ALTERATIONS FOR THE PURPOSE OF THIS SECTION.

**NOTE:** ON AND AFTER JANUARY 1, 2014, RESIDENTIAL BUILDINGS UNDERGOING PERMITTED ALTERATIONS, ADDITIONS, OR IMPROVEMENTS SHALL REPLACE NONCOMPLIANT PLUMBING FIXTURES WITH WATER-CONSERVING PLUMBING FIXTURES. PLUMBING FIXTURE REPLACEMENT IS REQUIRED PRIOR TO ISSUANCE OF A CERTIFICATE OF FINAL COMPLETION, CERTIFICATE OF OCCUPANCY OR FINAL PERMIT APPROVAL BY THE LOCAL BUILDING DEPARTMENT. SEE CIVIL CODE SECTION 1101.1, ET SEQ., FOR THE DEFINITION OF A NONCOMPLIANT PLUMBING FIXTURE, TYPES OF RESIDENTIAL BUILDINGS AFFECTED AND OTHER IMPORTANT ENACTMENT DATES.

**301.2 LOW-RISE AND HIGH-RISE RESIDENTIAL BUILDINGS. [HCD]**
THE PROVISIONS OF INDIVIDUAL SECTIONS OF CALGREEN MAY APPLY TO EITHER LOW-RISE RESIDENTIAL BUILDINGS HIGH-RISE RESIDENTIAL BUILDINGS, OR BOTH. INDIVIDUAL SECTIONS WILL BE DESIGNATED BY BANNERS TO INDICATE WHERE THE SECTION APPLIES SPECIFICALLY TO LOW-RISE ONLY (LR) OR HIGH-RISE ONLY (HR). WHEN THE SECTION APPLIES TO BOTH LOW-RISE AND HIGH-RISE BUILDINGS, NO BANNER WILL BE USED.

## SECTION 302 MIXED OCCUPANCY BUILDINGS

**302.1 MIXED OCCUPANCY BUILDINGS.**
IN MIXED OCCUPANCY BUILDINGS, EACH PORTION OF A BUILDING SHALL COMPLY WITH THE SPECIFIC GREEN BUILDING MEASURES APPLICABLE TO EACH SPECIFIC OCCUPANCY.

EXCEPTIONS:
1. [HCD] ACCESSORY STRUCTURES AND ACCESSORY OCCUPANCIES SERVING RESIDENTIAL BUILDINGS SHALL COMPLY WITH CHAPTER 4 AND APPENDIX A4, AS APPLICABLE.
2. [HCD] FOR PURPOSES OF *CALGREEN*, LIVE/WORK UNITS, COMPLYING WITH SECTION 419 OF THE *CALIFORNIA BUILDING CODE*, SHALL NOT BE CONSIDERED MIXED OCCUPANCIES. LIVE/WORK UNITS SHALL COMPLY WITH CHAPTER 4 AND APPENDIX A4, AS APPLICABLE.

# DIVISION 4.1 PLANNING AND DESIGN

**ABBREVIATION DEFINITIONS:**

| | |
|---|---|
| HCD | DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT |
| BSC | CALIFORNIA BUILDING STANDARDS COMMISSION |
| DSA-SS | DIVISION OF THE STATE ARCHITECT, STRUCTURAL SAFETY |
| OSHPD | OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT |
| LR | LOW RISE |
| HR | HIGH RISE |
| AA | ADDITIONS AND ALTERATIONS |
| N | NEW |

# CHAPTER 4
# RESIDENTIAL MANDATORY MEASURES

## SECTION 4.102 DEFINITIONS

**4.102.1 DEFINITIONS**
THE FOLLOWING TERMS ARE DEFINED IN CHAPTER 2 *(AND ARE INCLUDED HERE FOR REFERENCE)*

**FRENCH DRAIN.** A TRENCH, HOLE OR OTHER DEPRESSED AREA LOOSELY FILLED WITH ROCK, GRAVEL, FRAGMENTS OF BRICK OR SIMILAR PERVIOUS MATERIAL USED TO COLLECT OR CHANNEL DRAINAGE OR RUNOFF WATER.

**WATTLES.** WATTLES ARE USED TO REDUCE SEDIMENT IN RUNOFF. WATTLES ARE OFTEN CONSTRUCTED OF NATURAL PLANT MATERIALS SUCH AS HAY, STRAW OR SIMILAR MATERIAL SHAPED IN THE FORM OF TUBES AND PLACED ON A DOWNFLOW SLOPE. WATTLES ARE ALSO USED FOR PERIMETER AND INLET CONTROLS.

## 4.106 SITE DEVELOPMENT

**4.106.1 GENERAL.** PRESERVATION AND USE OF AVAILABLE NATURAL RESOURCES SHALL BE ACCOMPLISHED THROUGH EVALUATION AND CAREFUL PLANNING TO MINIMIZE NEGATIVE EFFECTS ON THE SITE AND ADJACENT AREAS. PRESERVATION OF SLOPES, MANAGEMENT OF STORM WATER DRAINAGE AND EROSION CONTROLS SHALL COMPLY WITH THIS SECTION.

**4.106.2 STORM WATER DRAINAGE AND RETENTION DURING CONSTRUCTION.**
PROJECTS WHICH DISTURB LESS THAN ONE ACRE OF SOIL AND ARE NOT PART OF A LARGER COMMON PLAN OF DEVELOPMENT WHICH IN TOTAL DISTURBS ONE ACRE OR MORE, SHALL MANAGE STORM WATER DRAINAGE DURING CONSTRUCTION. IN ORDER TO MANAGE STORM WATER DRAINAGE DURING CONSTRUCTION, ONE OR MORE OF THE FOLLOWING MEASURES SHALL BE IMPLEMENTED TO PREVENT FLOODING OF ADJACENT PROPERTY, PREVENT EROSION AND RETAIN SOIL RUNOFF ON THE SITE.

1. RETENTION BASINS OF SUFFICIENT SIZE SHALL BE UTILIZED TO RETAIN STORM WATER ON THE SITE.
2. WHERE STORM WATER IS CONVEYED TO A PUBLIC DRAINAGE SYSTEM, COLLECTION POINT, GUTTER OR SIMILAR DISPOSAL METHOD, WATER SHALL BE FILTERED BY USE OF A BARRIER SYSTEM, WATTLE OR OTHER METHOD APPROVED BY THE ENFORCING AGENCY.
3. COMPLIANCE WITH A LAWFULLY ENACTED STORM WATER MANAGEMENT ORDINANCE.

**NOTE:** REFER TO THE STATE WATER RESOURCES CONTROL BOARD FOR PROJECTS WHICH DISTURB ONE ACRE OR MORE OF SOIL, OR ARE PART OF A LARGER COMMON PLAN OF DEVELOPMENT WHICH IN TOTAL DISTURBS ONE ACRE OR MORE OF SOIL.

WEBSITE:: (HTTPS://WWW.WATERBOARDS.CA.GOV/WATER_ISSUES/PROGRAMS/STORMWATER/CONSTRUCTION.HTML)

**4.106.3 GRADING AND PAVING.** CONSTRUCTION PLANS SHALL INDICATE HOW THE SITE GRADING OR DRAINAGE SYSTEM WILL MANAGE ALL SURFACE WATER FLOWS TO KEEP WATER FROM ENTERING BUILDINGS. EXAMPLES OF METHODS TO MANAGE SURFACE WATER INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:

1. SWALES
2. WATER COLLECTION AND DISPOSAL SYSTEMS
3. FRENCH DRAINS
4. WATER RETENTION GARDENS
5. OTHER WATER MEASURES WHICH KEEP SURFACE WATER AWAY FROM BUILDINGS AND AID IN GROUNDWATER RECHARGE.

**EXCEPTION:** ADDITIONS AND ALTERATIONS NOT ALTERING THE DRAINAGE PATH.

**4.106.4 ELECTRIC VEHICLE (EV) CHARGING FOR NEW CONSTRUCTION.** NEW CONSTRUCTION SHALL COMPLY WITH SECTION 4.106.4.1 OR 4.106.4.2. ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE) SHALL COMPLY WITH THE *CALIFORNIA ELECTRICAL CODE*.

**EXCEPTIONS:**
1. ON A CASE-BY-CASE BASIS, WHERE THE LOCAL ENFORCING AGENCY HAS DETERMINED EV CHARGING AND INFRASTRUCTURE ARE NOT FEASIBLE BASED UPON ONE OR MORE OF THE FOLLOWING CONDITIONS:
   1.1. WHERE THERE IS NO LOCAL UTILITY POWER SUPPLY OR THE LOCAL UTILITY IS UNABLE TO SUPPLY ADEQUATE POWER.
   1.2. WHERE THERE IS EVIDENCE SUITABLE TO THE LOCAL ENFORCING AGENCY SUBSTANTIATING THAT ADDITIONAL LOCAL UTILITY INFRASTRUCTURE DESIGN REQUIREMENTS, DIRECTLY RELATED TO THE IMPLEMENTATION OF SECTION 4.106.4, MAY ADVERSELY IMPACT THE CONSTRUCTION COST OF THE PROJECT.
2. ACCESSORY DWELLING UNITS (ADU) AND JUNIOR ACCESSORY DWELLING UNITS (JADU) WITHOUT ADDITIONAL PARKING FACILITIES.

**4.106.4.1 NEW ONE- AND TWO-FAMILY DWELLINGS AND TOWNHOUSES WITH ATTACHED PRIVATE GARAGES.** FOR EACH DWELLING UNIT, INSTALL A LISTED RACEWAY TO ACCOMMODATE A DEDICATED 208/240-VOLT BRANCH CIRCUIT. THE RACEWAY SHALL NOT BE LESS THAN TRADE SIZE 1 (NOMINAL 1-INCH INSIDE DIAMETER). THE RACEWAY SHALL ORIGINATE AT THE MAIN SERVICE OR SUBPANEL AND SHALL TERMINATE INTO A LISTED CABINET, BOX OR OTHER ENCLOSURE IN CLOSE PROXIMITY TO THE PROPOSED LOCATION OF AN EV CHARGER. RACEWAYS ARE REQUIRED TO BE CONTINUOUS AT ENCLOSED, INACCESSIBLE OR CONCEALED AREAS AND SPACES. THE SERVICE PANEL AND/OR SUBPANEL SHALL PROVIDE CAPACITY TO INSTALL A 40-AMPERE 208/240-VOLT MINIMUM DEDICATED BRANCH CIRCUIT AND SPACE(S) RESERVED TO PERMIT INSTALLATION OF A BRANCH CIRCUIT OVERCURRENT PROTECTIVE DEVICE.

EXEMPTION: A RACEWAY IS NOT REQUIRED IF A MINIMUM 40-AMPERE 208/240-VOLT DEDICATED EV BRANCH CIRCUIT IS INSTALLED IN CLOSE PROXIMITY TO THE PROPOSED LOCATION OF AN EV CHARGER AT THE TIME OF ORIGINAL CONSTRUCTION IN ACCORDANCE WITH THE *CALIFORNIA ELECTRICAL CODE*.

**4.106.4.1.1 IDENTIFICATION.** THE SERVICE PANEL OR SUBPANEL CIRCUIT DIRECTORY SHALL IDENTIFY THE OVERCURRENT PROTECTIVE DEVICE SPACE(S) RESERVED FOR FUTURE EV CHARGING AS "EV CAPABLE". THE RACEWAY TERMINATION LOCATION SHALL BE PERMANENTLY AND VISIBLY MARKED AS "EV CAPABLE".

**4.106.4.2 NEW MULTIFAMILY DWELLINGS, HOTELS AND MOTELS AND NEW RESIDENTIAL PARKING FACILITIES.**
WHEN PARKING IS PROVIDED, PARKING SPACES FOR NEW MULTIFAMILY DWELLINGS, HOTELS AND MOTELS SHALL MEET THE REQUIREMENTS OF SECTION 4.106.4.2.2. CALCULATIONS FOR SPACES SHALL BE ROUNDED UP TO THE NEAREST WHOLE NUMBER. A PARKING SPACE SERVED BY ELECTRIC VEHICLE SUPPLY EQUIPMENT OR DESIGNED AS AN EV CHARGING SPACE SHALL COUNT AS AT LEAST ONE STANDARD AUTOMOBILE PARKING SPACE ONLY FOR THE PURPOSE OF COMPLYING WITH ANY APPLICABLE MINIMUM PARKING SPACE REQUIREMENTS ESTABLISHED BY A LOCAL JURISDICTION. SEE VEHICLE CODE SECTION 22511.2 FOR FURTHER DETAILS.

**4.106.4.2.1 RESERVED.**

**4.106.4.2.2 MULTIFAMILY DWELLINGS, HOTELS AND MOTELS**

1. **EV READY PARKING SPACES WITH RECEPTACLES.**

   a. **HOTELS AND MOTELS.** FORTY (40) PERCENT OF THE TOTAL NUMBER OF PARKING SPACES SHALL BE EQUIPPED WITH LOW POWER LEVEL 2 EV CHARGING RECEPTACLES.

   b. **MULTIFAMILY PARKING FACILITIES.** FORTY (40) PERCENT OF THE TOTAL NUMBER OF PARKING SPACES SHALL BE EQUIPPED WITH LOW POWER LEVEL 2 EV CHARGING RECEPTACLES. EV CHARGING RECEPTACLES REQUIRED BY THIS SECTION SHALL BE LOCATED IN AT LEAST ONE ASSIGNED PARKING SPACE PER DWELLING UNIT WHERE ASSIGNED PARKING IS PROVIDED BUT NEED NOT EXCEED FORTY (40) PERCENT OF THE TOTAL NUMBER OF ASSIGNED PARKING SPACES PROVIDED ON THE SITE.

   **EXCEPTION:** AREAS OF PARKING FACILITIES SERVED BY PARKING LIFTS, INCLUDING BUT NOT LIMITED TO AUTOMATED MECHANICAL-ACCESS OPEN PARKING GARAGES AS DEFINED IN THE *CALIFORNIA BUILDING CODE*; OR PARKING FACILITIES OTHERWISE INCAPABLE OF SUPPORTING ELECTRIC VEHICLE CHARGING.

   c. **RECEPTACLE POWER SOURCE**. EV CHARGING RECEPTACLES IN MULTIFAMILY PARKING FACILITIES SHALL BE PROVIDED WITH A DEDICATED BRANCH CIRCUIT CONNECTED TO THE DWELLING UNIT'S ELECTRICAL PANEL, UNLESS DETERMINED AS INFEASIBLE BY THE PROJECT BUILDER OR DESIGNER AND SUBJECT TO CONCURRENCE OF THE LOCAL ENFORCING AGENCY.

   **EXCEPTION:** AREAS OF PARKING FACILITIES SERVED BY PARKING LIFTS, INCLUDING BUT NOT LIMITED TO AUTOMATED MECHANICAL-ACCESS OPEN PARKING GARAGES AS DEFINED IN THE *CALIFORNIA BUILDING CODE*; OR PARKING FACILITIES OTHERWISE INCAPABLE OF SUPPORTING ELECTRIC VEHICLE CHARGING.

   d. **RECEPTACLE CONFIGURATIONS.** 208/240V EV CHARGING RECEPTACLES SHALL COMPLY WITH ONE OF THE FOLLOWING CONFIGURATIONS:

      1. FOR 20-AMPERE RECEPTACLES, NEMA 6-20R
      2. FOR 30-AMPERE RECEPTACLES, NEMA 14-30R
      3. FOR 50-AMPERE RECEPTACLES, NEMA 14-50R

2. **EV READY PARKING SPACES WITH EV CHARGERS.**

   a. **HOTELS AND MOTELS.** TEN (10) PERCENT OF THE TOTAL NUMBER OF PARKING SPACES SHALL BE EQUIPPED WITH LEVEL 2 EV CHARGERS. AT LEAST FIFTY (50) PERCENT OF THE REQUIRED EV CHARGERS SHALL BE EQUIPPED WITH J1772 CONNECTORS.

   b. **MULTIFAMILY PARKING FACILITIES.** TEN (10) PERCENT OF THE TOTAL NUMBER OF PARKING SPACES SHALL BE EQUIPPED WITH LEVEL 2 EV CHARGERS. AT LEAST FIFTY (50) PERCENT OF THE REQUIRED EV CHARGERS SHALL BE EQUIPPED WITH J1772 CONNECTORS. WHERE COMMON USE PARKING OR UNASSIGNED PARKING IS PROVIDED, EV CHARGERS SHALL BE LOCATED IN COMMON USE OR UNASSIGNED PARKING AREAS AND SHALL BE AVAILABLE FOR USE BY ALL RESIDENTS OR GUESTS.

   WHERE LOW POWER LEVEL 2 EV CHARGING RECEPTACLES OR LEVEL 2 EV CHARGERS ARE INSTALLED BEYOND THE MINIMUM REQUIRED, AN AUTOMATIC LOAD MANAGEMENT SYSTEM (ALMS) MAY BE USED TO REDUCE THE MAXIMUM REQUIRED ELECTRICAL CAPACITY TO EACH SPACE SERVED BY THE ALMS. THE ELECTRICAL SYSTEM AND ANY ON-SITE DISTRIBUTION TRANSFORMERS SHALL HAVE SUFFICIENT CAPACITY TO DELIVER AT LEAST 3.3 KW SIMULTANEOUSLY TO EACH EV CHARGING STATION (EVCS) SERVED BY THE ALMS. THE BRANCH CIRCUIT SHALL HAVE A MINIMUM CAPACITY OF 40 AMPERES, AND INSTALLED EV CHARGERS SHALL HAVE A CAPACITY OF NOT LESS THAN 30 AMPERES.

**4.106.4.2.2.1 ELECTRIC VEHICLE CHARGING STATIONS (EVCS).**
ELECTRIC VEHICLE CHARGING STATIONS REQUIRED BY SECTION 4.106.4.2.2, ITEM 2, WITH EV CHARGERS INSTALLED SHALL COMPLY WITH SECTION 4.106.4.2.2.1.1.

**EXCEPTION:** ELECTRIC VEHICLE CHARGING STATIONS SERVING PUBLIC ACCOMMODATIONS, PUBLIC HOUSING, MOTELS AND HOTELS SHALL NOT BE REQUIRED TO COMPLY WITH THIS SECTION. SEE *CALIFORNIA BUILDING CODE*, CHAPTER 11B, FOR APPLICABLE REQUIREMENTS.

**4.106.4.2.2.1.1 ELECTRIC VEHICLE CHARGING STATIONS (EVCS) SPACES WITH EV CHARGERS INSTALLED; DIMENSIONS AND LOCATION.**

EVCS SPACES SHALL BE DESIGNED TO COMPLY WITH THE FOLLOWING:

1. THE MINIMUM LENGTH OF EACH EVCS SPACE SHALL BE 18 FEET (5486 MM).
2. THE MINIMUM WIDTH OF EACH EVCS SPACE SHALL BE 9 FEET (2743 MM).
3. ONE IN EVERY 25 EVCS SPACES, BUT NOT LESS THAN ONE, SHALL ALSO HAVE AN 8-FOOT (2438 MM) WIDE MINIMUM A 5-FOOT (1524 MM) WIDE MINIMUM AISLE SHALL BE PERMITTED PROVIDED THE MINIMUM WIDTH OF THE EVCS SPACE IS 12 FEET (3658 MM). SURFACE SLOPE FOR THIS EVCS SPACE AND THE AISLE SHALL NOT EXCEED 1 UNIT VERTICAL IN 48 UNITS HORIZONTAL (2.083 PERCENT SLOPE) IN ANY DIRECTION. THESE EVCS SPACES SHALL ALSO COMPLY WITH AT LEAST ONE OF THE FOLLOWING:

   a. THE EVCS SPACE SHALL BE LOCATED ADJACENT TO AN ACCESSIBLE PARKING SPACE MEETING THE REQUIREMENTS OF THE *CALIFORNIA BUILDING CODE*, CHAPTER 11A, TO ALLOW USE OF THE EV CHARGER FROM THE ACCESSIBLE PARKING SPACE.
   b. HE EVCS SPACE SHALL BE LOCATED ON AN ACCESSIBLE ROUTE, AS DEFINED IN THE *CALIFORNIA BUILDING CODE*, CHAPTER 2, TO THE BUILDING.

   **EXCEPTION:** ELECTRIC VEHICLE CHARGING STATIONS DESIGNED AND CONSTRUCTED IN COMPLIANCE WITH THE *CALIFORNIA BUILDING CODE*, CHAPTER 11B, ARE NOT REQUIRED TO COMPLY WITH SECTION 4.106.4.2.2.1.1.

**4.106.4.2.2.1.2 ACCESSIBLE ELECTRIC VEHICLE CHARGING STATION SPACES.**
IN ADDITION TO THE REQUIREMENTS IN SECTION 4.106.4.2.2.1.1, ALL EV CHARGERS, WHERE INSTALLED, SHALL COMPLY WITH THE ACCESSIBILITY PROVISIONS FOR EV CHARGERS IN THE *CALIFORNIA BUILDING CODE*, CHAPTER 11B. EV READY SPACES AND EVCS IN MULTIFAMILY DEVELOPMENTS SHALL COMPLY WITH *CALIFORNIA BUILDING CODE*, CHAPTER 11A, SECTION 1109A.

**4.106.4.2.3 RESERVED.**

**4.106.4.2.4 RESERVED.**

**4.106.4.2.5 ELECTRIC VEHICLE READY SPACE SIGNAGE.**
ELECTRIC VEHICLE READY SPACES SHALL BE IDENTIFIED BY SIGNAGE OR PAVEMENT MARKINGS, IN COMPLIANCE WITH CALTRANS TRAFFIC OPERATIONS POLICY DIRECTIVE 13-01 (ZERO EMISSION VEHICLE SIGNS AND PAVEMENT MARKINGS) OR ITS SUCCESSOR(S).

**4.106.4.3 ELECTRIC VEHICLE CHARGING FOR ADDITIONS AND ALTERATIONS OF PARKING FACILITIES SERVING EXISTING MULTI-FAMILY BUILDINGS.**
WHERE NEW PARKING FACILITIES ARE ADDED, OR ELECTRICAL SYSTEMS OR LIGHTING OF EXISTING PARKING FACILITIES ARE ADDED OR ALTERED AND THE WORK REQUIRES A BUILDING PERMIT, TEN (10) PERCENT OF THE TOTAL NUMBER OF PARKING SPACES ADDED OR ALTERED SHALL BE EV CAPABLE SPACES TO SUPPORT FUTURE LEVEL 2 ELECTRIC VEHICLE SUPPLY EQUIPMENT. THE SERVICE PANEL OR SUBPANEL CIRCUIT DIRECTORY SHALL IDENTIFY THE OVERCURRENT PROTECTIVE DEVICE SPACE(S) RESERVED FOR FUTURE EV CHARGING PURPOSES AS "EV CAPABLE."

**NOTES:**

1. CONSTRUCTION DOCUMENTS ARE INTENDED TO DEMONSTRATE THE PROJECT'S CAPABILITY AND CAPACITY FOR FACILITATING FUTURE EV CHARGING.

2. THERE IS NO REQUIREMENT FOR EV SPACES TO BE CONSTRUCTED OR AVAILABLE UNTIL EV CHARGERS ARE INSTALLED FOR USE.

# DIVISION 4.2 ENERGY EFFICIENCY

## 4.201 GENERAL

**4.201.1 SCOPE.** FOR THE PURPOSES OF MANDATORY ENERGY EFFICIENCY STANDARDS IN THIS CODE, THE CALIFORNIA ENERGY COMMISSION WILL CONTINUE TO ADOPT MANDATORY STANDARDS.

# DIVISION 4.3 WATER EFFICIENCY AND CONSERVATION

## 4.303 INDOOR WATER USE

**4.303.1 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS.** PLUMBING FIXTURES (WATER CLOSETS AND URINALS) AND FITTINGS (FAUCETS AND SHOWERHEADS) SHALL COMPLY WITH THE SECTIONS 4.303.1.1, 4.303.1.2, 4.303.1.3, AND 4.303.4.4.

**NOTE:** ALL NONCOMPLIANT PLUMBING FIXTURES IN ANY RESIDENTIAL REAL PROPERTY SHALL BE REPLACED WITH WATER-CONSERVING PLUMBING FIXTURES. PLUMBING FIXTURE REPLACEMENT IS REQUIRED PRIOR TO ISSUANCE OF A CERTIFICATE OF FINAL COMPLETION, CERTIFICATE OF OCCUPANCY, OR FINAL PERMIT APPROVAL BY THE LOCAL BUILDING DEPARTMENT. SEE CIVIL CODE SECTION 1101.1, ET SEQ., FOR THE DEFINITION OF A NONCOMPLIANT PLUMBING FIXTURE, TYPES OF RESIDENTIAL BUILDINGS AFFECTED AND OTHER IMPORTANT ENACTMENT DATES.

**4.303.1.1 WATER CLOSETS.** THE EFFECTIVE FLUSH VOLUME OF ALL WATER CLOSETS SHALL NOT EXCEED 1.28 GALLONS PER FLUSH. TANK-TYPE WATER CLOSETS SHALL BE CERTIFIED TO THE PERFORMANCE CRITERIA OF THE U.S. EPA WATERSENSE SPECIFICATION FOR TANK-TYPE TOILETS.

**NOTE:** THE EFFECTIVE FLUSH VOLUME OF DUAL FLUSH TOILETS IS DEFINED AS THE COMPOSITE, AVERAGE FLUSH VOLUME OF TWO REDUCED FLUSHES AND ONE FULL FLUSH.

**4.303.1.2 URINALS.** THE EFFECTIVE FLUSH VOLUME OF WALL MOUNTED URINALS SHALL NOT EXCEED 0.125 GALLONS PER FLUSH. THE EFFECTIVE FLUSH VOLUME OF ALL OTHER URINALS SHALL NOT EXCEED 0.5 GALLONS PER FLUSH.

**4.303.1.3 SHOWERHEADS.**

**4.303.1.3.1 SINGLE SHOWERHEAD.** SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 80 PSI. SHOWERHEADS SHALL BE CERTIFIED TO THE PERFORMANCE CRITERIA OF THE U.S. EPA WATERSENSE SPECIFICATION FOR SHOWERHEADS.

**4.303.1.3.2 MULTIPLE SHOWERHEADS SERVING ONE SHOWER.** WHEN A SHOWER IS SERVED BY MORE THAN ONE SHOWERHEAD, THE COMBINED FLOW RATE OF ALL THE SHOWERHEADS AND/OR OTHER SHOWER OUTLETS CONTROLLED BY A SINGLE VALVE SHALL NOT EXCEED 1.8 GALLONS PER MINUTE AT 80 PSI, OR THE SHOWER SHALL BE DESIGNED TO ONLY ALLOW ONE SHOWER OUTLET TO BE IN OPERATION AT A TIME.

**NOTE**: A HAND-HELD SHOWER SHALL BE CONSIDERED A SHOWERHEAD.

**4.303.1.4 FAUCETS.**

**4.303.1.4.1 RESIDENTIAL LAVATORY FAUCETS.** THE MAXIMUM FLOW RATE OF RESIDENTIAL LAVATORY FAUCETS SHALL NOT EXCEED 1.2 GALLONS PER MINUTE AT 60 PSI. THE MINIMUM FLOW RATE OF RESIDENTIAL LAVATORY FAUCETS SHALL NOT BE LESS THAN 0.8 GALLONS PER MINUTE AT 20 PSI.

**4.303.1.4.2 LAVATORY FAUCETS IN COMMON AND PUBLIC USE AREAS.** THE MAXIMUM FLOW RATE OF LAVATORY FAUCETS INSTALLED IN COMMON AND PUBLIC USE AREAS (OUTSIDE OF DWELLINGS OR SLEEPING UNITS) IN RESIDENTIAL BUILDINGS SHALL NOT EXCEED 0.5 GALLONS PER MINUTE AT 60 PSI.

**4.303.1.4.3 METERING FAUCETS.** METERING FAUCETS WHEN INSTALLED IN RESIDENTIAL BUILDINGS SHALL NOT DELIVER MORE THAN 0.2 GALLONS PER CYCLE.

**4.303.1.4.4 KITCHEN FAUCETS.** THE MAXIMUM FLOW RATE OF KITCHEN FAUCETS SHALL NOT EXCEED 1.8 GALLONS PER MINUTE AT 60 PSI. KITCHEN FAUCETS MAY TEMPORARILY INCREASE THE FLOW ABOVE THE MAXIMUM RATE, BUT NOT TO EXCEED 2.2 GALLONS PER MINUTE AT 60 PSI, AND MUST DEFAULT TO A MAXIMUM FLOW RATE OF 1.8 GALLONS PER MINUTE AT 60 PSI.

**NOTE**: WHERE COMPLYING FAUCETS ARE UNAVAILABLE, AERATORS OR OTHER MEANS MAY BE USED TO ACHIEVE REDUCTION.

**4.303.1.4.5 PRE-RINSE SPRAY VALVES.**
WHEN INSTALLED, SHALL MEET THE REQUIREMENTS IN THE *CALIFORNIA CODE OF REGULATIONS*, TITLE 20 (APPLIANCE EFFICIENCY REGULATIONS), SECTIONS 1605.1 (H)(4) TABLE H-2, SECTION 1605.3 (H)(4)(A), AND SECTION 1607 (D)(7) AND SHALL BE EQUIPPED WITH AN INTEGRAL AUTOMATIC SHUTOFF.

**FOR REFERENCE ONLY:** THE FOLLOWING TABLE AND CODE SECTION HAVE BEEN REPRINTED FROM THE *CALIFORNIA CODE OF REGULATIONS*, TITLE 20 (APPLIANCE EFFICIENCY REGULATIONS),SECTION 1605.1 (H)(4) AND SECTION 1605.3 (H)(4)(A).

TABLE H-2

STANDARDS FOR COMMERCIAL PRE-RINSE SPRAY VALVES MANUFACTURED ON OR AFTER JANUARY 28, 2019

| PRODUCT CLASS [spray force in ounce force (ozf)] | MAXIMUM FLOW RATE (gpm) |
|---|---|
| Product Class 1 (≤ 5.0 ozf) | 1.00 |
| Product Class 2 (> 5.0 ozf and ≤ 8.0 ozf) | 1.20 |
| Product Class 3 (> 8.0 ozf) | 1.60 |

[TITLE 20 SECTION 1605.3 (H)(4)(A): COMMERCIAL PRERINSE SPRAY VALVES MANUFACTURED ON OR AFTER JANUARY 1, 2006, SHALL HAVE A MINIMUM SPRAY FORCE OF NOT LESS THAN 4.0 OUNCES-FORCE (OZF)[113 GRAMS-FORCE(GF)]

**4.303.2 SUBMETERS FOR MULTIFAMILY BUILDINGS AND DWELLING UNITS IN MIXED-USED RESIDENTIAL/COMMERCIAL BUILDINGS.**
SUBMETERS SHALL BE INSTALLED TO MEASURE WATER USAGE OF INDIVIDUAL RENTAL DWELLING UNITS IN ACCORDANCE WITH THE *CALIFORNIA PLUMBING CODE*.

**4.303.3 STANDARDS FOR PLUMBING FIXTURES AND FITTINGS.** PLUMBING FIXTURES AND FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE *CALIFORNIA PLUMBING CODE*, AND SHALL MEET THE APPLICABLE STANDARDS REFERENCED IN TABLE 1701.1 OF THE *CALIFORNIA PLUMBING CODE*.

NOTE:
THIS TABLE COMPILES THE DATA IN SECTION 4.303.1, AND IS INCLUDED AS A CONVENIENCE FOR THE USER.

TABLE - MAXIMUM FIXTURE WATER USE

| FIXTURE TYPE | FLOW RATE |
|---|---|
| SHOWER HEADS (RESIDENTIAL) | 1.8 GMP @ 80 PSI |
| LAVATORY FAUCETS (RESIDENTIAL) | MAX. 1.2 GPM @ 60 PSI MIN. 0.8 GPM @ 20 PSI |
| LAVATORY FAUCETS IN COMMON & PUBLIC USE AREAS | 0.5 GPM @ 60 PSI |
| KITCHEN FAUCETS | 1.8 GPM @ 60 PSI |
| METERING FAUCETS | 0.2 GAL/CYCLE |
| WATER CLOSET | 1.28 GAL/FLUSH |
| URINALS | 0.125 GAL/FLUSH |

## 4.304 OUTDOOR WATER USE

**4.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS**. RESIDENTIAL DEVELOPMENTS SHALL COMPLY WITH A LOCAL WATER EFFICIENT LANDSCAPE ORDINANCE OR THE CURRENT CALIFORNIA DEPARTMENT OF WATER RESOURCES' MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO), WHICHEVER IS MORE STRINGENT.

**NOTES:**

1. THE MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO) IS LOCATED IN THE *CALIFORNIA CODE REGULATIONS*, TITLE 23, CHAPTER 2.7, DIVISION 2. MWELO AND SUPPORTING DOCUMENTS, INCLUDING WATER BUDGET CALCULATOR, ARE AVAILABLE AT: HTTPS://WWW.WATER.CA.GOV/

# DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

## 4.406 ENHANCED DURABILITY AND REDUCED MAINTENANCE

**4.406.1 RODENT PROOFING.** ANNULAR SPACES AROUND PIPES, ELECTRIC CABLES, CONDUITS OR OTHER OPENINGS IN SOLE/BOTTOM PLATES AT EXTERIOR WALLS SHALL BE PROTECTED AGAINST THE PASSAGE OF RODENTS BY CLOSING SUCH OPENINGS WITH CEMENT MORTAR, CONCRETE MASONRY OR A SIMILAR METHOD ACCEPTABLE TO THE ENFORCING AGENCY.

## 4.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING

**4.408.1 CONSTRUCTION WASTE MANAGEMENT.** RECYCLE AND/OR SALVAGE FOR REUSE A MINIMUM OF 65 PERCENT OF THE NON-HAZARDOUS CONSTRUCTION AND DEMOLITION WASTE IN ACCORDANCE WITH EITHER SECTION 4.408.2, 4.408.3 OR 4.408.4, OR MEET A MORE STRINGENT LOCAL CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT ORDINANCE.

**EXCEPTIONS:**

1. EXCAVATED SOIL AND LAND-CLEARING DEBRIS.
2. ALTERNATE WASTE REDUCTION METHODS DEVELOPED BY WORKING WITH LOCAL AGENCIES IF DIVERSION OR RECYCLE FACILITIES CAPABLE OF


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COMPLIANCE WITH THIS ITEM DO NOT EXIST OR ARE NOT LOCATED REASONABLY CLOSE TO THE JOBSITE.
3. THE ENFORCING AGENCY MAY MAKE EXCEPTIONS TO THE REQUIREMENTS OF THIS SECTION WHEN ISOLATED JOBSITES ARE LOCATED IN AREAS BEYOND THE HAUL BOUNDARIES OF THE DIVERSION FACILITY.

**4.408.2 CONSTRUCTION WASTE MANAGEMENT PLAN.** SUBMIT A CONSTRUCTION WASTE MANAGEMENT PLAN IN CONFORMANCE WITH ITEMS 1 THROUGH 5. THE CONSTRUCTION WASTE MANAGEMENT PLAN SHALL BE UPDATED AS NECESSARY AND SHALL BE AVAILABLE DURING CONSTRUCTION FOR EXAMINATION BY THE ENFORCING AGENCY.

1. IDENTIFY THE CONSTRUCTION AND DEMOLITION WASTE MATERIALS TO BE DIVERTED FROM DISPOSAL BY RECYCLING, REUSE ON THE PROJECT OR SALVAGE FOR FUTURE USE OR SALE.
2. SPECIFY IF CONSTRUCTION AND DEMOLITION WASTE MATERIALS WILL BE SORTED ON-SITE (SOURCE SEPARATED) OR BULK MIXED (SINGLE STREAM).
3. IDENTIFY DIVERSION FACILITIES WHERE THE CONSTRUCTION AND DEMOLITION WASTE MATERIAL COLLECTED WILL BE TAKEN.
4. IDENTIFY CONSTRUCTION METHODS EMPLOYED TO REDUCE THE AMOUNT OF CONSTRUCTION AND DEMOLITION WASTE GENERATED.
5. SPECIFY THAT THE AMOUNT OF CONSTRUCTION AND DEMOLITION WASTE MATERIALS DIVERTED SHALL BE CALCULATED BY WEIGHT OR VOLUME, BUT NOT BY BOTH.

**4.408.3 WASTE MANAGEMENT COMPANY.** UTILIZE A WASTE MANAGEMENT COMPANY, APPROVED BY THE ENFORCING AGENCY, WHICH CAN PROVIDE VERIFIABLE DOCUMENTATION THAT THE PERCENTAGE OF CONSTRUCTION AND DEMOLITION WASTE MATERIAL DIVERTED FROM THE LANDFILL COMPLIES WITH SECTION 4.408.1.

**NOTE:** THE OWNER OR CONTRACTOR MAY MAKE THE DETERMINATION IF THE CONSTRUCTION AND DEMOLITION WASTE MATERIALS WILL BE DIVERTED BY A WASTE MANAGEMENT COMPANY.

**4.408.4 WASTE STREAM REDUCTION ALTERNATIVE (LR).** PROJECTS THAT GENERATE A TOTAL COMBINED WEIGHT OF CONSTRUCTION AND DEMOLITION WASTE DISPOSED OF IN LANDFILLS, WHICH DO NOT EXCEED 3.4 LBS./SQ.FT. OF THE BUILDING AREA SHALL MEET THE MINIMUM 65% CONSTRUCTION WASTE REDUCTION REQUIREMENT IN SECTION 4.408.1

**4.408.4.1 WASTE STREAM REDUCTION ALTERNATIVE.** PROJECTS THAT GENERATE A TOTAL COMBINED WEIGHT OF CONSTRUCTION AND DEMOLITION WASTE DISPOSED OF IN LANDFILLS, WHICH DO NOT EXCEED 2 POUNDS PER SQUARE FOOT OF THE BUILDING AREA, SHALL MEET THE MINIMUM 65% CONSTRUCTION WASTE REDUCTION REQUIREMENT IN SECTION 4.408.1

**4.408.5 DOCUMENTATION.** DOCUMENTATION SHALL BE PROVIDED TO THE ENFORCING AGENCY WHICH DEMONSTRATES COMPLIANCE WITH SECTION 4.408.2, ITEMS 1 THROUGH 5, SECTION 4.408.3 OR SECTION 4.408.4.

**NOTES:**

1. SAMPLE FORMS FOUND IN "A GUIDE TO THE CALIFORNIA GREEN BUILDING STANDARDS CODE (RESIDENTIAL)" LOCATED AT WWW.HCD.CA.GOV/CALGREEN.HTML MAY BE USED TO ASSIST IN DOCUMENTING COMPLIANCE WITH THIS SECTION.
2. MIXED CONSTRUCTION AND DEMOLITION DEBRIS (C & D) PROCESSORS CAN BE LOCATED AT THE CALIFORNIA DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY (CALRECYCLE).

## 4.410 BUILDING MAINTENANCE AND OPERATION

**4.410.1 OPERATION AND MAINTENANCE MANUAL.** AT THE TIME OF FINAL INSPECTION, A MANUAL, COMPACT DISC, WEB-BASED REFERENCE OR OTHER MEDIA ACCEPTABLE TO THE ENFORCING AGENCY WHICH INCLUDES ALL OF THE FOLLOWING SHALL BE PLACED IN THE BUILDING:

1. DIRECTIONS TO THE OWNER OR OCCUPANT THAT THE MANUAL SHALL REMAIN WITH THE BUILDING THROUGHOUT THE LIFE CYCLE OF THE STRUCTURE.
2. OPERATION AND MAINTENANCE INSTRUCTIONS FOR THE FOLLOWING:
   A. EQUIPMENT AND APPLIANCES, INCLUDING WATER-SAVING DEVICES AND SYSTEMS, HVAC SYSTEMS, PHOTOVOLTAIC SYSTEMS, ELECTRIC VEHICLE CHARGERS, WATER-HEATING SYSTEMS AND OTHER MAJOR APPLIANCES AND EQUIPMENT.
   B. ROOF AND YARD DRAINAGE, INCLUDING GUTTERS AND DOWNSPOUTS.
   C. SPACE CONDITIONING SYSTEMS, INCLUDING CONDENSERS AND AIR FILTERS.
   D. LANDSCAPE IRRIGATION SYSTEMS.
   E. WATER REUSE SYSTEMS.
3. INFORMATION FROM LOCAL UTILITY, WATER AND WASTE RECOVERY PROVIDERS ON METHODS TO FURTHER REDUCE RESOURCE CONSUMPTION, INCLUDING RECYCLE PROGRAMS AND LOCATIONS.
4. PUBLIC TRANSPORTATION AND/OR CARPOOL OPTIONS AVAILABLE IN THE AREA.
5. EDUCATIONAL MATERIAL ON THE POSITIVE IMPACTS OF AN INTERIOR RELATIVE HUMIDITY BETWEEN 30-60 PERCENT AND WHAT METHODS AN OCCUPANT MAY USE TO MAINTAIN THE RELATIVE HUMIDITY LEVEL IN THAT RANGE.
6. INFORMATION ABOUT WATER-CONSERVING LANDSCAPE AND IRRIGATION DESIGN AND CONTROLLERS WHICH CONSERVE WATER.
7. INSTRUCTIONS FOR MAINTAINING GUTTERS AND DOWNSPOUTS AND THE IMPORTANCE OF DIVERTING WATER AT LEAST 5 FEET AWAY FROM THE FOUNDATION.
8. INFORMATION ON REQUIRED ROUTINE MAINTENANCE MEASURES, INCLUDING, BUT NOT LIMITED TO, CAULKING, PAINTING, GRADING AROUND THE BUILDING, ETC.
9. INFORMATION ABOUT STATE SOLAR ENERGY AND INCENTIVE PROGRAMS AVAILABLE.
10. A COPY OF ALL SPECIAL INSPECTIONS VERIFICATIONS REQUIRED BY THE ENFORCING AGENCY OR THIS CODE.
11. INFORMATION FROM THE DEPARTMENT OF FORESTRY AND FIRE PROTECTION ON MAINTENANCE OF DEFENSIBLE SPACE AROUND RESIDENTIAL STRUCTURES.
12. INFORMATION AND/OR DRAWINGS IDENTIFYING THE LOCATION OF GRAB BAR REINFORCEMENTS.

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## DIVISION 4.5 ENVIRONMENTAL QUALITY (CONTINUED)

**4.504.3 CARPET SYSTEMS.** ALL CARPET INSTALLED IN THE BUILDING INTERIOR SHALL MEET THE REQUIREMENTS OF THE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH, "STANDARD METHOD FOR THE TESTING AND EVALUATION OF VOLATILE ORGANIC CHEMICAL EMISSIONS FROM INDOOR SOURCES USING ENVIRONMENTAL CHAMBERS," VERSION 1.2, JANUARY 2017 (EMISSION TESTING METHOD FOR CALIFORNIA SPECIFICATION 01350)

SEE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH'S WEBSITE FOR CERTIFICATION PROGRAMS AND TESTING LABS.

HTTPS://WWW.CDPH.CA.GOV/PROGRAMS/CCDPHP/DEODC/EHLB/IAQ/PAGES/VOC.ASPX.

**4.504.3.1 CARPET CUSHION.** ALL CARPET CUSHION INSTALLED IN THE BUILDING INTERIOR SHALL MEET THE REQUIREMENTS OF THE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH, "STANDARD METHOD FOR THE TESTING AND EVALUATION OF VOLATILE ORGANIC CHEMICAL EMISSIONS FROM INDOOR SOURCES USING ENVIRONMENTAL CHAMBERS," VERSION 1.2, JANUARY 2017 (EMISSION TESTING METHOD FOR CALIFORNIA SPECIFICATION 01350)

SEE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH'S WEBSITE FOR CERTIFICATION PROGRAMS AND TESTING LABS.

HTTPS://WWW.CDPH.CA.GOV/PROGRAMS/CCDPHP/DEODC/EHLB/IAQ/PAGES/VOC.ASPX.

**4.504.3.2 CARPET ADHESIVE.** ALL CARPET ADHESIVE SHALL MEET THE REQUIREMENTS OF TABLE 4.504.1.

**4.504.4 RESILIENT FLOORING SYSTEMS.** WHERE RESILIENT FLOORING IS INSTALLED, AT LEAST 80% OF FLOOR AREA RECEIVING RESILIENT FLOORING SHALL MEET THE REQUIREMENTS OF THE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH, "STANDARD METHOD FOR THE TESTING AND EVALUATION OF VOLATILE ORGANIC CHEMICAL EMISSIONS FROM INDOOR SOURCES USING ENVIRONMENTAL CHAMBERS," VERSION 1.2, JANUARY 2017 (EMISSION TESTING METHOD FOR CALIFORNIA SPECIFICATION 01350)

SEE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH'S WEBSITE FOR CERTIFICATION PROGRAMS AND TESTING LABS.

HHTPS://WWW.CDPH.CA.GOV/PROGRAMS/CCDPHP/DEODC/EHLB/IAQ/PAGES/VOC.ASPX.

**4.504.5 COMPOSITE WOOD PRODUCTS.** HARDWOOD PLYWOOD, PARTICLEBOARD AND MEDIUM DENSITY FIBERBOARD COMPOSITE WOOD PRODUCTS USED ON THE INTERIOR OR EXTERIOR OF THE BUILDINGS SHALL MEET THE REQUIREMENTS FOR FORMALDEHYDE AS SPECIFIED IN ARB'S AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD (17 CCR 93120 ET SEQ.), BY OR BEFORE THE DATES SPECIFIED IN THOSE SECTIONS, AS SHOWN IN TABLE 4.504.5

**4.504.5.1 DOCUMENTATION.** VERIFICATION OF COMPLIANCE WITH THIS SECTION SHALL BE PROVIDED AS REQUESTED BY THE ENFORCING AGENCY. DOCUMENTATION SHALL INCLUDE AT LEAST ONE OF THE FOLLOWING:

1. PRODUCT CERTIFICATIONS AND SPECIFICATIONS.
2. CHAIN OF CUSTODY CERTIFICATIONS.
3. PRODUCT LABELED AND INVOICED AS MEETING THE COMPOSITE WOOD PRODUCTS REGULATION (SEE CCR, TITLE 17, SECTION 93120, ET SEQ.).
4. EXTERIOR GRADE PRODUCTS MARKED AS MEETING THE PS-1 OR PS-2 STANDARDS OF THE ENGINEERED WOOD ASSOCIATION, THE AUSTRALIAN AS/NZS 2269, EUROPEAN 636 3S STANDARDS, AND CANADIAN CSA 0121, CSA 0151, CSA 0153 AND CSA 0325 STANDARDS.
5. OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY.

**4.505 INTERIOR MOISTURE CONTROL**

**4.505.1 GENERAL.** BUILDINGS SHALL MEET OR EXCEED THE PROVISIONS OF THE *CALIFORNIA BUILDING STANDARDS CODE*.

**4.505.2 CONCRETE SLAB FOUNDATIONS.** CONCRETE SLAB FOUNDATIONS REQUIRED TO HAVE A VAPOR RETARDER BY CALIFORNIA BUILDING CODE, CHAPTER 19, OR CONCRETE SLAB-ON-GROUND FLOORS REQUIRED TO HAVE A VAPOR RETARDER BY THE CALIFORNIA RESIDENTIAL CODE, CHAPTER 5, SHALL ALSO COMPLY WITH THIS SECTION.

**4.505.2.1 CAPILLARY BREAK.** A CAPILLARY BREAK SHALL BE INSTALLED IN COMPLIANCE WITH AT LEAST ONE OF THE FOLLOWING:

1. A 4-INCH (101.6 MM) THICK BASE OF 1/2 INCH (12.7MM) OR LARGER CLEAN AGGREGATE SHALL BE PROVIDED WITH A VAPOR BARRIER IN DIRECT CONTACT WITH CONCRETE AND A CONCRETE MIX DESIGN, WHICH WILL ADDRESS BLEEDING, SHRINKAGE, AND CURLING, SHALL BE USED. FOR ADDITIONAL INFORMATION, SEE AMERICAN CONCRETE INSTITUTE, ACI 302.2R-06.
2. OTHER EQUIVALENT METHODS APPROVED BY THE ENFORCING AGENCY.
3. A SLAB DESIGN SPECIFIED BY A LICENSED DESIGN PROFESSIONAL.

**4.505.3 MOISTURE CONTENT OF BUILDING MATERIALS.** BUILDING MATERIALS WITH VISIBLE SIGNS OF WATER DAMAGE SHALL NOT BE INSTALLED. WALL AND FLOOR FRAMING SHALL NOT BE ENCLOSED WHEN THE FRAMING MEMBERS EXCEED 19 PERCENT MOISTURE CONTENT. MOISTURE CONTENT SHALL BE VERIFIED IN COMPLIANCE WITH THE FOLLOWING:

1. MOISTURE CONTENT SHALL BE DETERMINED WITH EITHER A PROBE-TYPE OR CONTACT-TYPE MOISTURE METER.EQUIVALENT MOISTURE VERIFICATION METHODS MAY BE APPROVED BY THE ENFORCING AGENCY AND SHALL SATISFY REQUIREMENTS FOUND IN SECTION 101.8 OF THIS CODE.
2. MOISTURE READINGS SHALL BE TAKEN AT A POINT 2 FEET (610 MM) TO 4 FEET (1219 MM) FROM THE GRADE STAMPED END OF EACH PIECE VERIFIED.
3. AT LEAST THREE RANDOM MOISTURE READINGS SHALL BE PERFORMED ON WALL AND FLOOR FRAMING WITH DOCUMENTATION ACCEPTABLE TO THE ENFORCING AGENCY PROVIDED AT THE TIME OF APPROVAL TO ENCLOSE THE WALL AND FLOOR FRAMING.

INSULATION PRODUCTS WHICH ARE VISIBLY WET OR HAVE A HIGH MOISTURE CONTENT SHALL BE REPLACED OR ALLOWED TO DRY PRIOR TO ENCLOSURE IN WALL OR FLOOR CAVITIES. WET-APPLIED INSULATION PRODUCTS SHALL FOLLOW THE MANUFACTURERS' DRYING RECOMMENDATIONS PRIOR TO ENCLOSURE.

**4.506 INDOOR AIR QUALITY AND EXHAUST**

**4.506.1 BATHROOM EXHAUST FANS.** EACH BATHROOM SHALL BE MECHANICALLY VENTILATED AND SHALL COMPLY WITH THE FOLLOWING:

1. FANS SHALL BE ENERGY STAR COMPLIANT AND BE DUCTED TO TERMINATE OUTSIDE THE BUILDING.
2. UNLESS FUNCTIONING AS A COMPONENT OF A WHOLE HOUSE VENTILATION SYSTEM, FANS MUST BE CONTROLLED BY A HUMIDITY CONTROL.

A. HUMIDITY CONTROLS SHALL BE CAPABLE OF ADJUSTMENT BETWEEN A RELATIVE HUMIDITY RANGE LESS THAN OR EQUAL TO 50% TO A MAXIMUM OF 80%. A HUMIDITY CONTROL MAY UTILIZE MANUAL OR AUTOMATIC MEANS OF ADJUSTMENT.
B. A HUMIDITY CONTROL MAY BE A SEPARATE COMPONENT TO THE EXHAUST FAN AND IS NOT REQUIRED TO BE NTEGRAL (I.E., BUILT-IN)

**NOTES:**

1. FOR THE PURPOSES OF THIS SECTION, A BATHROOM IS A ROOM WHICH CONTAINS A BATHTUB, SHOWER OR TUB/SHOWER COMBINATION.
2. LIGHTING INTEGRAL TO BATHROOM EXHAUST FANS SHALL COMPLY WITH THE *CALIFORNIA ENERGY CODE*.

### 4.507 ENVIRONMENTAL COMFORT

**4.507.2 HEATING AND AIR-CONDITIONING SYSTEM DESIGN.** HEATING AND AIR CONDITIONING SYSTEMS SHALL BE SIZED, DESIGNED AND HAVE THEIR EQUIPMENT SELECTED USING THE FOLLOWING METHODS:

1. THE HEAT LOSS AND HEAT GAIN IS ESTABLISHED ACCORDING TO ANSI/ACCA 2 MANUAL J - 2011 (RESIDENTIAL LOAD CALCULATION), ASHRAE HANDBOOKS OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.
2. DUCT SYSTEMS ARE SIZED ACCORDING TO ANSI/ACCA 1 MANUAL D - 2014 (RESIDENTIAL DUCT SYSTEMS), ASHRAE HANDBOOKS OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.
3. SELECT HEATING AND COOLING EQUIPMENT ACCORDING TO ANSI/ACCA 3 MANUAL S - 2014 (RESIDENTIAL EQUIPMENT SELECTION), OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.

**EXCEPTION:** USE OF ALTERNATE DESIGN TEMPERATURES NECESSARY TO ENSURE THE SYSTEM FUNCTIONS ARE ACCEPTABLE.

# CHAPTER 7
# INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS

## 702 QUALIFICATIONS

**702.1 INSTALLER TRAINING.** HVAC SYSTEM INSTALLERS SHALL BE TRAINED AND CERTIFIED IN THE PROPER INSTALLATION OF HVAC SYSTEMS INCLUDING DUCTS AND EQUIPMENT BY A NATIONALLY OR REGIONALLY RECOGNIZED TRAINING OR CERTIFICATION PROGRAM. UNCERTIFIED PERSONS MAY PERFORM HVAC INSTALLATIONS WHEN UNDER THE DIRECT SUPERVISION AND RESPONSIBILITY OF A PERSON TRAINED AND CERTIFIED TO INSTALL HVAC SYSTEMS OR CONTRACTOR LICENSED TO INSTALL HVAC SYSTEMS. EXAMPLES OF ACCEPTABLE HVAC TRAINING AND CERTIFICATION PROGRAMS INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:

1. STATE CERTIFIED APPRENTICESHIP PROGRAMS.
2. PUBLIC UTILITY TRAINING PROGRAMS.
3. TRAINING PROGRAMS SPONSORED BY TRADE, LABOR OR STATEWIDE ENERGY CONSULTING OR VERIFICATION ORGANIZATIONS.
4. PROGRAMS SPONSORED BY MANUFACTURING ORGANIZATIONS.
5. OTHER PROGRAMS ACCEPTABLE TO THE ENFORCING AGENCY.

**702.2 SPECIAL INSPECTION (HCD).** WHEN REQUIRED BY THE ENFORCING AGENCY, THE OWNER OR THE RESPONSIBLE ENTITY ACTING AS THE OWNER'S AGENT SHALL EMPLOY ONE OR MORE SPECIAL INSPECTORS TO PROVIDE INSPECTION OR OTHER DUTIES NECESSARY TO SUBSTANTIATE COMPLIANCE WITH THIS CODE. SPECIAL INSPECTORS SHALL DEMONSTRATE COMPETENCE TO THE SATISFACTION OF THE ENFORCING AGENCY FOR THE PARTICULAR TYPE OF INSPECTION OR TASK TO BE PERFORMED. IN ADDITION TO OTHER CERTIFICATIONS OR QUALIFICATIONS ACCEPTABLE TO THE ENFORCING AGENCY, THE FOLLOWING CERTIFICATIONS OR EDUCATION MAY BE CONSIDERED BY THE ENFORCING AGENCY WHEN EVALUATING THE QUALIFICATIONS OF A SPECIAL INSPECTOR:

1. CERTIFICATION BY A NATIONAL OR REGIONAL GREEN BUILDING PROGRAM OR STANDARD PUBLISHER.
2. CERTIFICATION BY A STATEWIDE ENERGY CONSULTING OR VERIFICATION ORGANIZATION, SUCH AS HERS RATERS, BUILDING PERFORMANCE CONTRACTORS, AND HOME ENERGY AUDITORS.
3. SUCCESSFUL COMPLETION OF A THIRD PARTY APPRENTICE TRAINING PROGRAM IN THE APPROPRIATE TRADE.
4. OTHER PROGRAMS ACCEPTABLE TO THE ENFORCING AGENCY.

**NOTES:**

1. SPECIAL INSPECTORS SHALL BE INDEPENDENT ENTITIES WITH NO FINANCIAL INTEREST IN THE MATERIALS OR THE PROJECT THEY ARE INSPECTING FOR COMPLIANCE WITH THIS CODE.
2. HERS RATERS ARE SPECIAL INSPECTORS CERTIFIED BY THE CALIFORNIA ENERGY COMMISSION (CEC) TO RATE HOMES IN CALIFORNIA ACCORDING TO THE HOME ENERGY RATING SYSTEM (HERS).

[BSC] WHEN REQUIRED BY THE ENFORCING AGENCY, THE OWNER OR THE RESPONSIBLE ENTITY ACTING AS THE OWNER'S AGENT SHALL EMPLOY ONE OR MORE SPECIAL INSPECTORS TO PROVIDE INSPECTION OR OTHER DUTIES NECESSARY TO SUBSTANTIATE COMPLIANCE WITH THIS CODE. SPECIAL INSPECTORS SHALL DEMONSTRATE COMPETENCE TO THE SATISFACTION OF THE ENFORCING AGENCY FOR THE PARTICULAR TYPE OF INSPECTION OR TASK TO BE PERFORMED. IN ADDITION, THE SPECIAL INSPECTOR SHALL HAVE A CERTIFICATION FROM A RECOGNIZED STATE, NATIONAL OR INTERNATIONAL ASSOCIATION, AS DETERMINED BY THE LOCAL AGENCY. THE AREA OF CERTIFICATION SHALL BE CLOSELY RELATED TO THE PRIMARY JOB FUNCTION, AS DETERMINED BY THE LOCAL AGENCY.

**NOTE:** SPECIAL INSPECTORS SHALL BE INDEPENDENT ENTITIES WITH NO FINANCIAL INTEREST IN THE MATERIALS OR THE PROJECT THEY ARE INSPECTING FOR COMPLIANCE WITH THIS CODE.

## 703 VERIFICATIONS

**703.1 DOCUMENTATION.** DOCUMENTATION USED TO SHOW COMPLIANCE WITH THIS CODE SHALL INCLUDE BUT IS NOT LIMITED TO, CONSTRUCTION DOCUMENTS, PLANS, SPECIFICATIONS, BUILDER OR INSTALLER CERTIFICATION, INSPECTION REPORTS, OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY WHICH DEMONSTRATE SUBSTANTIAL CONFORMANCE. WHEN SPECIFIC DOCUMENTATION OR SPECIAL INSPECTION IS NECESSARY TO VERIFY COMPLIANCE, THAT METHOD OF COMPLIANCE WILL BE SPECIFIED IN THE APPROPRIATE SECTION OR IDENTIFIED APPLICABLE CHECKLIST.

## 2022 CALGREEN RESIDENTIAL CHECKLIST (3/3)


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Note: Artist's conception; colors, materials, application, and landscape treatment may vary.

## PLAN 1 | Conceptual Perspective

**RANCHO RIDGE, LLC.**

# 647 N. RANCHO SANTIAGO BLVD.

ORANGE, CA

A-1

0 4 8 16

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Right



Rear



Note: Artist's Conception; Colors, Materials and Application May Vary.

Left




Color Scheme 3

Front

**BUILDING MATERIAL: MEDITERRANEAN STYLE**

| | |
|---|---|
| Roof: | 'S' Tile Roof |
| Exterior: | Stucco Finish |
| Accents: | Sculpted Foam Base at Porch |
| Window & Door Trim: | Stucco Over Foam |
| Window Accents: | Stucco Over Foam Trim Surround |
| Entry Door: | Decorative Front Entry Door |
| Entry Accents: | Sculpted Trim Surround |
| Garage Door: | Sectional Garage Doors |

## PLAN 1 | Conceptual Elevations

**RANCHO RIDGE, LLC.**

# 647 N. RANCHO SANTIAGO BLVD.

ORANGE, CA

A-2

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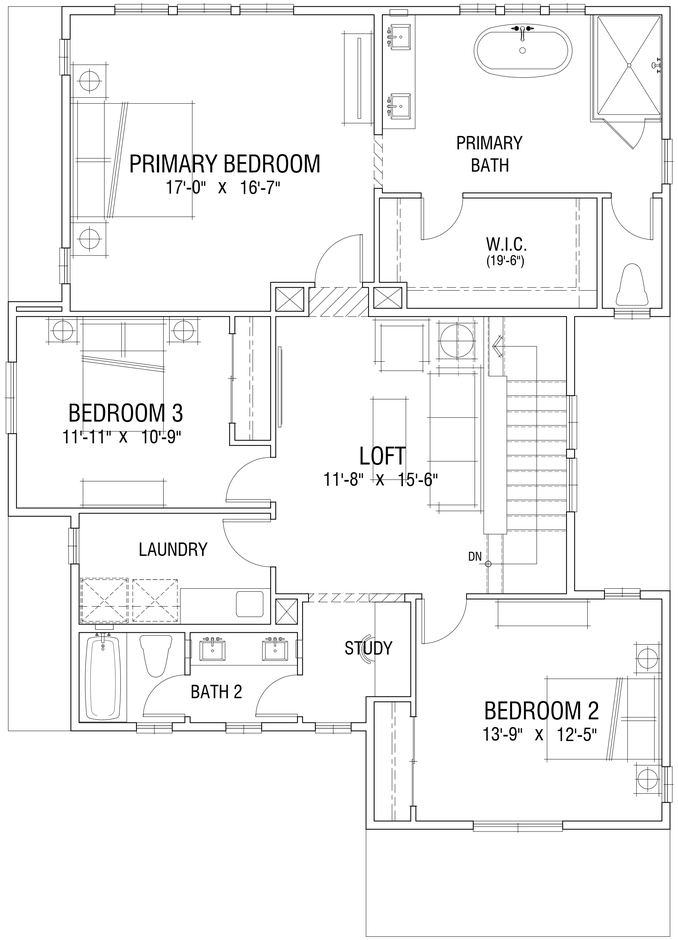
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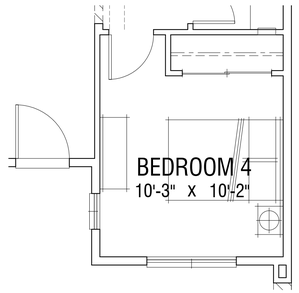
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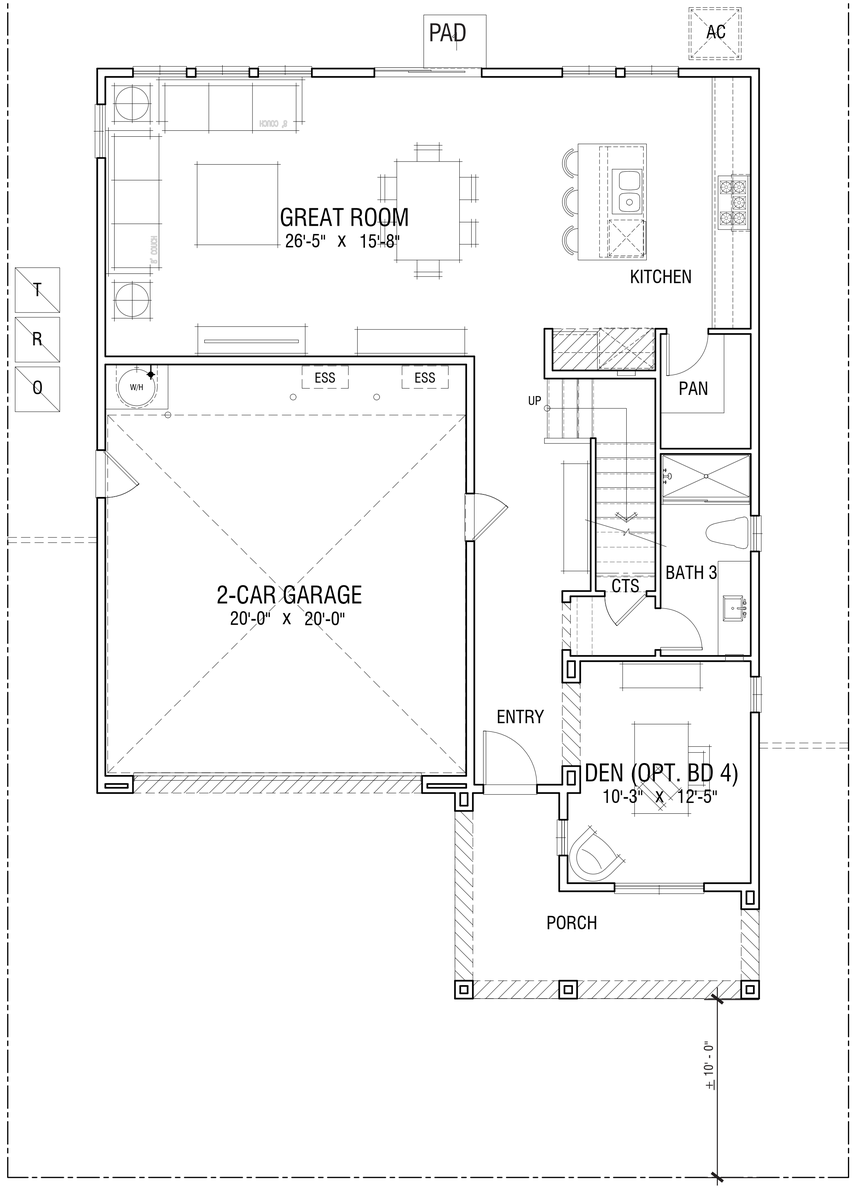
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**Opt. Bedroom 4 at Den**




**Plan Stats**
±2,419 SF
3 Bedroom | 3 Bath
Loft | Den (Opt. Bd 4)
Opt. California Room
2-Car Garage

NOTE:
1. SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION
2. FURTHER FLOOR PLAN COORDINATION NEEDED TO REFLECT CONCEPTUAL ELEVATION DESIGN

OCCUPANCY: R3
CONSTRUCTION TYPE: VB
SPRINKLER SYSTEM: 13D

**Second Level**

**First Level**

## PLAN 1 | Conceptual Floor Plans

**RANCHO RIDGE, LLC.**

# 647 N. RANCHO SANTIAGO BLVD.

ORANGE, CA

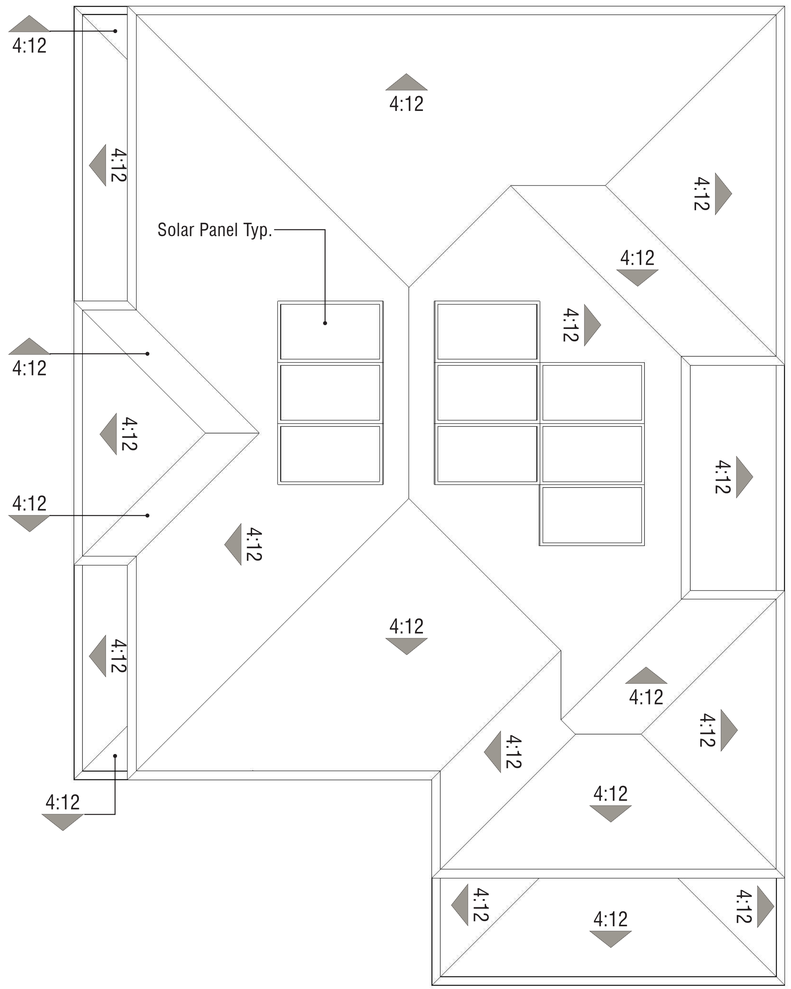
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Roof Pitch: 4:12
Rake: 1’-0”
Eave: 1’-0”

## PLAN 1 | Conceptual Roof Plan

**RANCHO RIDGE, LLC.**

# 647 N. RANCHO SANTIAGO BLVD.

ORANGE, CA

A-4

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Right



Rear



Note: Artist's Conception; Colors, Materials and Application May Vary.

Left




Color Scheme 2

Front

**BUILDING MATERIAL: MEDITERRANEAN STYLE**

| | |
|---|---|
| Roof: | 'S' Tile Roof |
| Exterior: | Stucco Finish |
| Accents: | Sculpted Foam Base at Porch |
| Window & Door Trim: | Stucco Over Foam |
| Window Accents: | Stucco Over Foam Trim Surround |
| Entry Door: | Decorative Front Entry Door |
| Entry Accents: | Sculpted Trim Surround |
| Garage Door: | Sectional Garage Doors |

# PLAN 1R | Conceptual Elevations

## 647 N. RANCHO SANTIAGO BLVD.

ORANGE, CA

**RANCHO RIDGE, LLC.**

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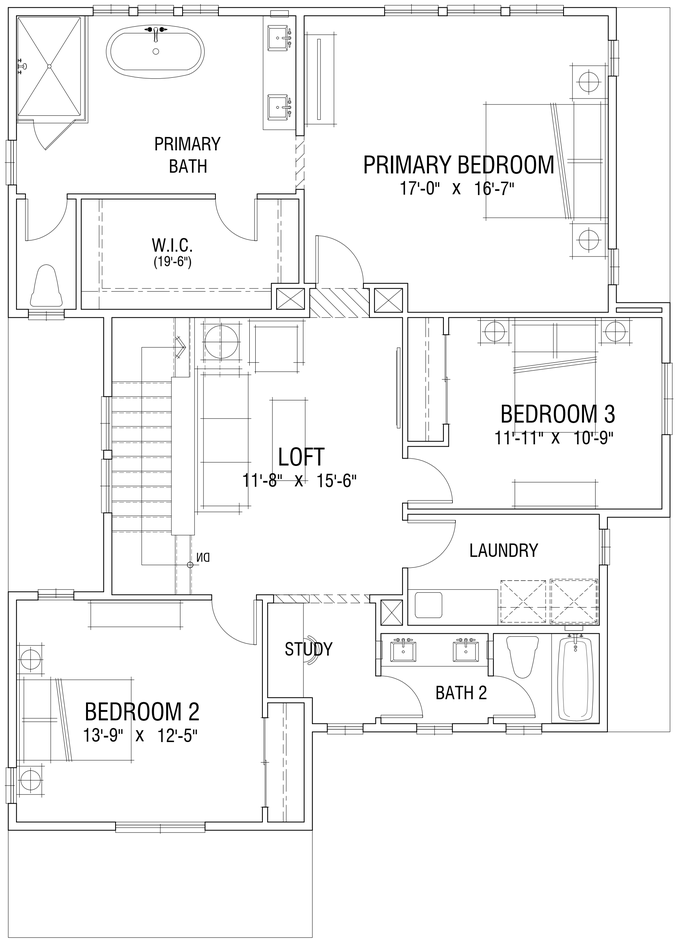
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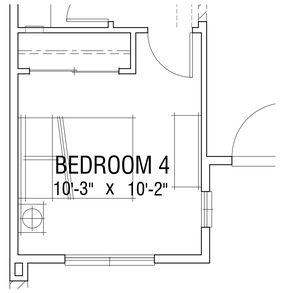
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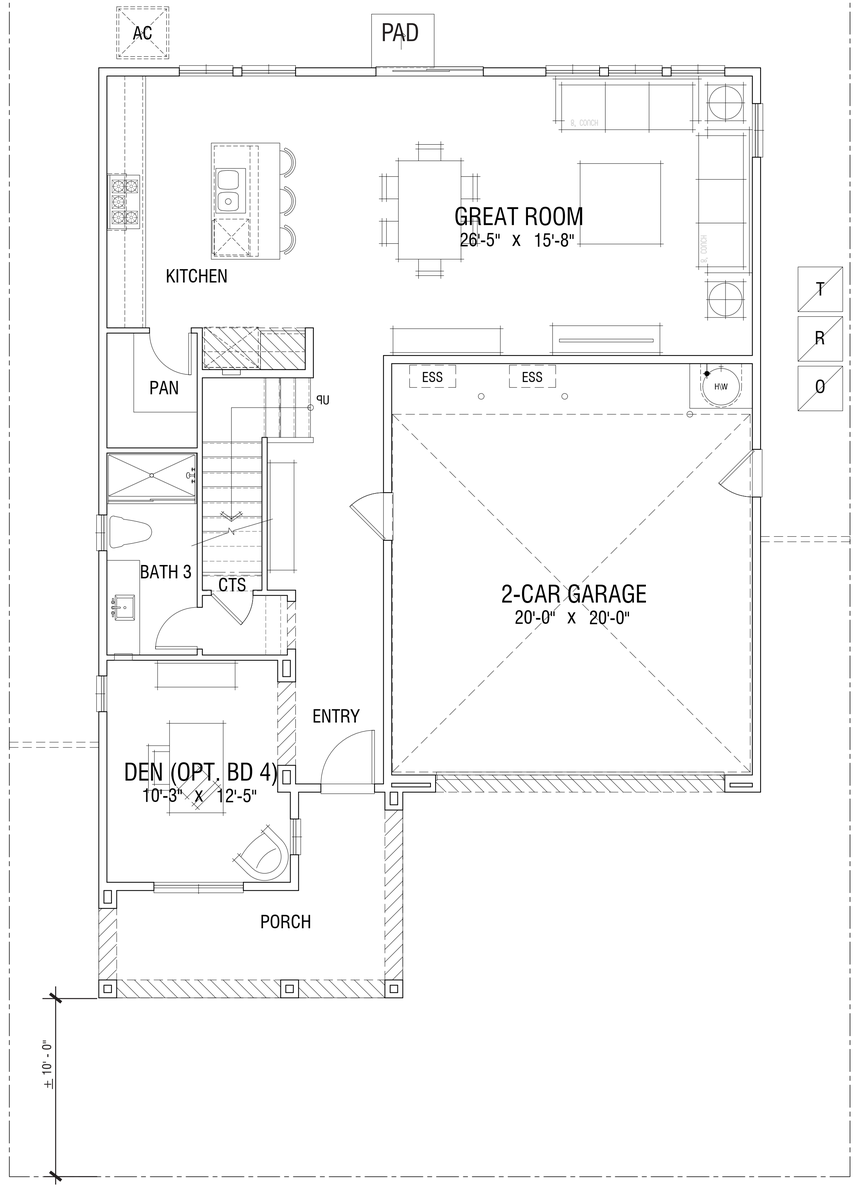



**Second Level**




**Opt. Bedroom 4 at Den**

**Plan Stats**
±2,419 SF
3 Bedroom | 3 Bath
Loft | Den (Opt. Bd 4)
Opt. California Room
2-Car Garage




**First Level**

NOTE:
1. SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION
2. FURTHER FLOOR PLAN COORDINATION NEEDED TO REFLECT CONCEPTUAL ELEVATION DESIGN

OCCUPANCY: R3
CONSTRUCTION TYPE: VB
SPRINKLER SYSTEM: 13D

## PLAN 1R | Conceptual Floor Plans

**RANCHO RIDGE, LLC.**

# 647 N. RANCHO SANTIAGO BLVD.

ORANGE, CA

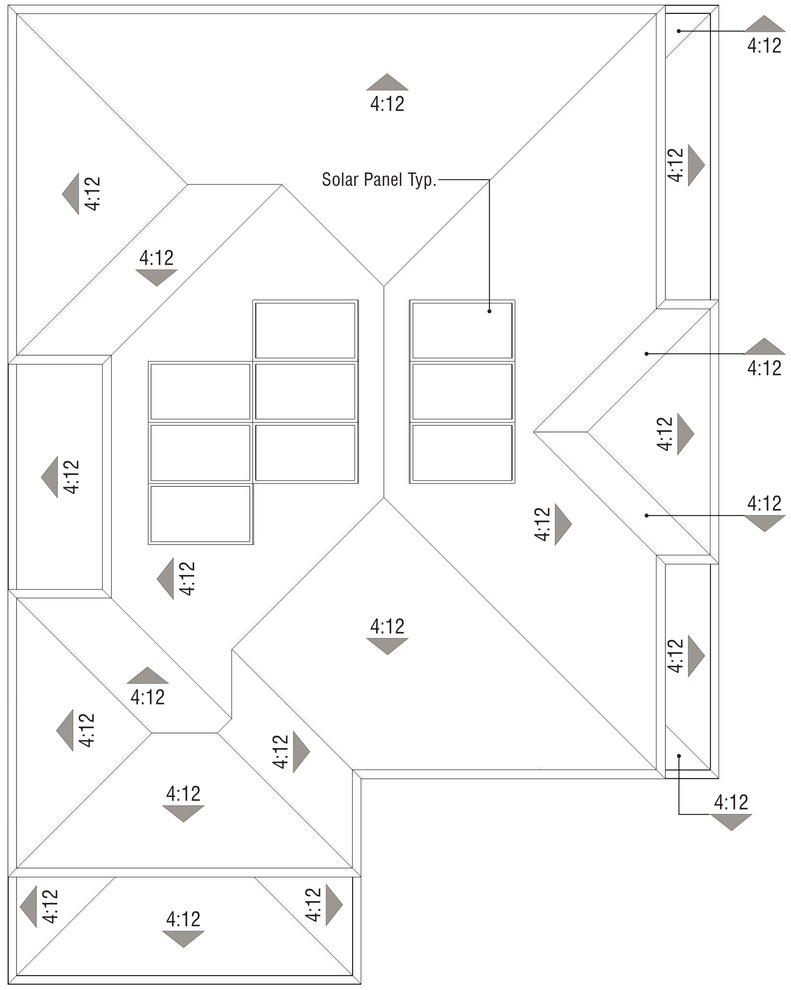
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Roof Pitch: 4:12
Rake: 1’-0”
Eave: 1’-0”

## PLAN 1 | Conceptual Roof Plan

**RANCHO RIDGE, LLC.**

# 647 N. RANCHO SANTIAGO BLVD.

ORANGE, CA

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Note: Artist's conception; colors, materials, application, and landscape treatment may vary.

## PLAN 2 | Conceptual Perspective

**RANCHO RIDGE, LLC.**

# 647 N. RANCHO SANTIAGO BLVD.

ORANGE, CA

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Right



Rear



Note: Artist's Conception; Colors, Materials and Application May Vary.

Left




Color Scheme 1

Front

**BUILDING MATERIAL: MEDITERRANEAN STYLE**

| | |
|---|---|
| Roof: | 'S' Tile Roof |
| Exterior: | Stucco Finish |
| Accents: | Sculpted Foam Trims |
| Window & Door Trim: | Stucco Over Foam |
| Window Accents: | Stucco Over Foam Trim Surround |
| Entry Door: | Decorative Front Entry Door |
| Entry Accents: | Sculpted Trim Surround |
| Garage Door: | Sectional Garage Doors |

## PLAN 2 | Conceptual Elevations

**RANCHO RIDGE, LLC.**

# 647 N. RANCHO SANTIAGO BLVD.

ORANGE, CA

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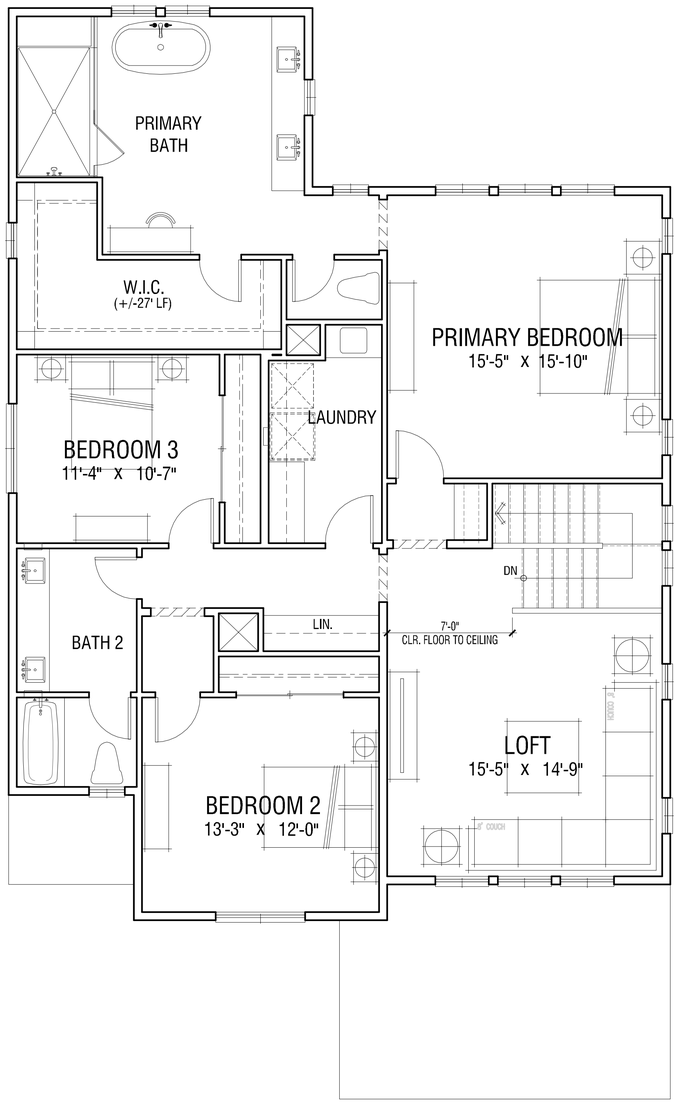
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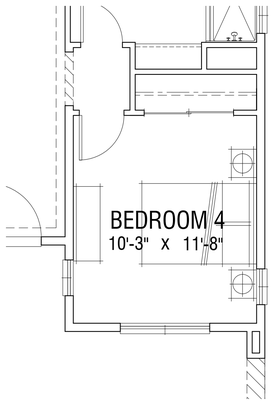
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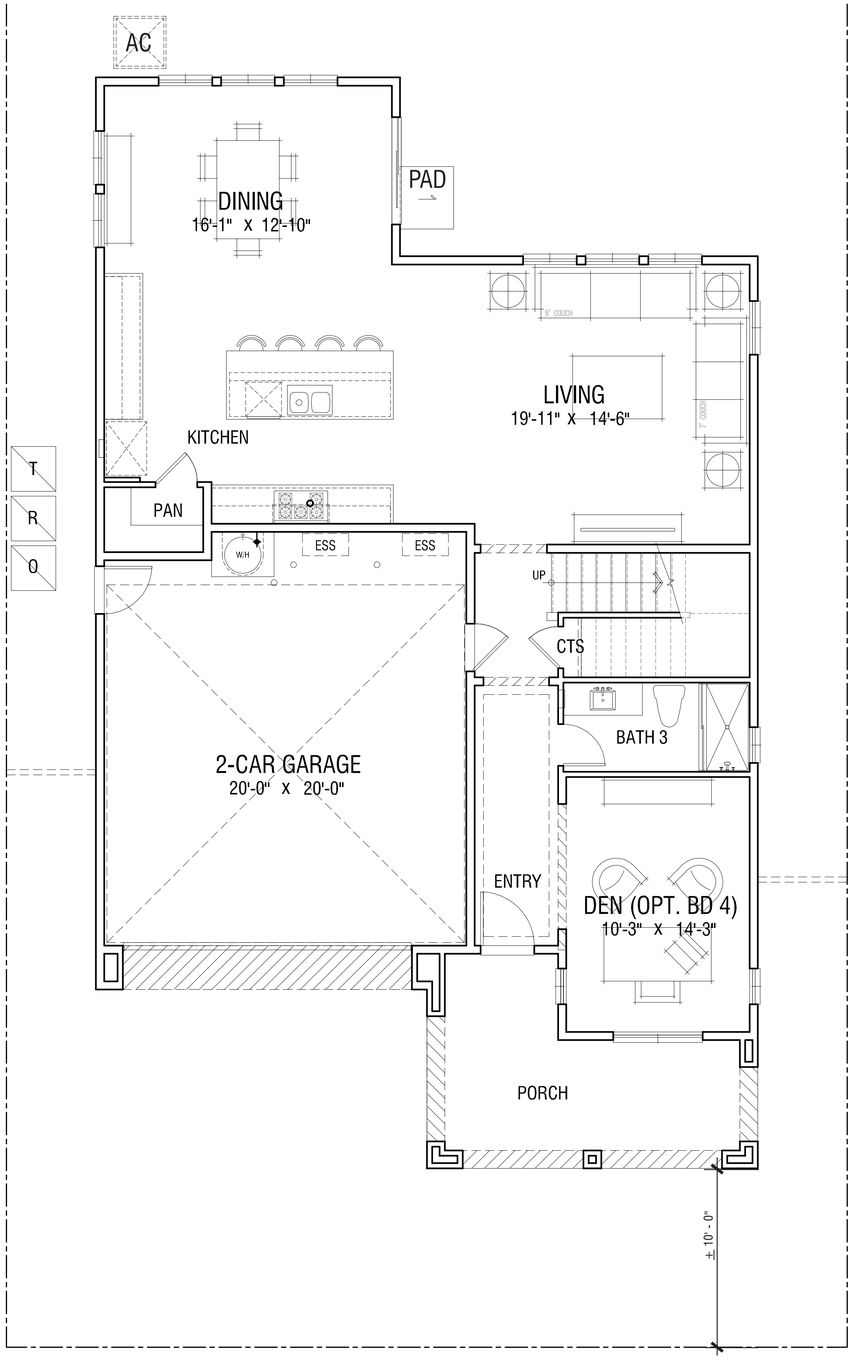

**Second Level**




**Opt. Bedroom 4 at Den**

**Plan Stats**

±2,725 SF
3 Bedroom | 2.5-3 Bath
Loft | Den (Opt. Bd 4)
Opt. California Room
2-Car Garage




**First Level**

NOTE:
1. SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION
2. FURTHER FLOOR PLAN COORDINATION NEEDED TO REFLECT CONCEPTUAL ELEVATION DESIGN

OCCUPANCY: R3
CONSTRUCTION TYPE: VB
SPRINKLER SYSTEM: 13D

## PLAN 2 | Conceptual Floor Plans

**RANCHO RIDGE, LLC.**

# 647 N. RANCHO SANTIAGO BLVD.

ORANGE, CA

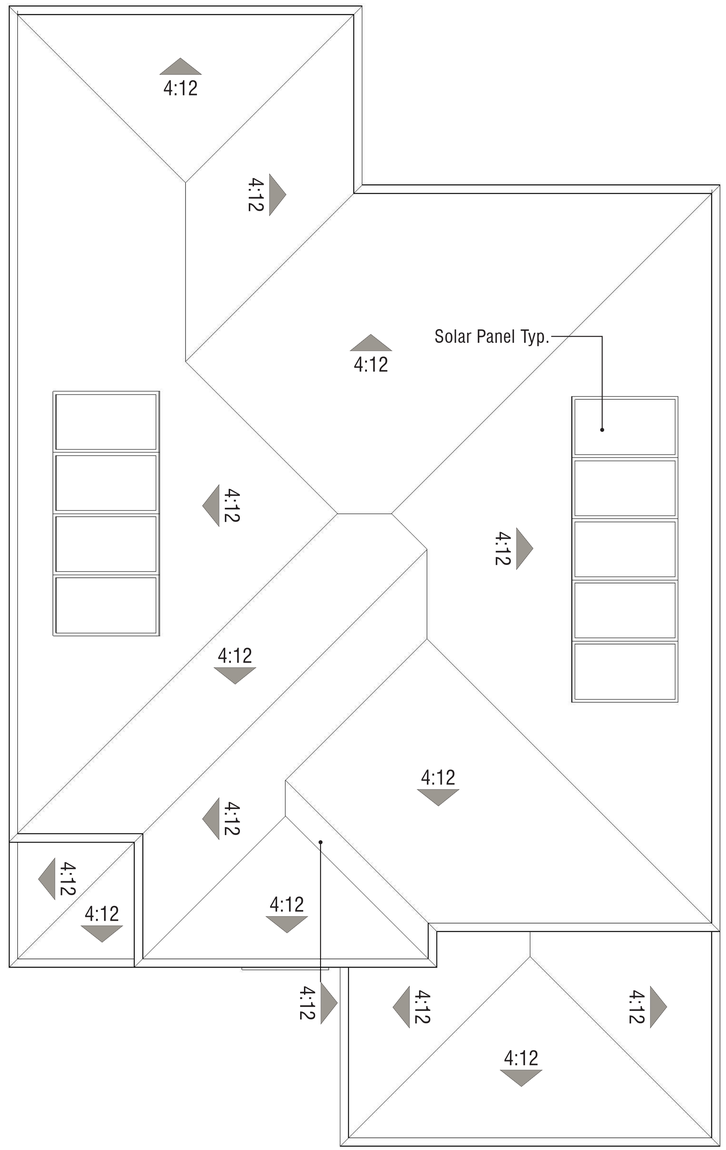
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Roof Pitch: 4:12
Rake: 1’-0”
Eave: 1’-0”

## PLAN 2 | Conceptual Roof Plan

**RANCHO RIDGE, LLC.**

# 647 N. RANCHO SANTIAGO BLVD.

ORANGE, CA

A-11

0 4 8 16

DESIGN REVIEW SUBMITTAL

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Right



Rear



Note: Artist's Conception; Colors, Materials and Application May Vary.

Left




*Color Scheme 2*

Front

**BUILDING MATERIAL: MEDITERRANEAN STYLE**

| | |
|---|---|
| Roof: | 'S' Tile Roof |
| Exterior: | Stucco Finish |
| Accents: | Sculpted Foam Trims |
| Window & Door Trim: | Stucco Over Foam |
| Window Accents: | Stucco Over Foam Trim Surround |
| Entry Door: | Decorative Front Entry Door |
| Entry Accents: | Sculpted Trim Surround |
| Garage Door: | Sectional Garage Doors |

# PLAN 2R | Conceptual Elevations

**RANCHO RIDGE, LLC.**

## 647 N. RANCHO SANTIAGO BLVD.

ORANGE, CA

A-12

0 4 8 16

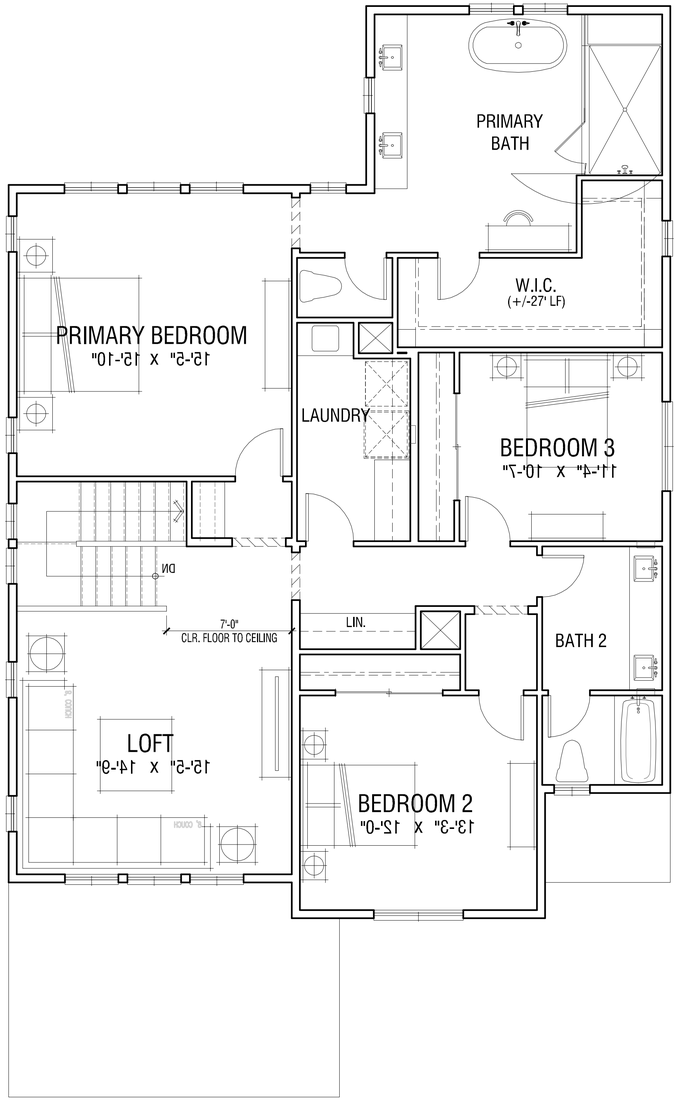
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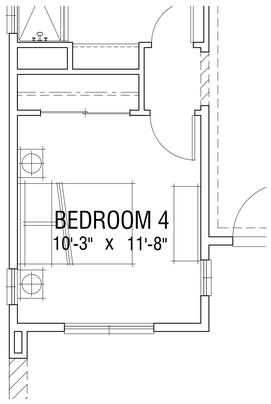
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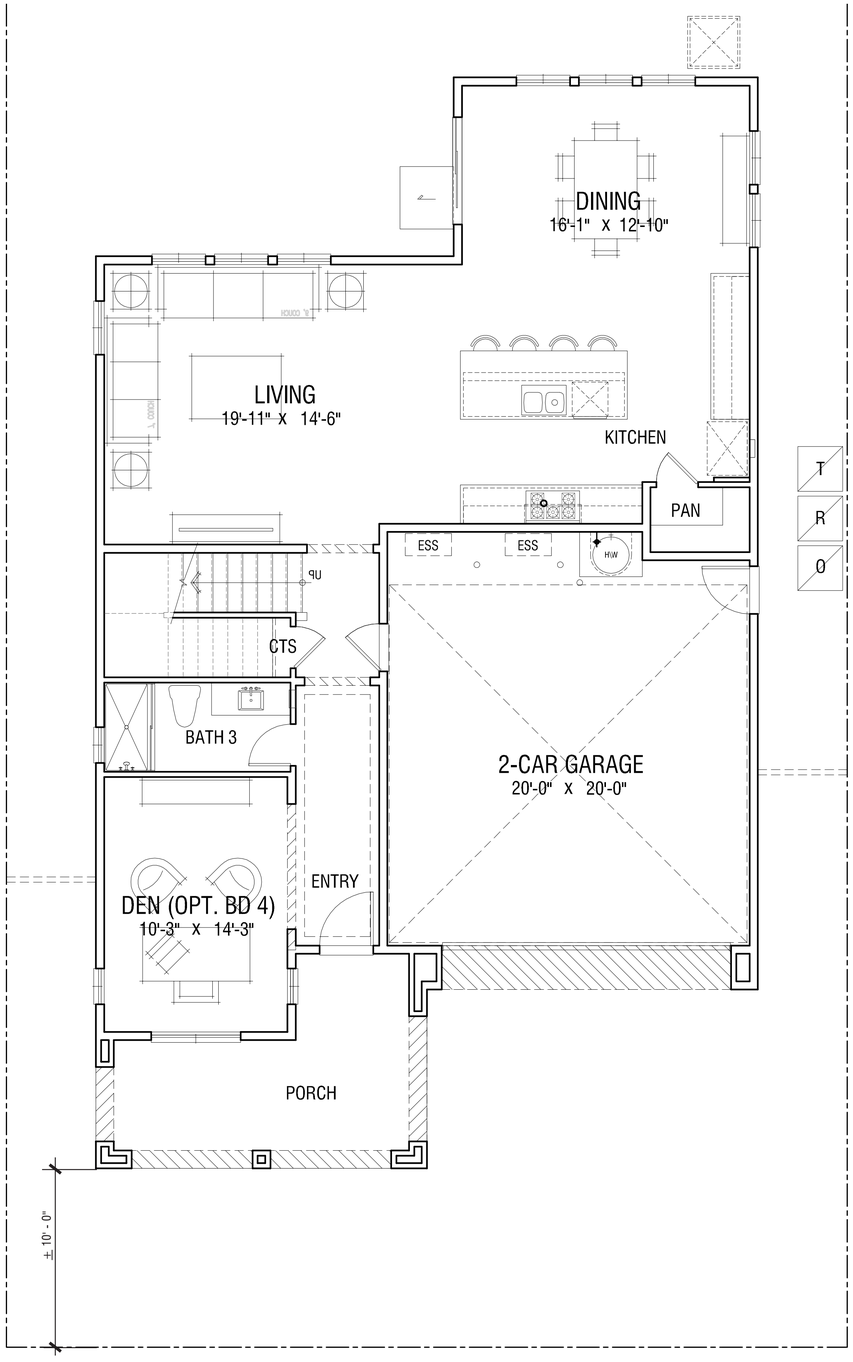
ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO




**Second Level**




**Opt. Bedroom 4 at Den**




**First Level**

NOTE:
1. SQUARE FOOTAGE MAY VARY DUE TO METHOD OF CALCULATION
2. FURTHER FLOOR PLAN COORDINATION NEEDED TO REFLECT CONCEPTUAL ELEVATION DESIGN

OCCUPANCY: R3
CONSTRUCTION TYPE: VB
SPRINKLER SYSTEM: 13D

**Plan Stats**
±2,725 SF
3 Bedroom | 2.5-3 Bath
Loft | Den (Opt. Bd 4)
Opt. California Room
2-Car Garage

## PLAN 2R | Conceptual Floor Plans

**RANCHO RIDGE, LLC.**

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ORANGE, CA

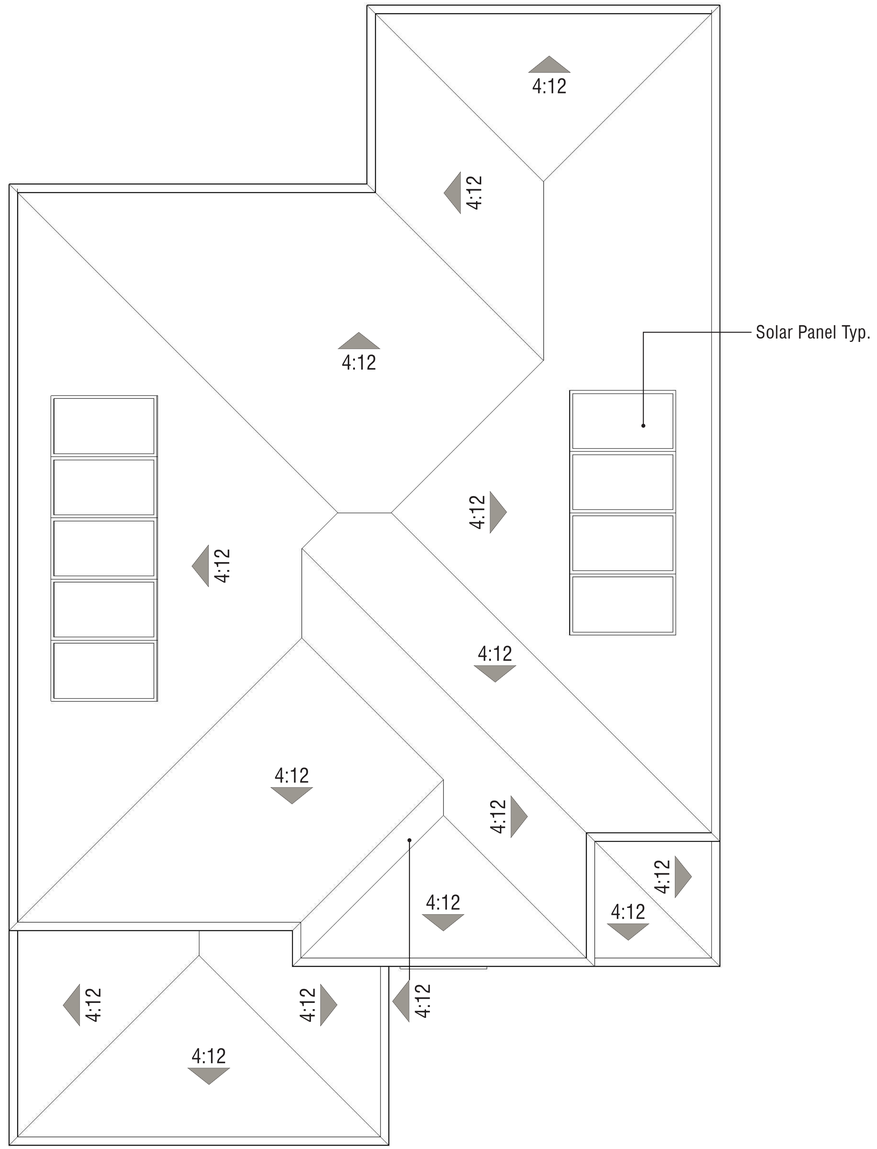
A-13

0 4 8 16

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Roof Pitch: 4:12
Rake: 1’-0”
Eave: 1’-0”

## PLAN 2R | Conceptual Roof Plan

**RANCHO RIDGE, LLC.**

# 647 N. RANCHO SANTIAGO BLVD.

ORANGE, CA

A-14

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## Exterior Color & Materials

SCHEME 1 — MEDITERRANEAN ELEVATIONS

| Material | Color | Manufacturer |
|---|---|---|
| **Roofing:** Concrete 'S' Tile | 3646 Sunset Blend<br>Ref: .16 Emi: .94 A.SRI: 17<br>CRRC: 0918-0042 | Eagle |
| **Metal Bird Stop @ 'S' Tile** *(factory finish)* | Black | Eagle |
| **Vinyl Windows** *(factory finish)* | White | Milgard |
| **Half Round Gutters & Round Downspouts** *(factory finish)* | Low Gloss White | Custom-Bilt Metals |
| **Stucco Color #1** *(20/30 sand finish)* | SW 9120<br>Tumblin' Tumblweed | Sherwin Williams |
| **Stucco Color #2** *(20/30 sand finish)* | SW 6155<br>Rice Grain | Sherwin Williams |
| **Trim Color #1** *(applied to):*<br>Columns<br>Fascia<br>Secondary Doors<br>Stucco Trim | SW 7012<br>Creamy | Sherwin Williams |
| **Trim Color #2** *(applied to):*<br>Garage Door | SW 6104<br>Kaffee | Sherwin Williams |
| **Accent Color** *(applied to):*<br>Front Door | SW 7749<br>Laurel Woods | Sherwin Williams |
| **Decorative Metal** | SW 7020 Black Fox | Sherwin Williams |
| **Garage Door Weatherstrip** *(factory finish)* | Match Garage Door Color | TBD |

NOTE: Notify WHA if any variation occurs between these schemes and the construction documents prior to purchase. Contact Jennifer Sandate (949) 250-0607.

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Orange, California
RANCHO RIDGE, LLC
August 29, 2024 | 2021327
PAGE 2 OF 3


## Exterior Color & Materials

SCHEME 2 — MEDITERRANEAN ELEVATIONS

| Material | Color | Manufacturer |
|---|---|---|
| **Roofing:** Concrete 'S' Tile | 3581 Arcadia Canyon Brown<br>Ref: .13 Emi: .94 A.SRI: 16<br>CRRC: 0918-0043 | Eagle |
| **Metal Bird Stop @ 'S' Tile** *(factory finish)* | Black | Eagle |
| **Vinyl Windows** *(factory finish)* | White | Milgard |
| **Half Round Gutters & Round Downspouts** *(factory finish)* | Low Gloss White | Custom-Bilt Metals |
| **Stucco Color #1** *(20/30 sand finish)* | SW 9173<br>Shiitake | Sherwin Williams |
| **Stucco Color #2** *(20/30 sand finish)* | SW 7567<br>Natural Tan | Sherwin Williams |
| **Trim Color #1** *(applied to):*<br>Columns<br>Fascia<br>Secondary Doors<br>Stucco Trim | SW 7009<br>Pearly White | Sherwin Williams |
| **Trim Color #2** *(applied to):*<br>Garage Door | SW 7041<br>Van Dyke Brown | Sherwin Williams |
| **Accent Color** *(applied to):*<br>Front Door | SW 0032<br>Needlepoint Navy | Sherwin Williams |
| **Decorative Metal** | SW 7020 Black Fox | Sherwin Williams |
| **Garage Door Weatherstrip** *(factory finish)* | Match Garage Door Color | TBD |

NOTE: Notify WHA if any variation occurs between these schemes and the construction documents prior to purchase. Contact Jennifer Sandate (949) 250-0607.

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Orange, California
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August 29, 2024 | 2021327
PAGE 3 OF 3

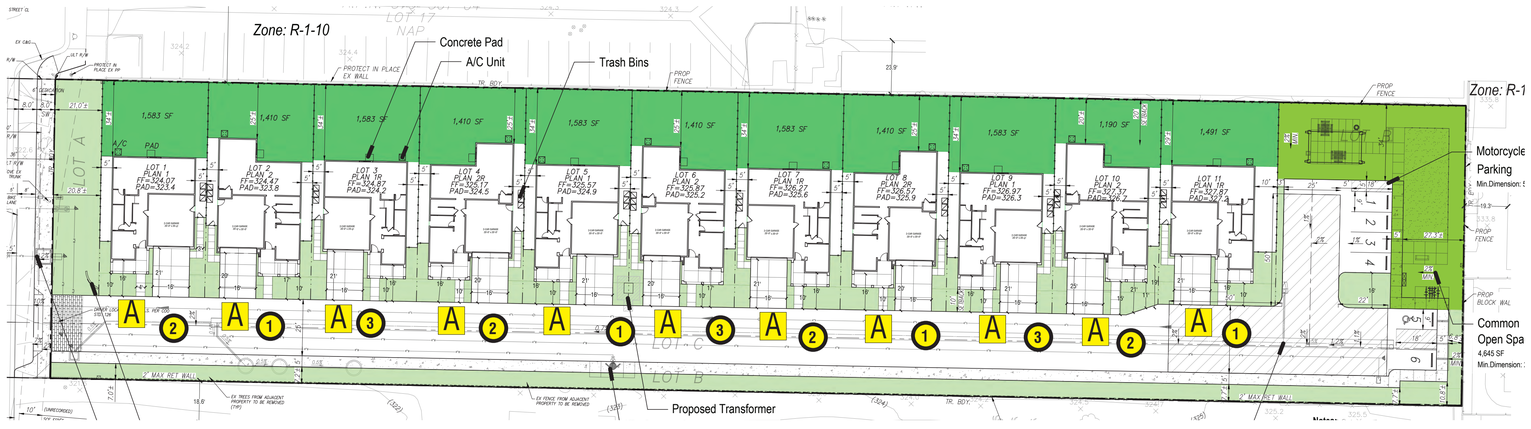

## Exterior Color & Materials

SCHEME 3 — MEDITERRANEAN ELEVATIONS

| Material | Color | Manufacturer |
|---|---|---|
| **Roofing:** Concrete 'S' Tile | SCC 8825 Corona Del Mar Blend<br>Ref: .14 Emi: .90 A.SRI: 16<br>CRRC: 0918-0074 | Eagle |
| **Metal Bird Stop @ 'S' Tile** *(factory finish)* | Black | Eagle |
| **Vinyl Windows** *(factory finish)* | White | Milgard |
| **Half Round Gutters & Round Downspouts** *(factory finish)* | Low Gloss White | Custom-Bilt Metals |
| **Stucco Color #1** *(20/30 sand finish)* | SW 9110<br>Malabar | Sherwin Williams |
| **Stucco Color #2** *(20/30 sand finish)* | SW 9109<br>Natural Linen | Sherwin Williams |
| **Trim Color #1** *(applied to):*<br>Columns<br>Fascia<br>Secondary Doors<br>Stucco Trim | SW 6070<br>Heron Plume | Sherwin Williams |
| **Trim Color #2** *(applied to):*<br>Garage Door | SW 7520<br>Dark Brown | Sherwin Williams |
| **Accent Color** *(applied to):*<br>Front Door | SW 6013<br>Bitter Chocolate | Sherwin Williams |
| **Decorative Metal** | SW 7020 Black Fox | Sherwin Williams |
| **Garage Door Weatherstrip** *(factory finish)* | Match Garage Door Color | TBD |

NOTE: Notify WHA if any variation occurs between these schemes and the construction documents prior to purchase. Contact Jennifer Sandate (949) 250-0607.

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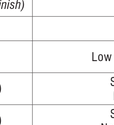

| Color Assignments | | | | |
|---|---|---|---|---|
| | A - Mediterranean | | | Total |
| Scheme | 1 | 2 | 3 | |
| Plan 1 | 5,11 | 1,7 | 3,9 | 6 |
| Plan 2 | 2,8 | 4,10 | 6 | 5 |
| Total | 4 | 4 | 3 | 11 |

| 647 N. Rancho Santiago Blvd. | | 2021327 |
|---|---|---|
| DATE | DESCRIPTION | INITIALS |
| 4/4/23 | C+E Assignments | J.S |
| 8/29/24 | R1 | J.S. |

**Carriage House DC** | 3498WGOB — Job Name: Job Type: Quantity: Comments:



**PRODUCT DESCRIPTION**
Carriage House DC is a traditional, early American style collection from Maxim Lighting International in Oriental Bronze finish with Water Glass glass.




**MEASUREMENTS**
DIMENSION : 14" W x 31" H x 18.5" Ext
BACK PLATE : 6.5" W x 15.5" H x 13" HCO
HANGING WEIGHT : 17.38 lb

**LAMPING**
INPUT VOLTAGE : 120V
LUMENS : 0 Rated
BULB : 3 x 40W Incandescent E12 Candelabra , 120W Total
BULB INCLUDED : (Not Included)
DIMMABLE : Yes

**FINISHES OPTION**
Oriental Bronze

**GLASS**
Water Glass WG

**MATERIAL**
Die Cast Aluminum, Glass

**RATINGS**
cETLus
Wet Location

**ADDITIONAL**
RATED LIFE 1,500 Hours
OPERATING TEMPERATURE: -20°C (-4°F), 40°C (104°F)

Always consult a qualified electrician before installing any lighting product.

MAXIM LIGHTING
WESTERN DISTRIBUTION CENTER (HEADQUARTER)
2331 NORTH WINELAND AVE | CITY OF INDUSTRY, CA 91746
EASTERN DISTRIBUTION CENTER
4200 SHIRLEY DR. | ATLANTA, GA 30336
P. 626.956.4200 | F. 626.956.4225 | maximlighting.com

Decorative Light Fixture

# EXTERIOR COLOR AND MATERIALS

## RANCHO RIDGE, LLC.

## 647 N. RANCHO SANTIAGO BLVD.

ORANGE, CA

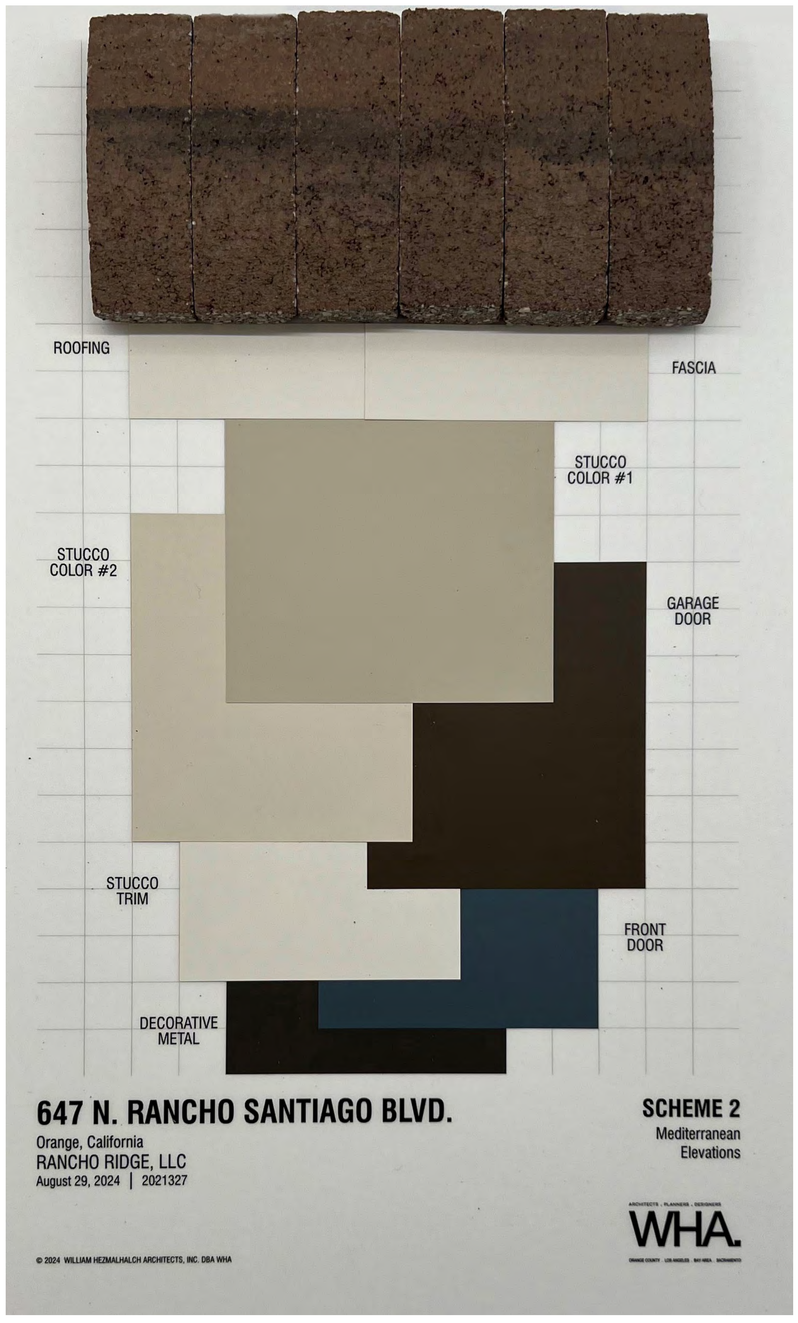
CM-1

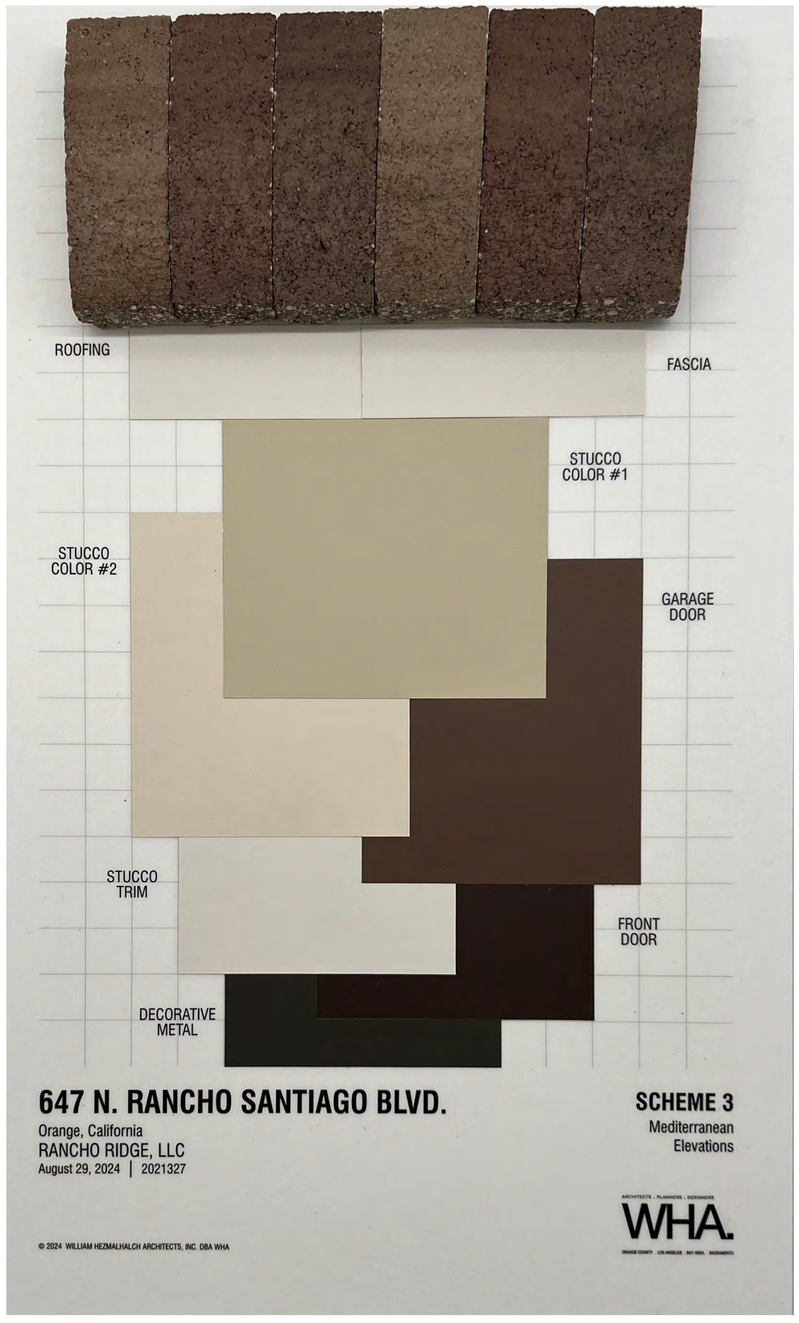
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## EXTERIOR COLOR AND MATERIALS

**RANCHO RIDGE, LLC.**

647 N. RANCHO SANTIAGO BLVD.

ORANGE, CA

CM-2

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RANCHO SANTIAGO BLVD

Limit of Work

Sight-line clearances per Civil

**Fuel Mod. Note: Refer to Conceptual Fuel Mod. plan by Dudek for additional information.**














*Conceptual images (provided herein are conceptual and subject to change)

## LEGEND

1. Community open space area with overhead structure, freestanding BBQ and picnic tables, lawn area for informal play, specimen tree for shade, and bench seating for small social events and group gatherings.
2. Two community cluster mailboxes per USPS review and approval. Color bronze.
3. Proposed wall, pilaster, gate or fence, per L2- Wall & Fence Plan.
4. Enhanced paving at main project entry.
5. Specimen Tree, California Sycamore per L3- Planting Plan.
6. Proposed tree, per L3- Planting Plan.
7. Blue Podocarpus green screen,
8. 5' wide community natural colored concrete sidewalk, with light top-cast finish and saw-cut joints.
9. 3' wide unit entry natural colored concrete walk, with light top-cast finish and saw-cut joints.
10. Natural colored concrete driveway, with light broom finish and tooled joints.
11. Community Entry monument, see L-3 sheet for additional information.
12. Common area landscape, builder installed and HOA maintained.
13. Guest parking stall.
14. Property line.
15. Proposed public street R.O.W.
16. Proposed 8ft wide public street sidewalk, per Civil plans.
17. Transformer to be screened with landscape, quantity and final locations to be determined.
18. Easement. Refer to Civil Engineer.
19. Existing wall. Refer to Civil Engineer.
20. Bike Rack. 1 3-loop bike rack to accommodate 5 bike parking spaces.
21. Community dog waste station.
22. ADA parking stall and striping.
23. Zone 0: (0-5') Ember resistant zone.
24. Zone A: (5-20') Irrigated structure setback.
25. Zone B: (50') Irrigated zone.
26. Off Site Equivalent Landscape FMP (Up to 100 feet.)

0 10' 20' 40'

Scale: 1" = 20'

# Schematic Landscape Plan

Rancho Ridge LLC.

Schematic - 6th City Submittal | Project No.: RR01-2022-D
Date: September 24, 2025

L-1

# 647 N. RANCHO SANTIAGO BLVD.

studio PAD Landscape Architecture
25192 La Paseo Drive (Ste 165)
Laguna Hills CA 92653 www.studio-PAD.com



2




1

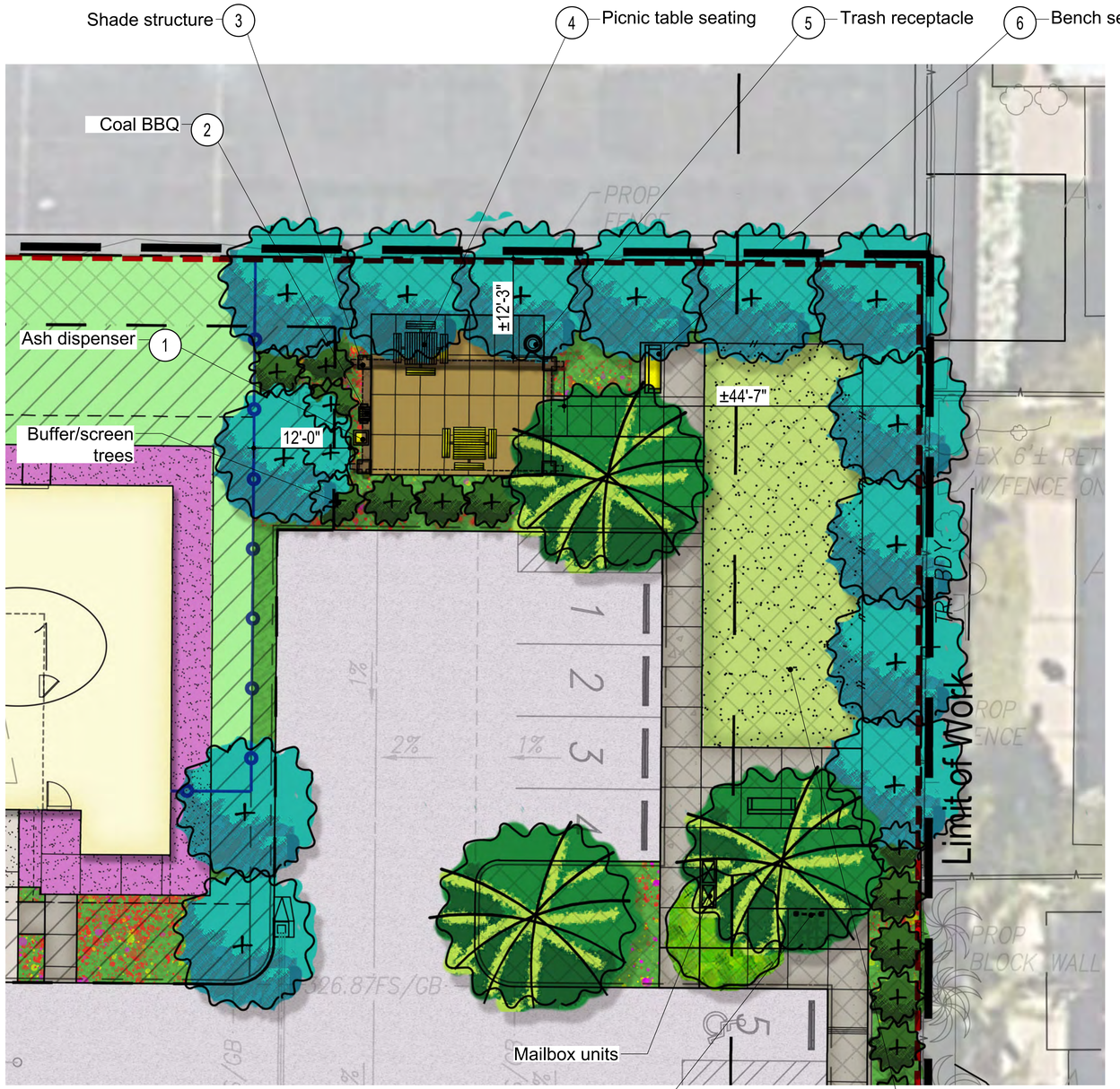


6



3

*Conceptual images (provided herein are conceptual and subject to change)







4




5



7

0 4' 8' 16'

Scale: 1/8" = 1'-0"

Rancho Ridge LLC.

# Schematic Enlargement Plan - Community Open Space Area

Schematic - 6th City Submittal | Project No.: RR01-2022-D
Date: September 24, 2025

L-2

# 647 N. RANCHO SANTIAGO BLVD.

studio PAD Landscape Architecture
23195 La Cadena Drive, Suite 100, Laguna Hills, CA 92653 www.studio-PAD.com



Split Face CMU Wall with cap.

Color: Tan - Split Face



CMU Pilaster Split Face with Precision cap.



Vinyl Fence - Tan



Vinyl Gate - Tan




CMU Stucco Project Sign Wall & Lettering, per City local standards.




## WALL LEGEND

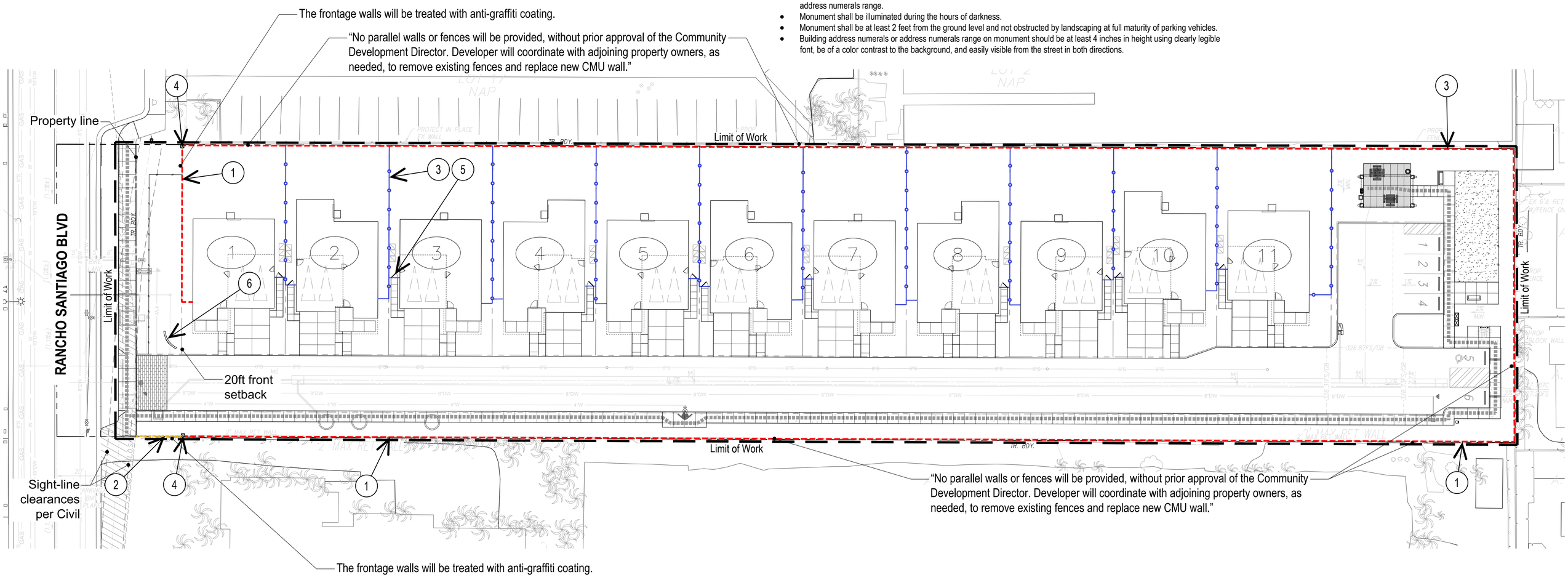
1. 5'-9" High split face CMU wall, with precision cap.
2. 3'-6" High split face CMU wall (retaining per Civil), with precision cap.
3. 5'-6" High vinyl fence.
4. 6'-0" High (16" sq.) split-face block Pilaster w/ split-face cap.
5. 5'-6" High Vinyl side yard gates.
6. 4'-6" High stucco over CMU project sign wall (with flat stucco cap)

ADA Path of Travel

*ALL NEW WALLS / FENCES WILL BE INSTALLED ON PROPERTY (INCLUDING FOOTINGS).

**Monument Addressing Standards:**

- Sites having multiple buildings for which addressing mounted on the building is not clearly visible from the street, an illuminated monument will be required at the vehicular entry to the site. Monument shall display building address numerals or address numerals range.
- Monument shall be illuminated during the hours of darkness.
- Monument shall be at least 2 feet from the ground level and not obstructed by landscaping at full maturity of parking vehicles.
- Building address numerals or address numerals range on monument should be at least 4 inches in height using clearly legible font, be of a color contrast to the background, and easily visible from the street in both directions.




0 10' 20' 40'

Scale: 1" = 20'

# Schematic Wall & Fence Plan

Rancho Ridge LLC.

Schematic - 6th City Submittal | Project No.: RR01-2022-D Date: September 24, 2025 **L-3**

# 647 N. RANCHO SANTIAGO BLVD.

studio PAD Landscape Architecture

**NOTES:**

1. Irrigation (including spray and/or drip) will be provided, in the Construction Document phase, and to be installed per local California water regulations (AB1881) .
2. Transformers, back-flow preventers & other above-ground utilities to be screened with landscape as permitted per local codes & regulations.
3. Landscape lighting (landscape up-lights, path lights/bollards, etc.) to be coordinated with Electrical Engineer in future phase.
4. The plant palette listed provides a list of plant material to select from when preparing final landscape construction documents for this project. However, substitutions may be required due to availability, soils tests, or other conditions.
5. All trees within 5' of hardscape to be installed with deep root barriers.
6. NO EXISTING TREES TO REMAIN, ALL TO BE REMOVED. Refer to Arborist Report for all tree information including tree removals.

## FUEL MANAGEMENT ZONES

**Zone 0: (0-5') Ember resistant zone.**

**Zone A: (5-20') Irrigated structure setback.**

**Zone B: (50') Irrigated zone.**

**Off Site Equivalent Landscape FMP (Up to 100 feet.)**

**Refer to Conceptual Fuel Mod. plan by Dudek for additional information.**

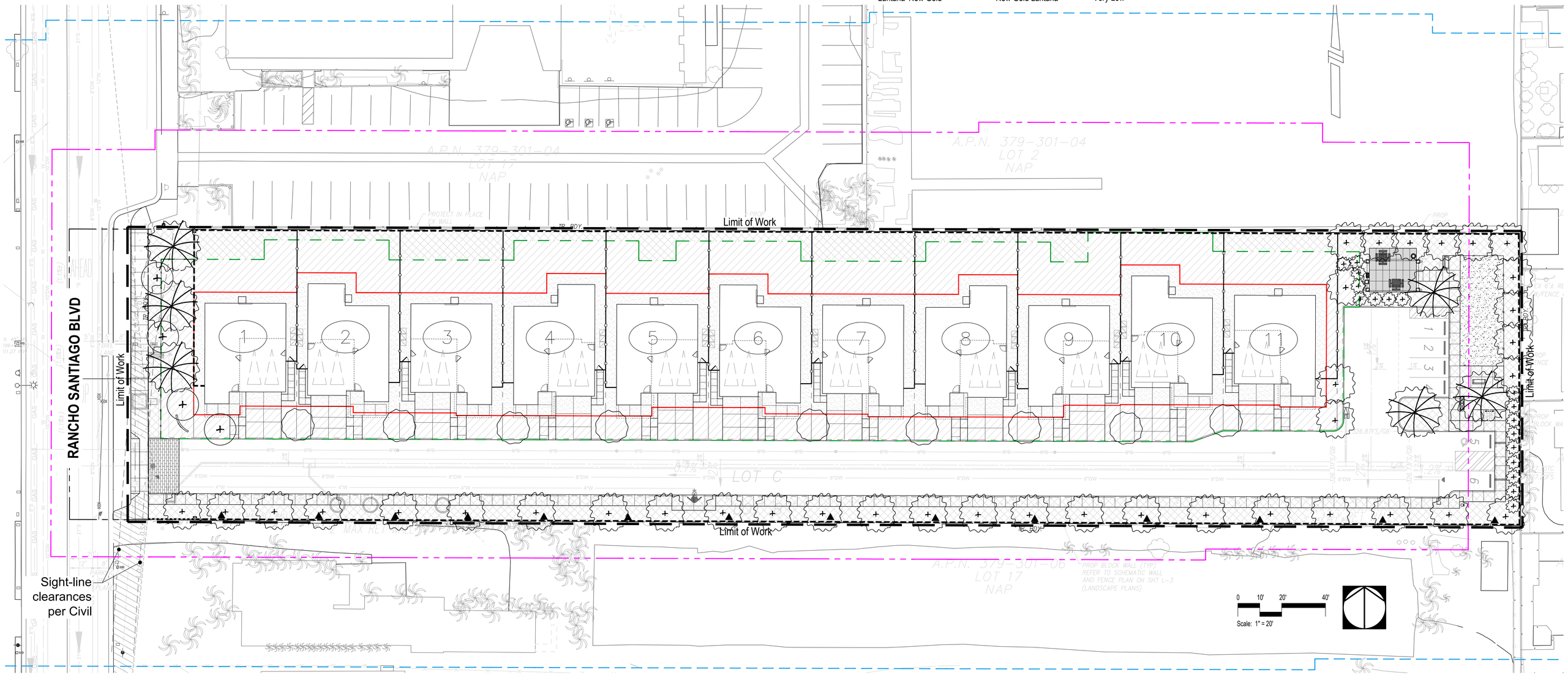
| VINES & ESPALIERS | | WUCOLS (R3) |
|---|---|---|
| ▲ Bougainvillea 'Monka' (Oo-La-La® Bougainvillea) | Bougainvillea | Low |
| Macfadyena unguis-cati | Cat's Claw Vine | Low |
| Pandorea jasminoides 'Lady Di' | White Bower Vine | Low |

| SHRUBS and GROUND COVER | | WUCOLS (R3) |
|---|---|---|
| Leucadendron sp. | Conebush | Low |
| Muhlenbergia rigens | Deer Grass | Low |
| Rhaphiolepis indica 'Pink Lady" | India Hawthorn | Low |
| Rosmarinus sp. | Rosemary | Very Low |
| Salvia greggii 'Furman's Red' | Autumn Sage | Low |
| Salvia clevelandii | Cleveland Sage | Very Low |
| Senecio mandraliscae | Blue Chalksticks | Low |
| Westringia sp. | Westringia | Low |
| Yucca 'Bright Star' | Bright Star Yucca | Very Low |
| Lavandula dentata | French Lavender | Low |

| SHRUBS and GROUND COVER | | WUCOLS (R3) |
|---|---|---|
| Aeonium sp. | Aeonium | Low |
| Agave sp. | Agave | Very Low |
| Aloe sp. | Aloe | Low |
| Bougainvillea sp. | Bougainvillea | Low |
| Bulbine frutescens | Bulbine | Low |
| Callistemon citrinus 'Little John' | Dwarf Bottlebrush | Low |
| Carex divulsa | Berkeley Sedges | Low |
| Ceanothus sp. | California Lilac | Low |
| Dasylerion longissium | Mexican Grass Tree | Very Low |
| Dianella revoluta 'Little Rev' | Little Rev™ Flax Lily | Low |
| Echeveria sp. | Echeveria | Low |
| Epilobium canum | California Fuchsia | Very Low |
| Heteromeles arbutifolia | Toyon | Very Low |
| Kniphofia uvaria 'Flamenco' | Flamenco Red Hot Pocker | Low |
| Lantana 'New Gold' | New Gold Lantana | Very Low |

## TREE PLANTING LEGEND

| Symbol | Type/Form | Suggestions | Trunk | Size | WUCOLS (R3) | Qty. |
|---|---|---|---|---|---|---|
| | TREES | Botanical Name (Common Name) | | | | |
| | Specimen | Sycamore racemosa (California Sycamore) | Natural | 48" Box | Mod. | 6 |
| | Deciduous Flowering | Lagerstroemia i x fauriei 'Natchez' (Natchez Crape Myrtle) | Single | 24" Box | Mod. | 4 |
| | Street | Arbutus u. 'Marina' (Marina Strawberry Tree) | Single | 24" Box | Low | 37 |
| | Medium | Chilopsis linearis (Desert Willow) | Single | 24" Box | Low | 10 |
| | Columnar | Podocarpus henkelii (Long Leafed Yellow-Wood) | Single | 15 g | Low | 17 |
| | | | | | Total = | 110 |




# Schematic Planting Plan

Rancho Ridge LLC.

Schematic - 6th City Submittal | Project No.: RR01-2022-D Date: September 24, 2025 **L-4**

# 647 N. RANCHO SANTIAGO BLVD.

studio PAD Landscape Architecture
31195 La Baston Drive, Suite 1950, Laguna Hills, CA 92653 www.studio-pad.com



*Sycamore racemosa*
California Sycamore



*Lagerstroemia i. 'Natchez'*
White Crape Myrtle Tree



*Chilopsis linearis*
Desert Willow



*Arbutus u. 'Marina'*
Marina Strawberry Tree



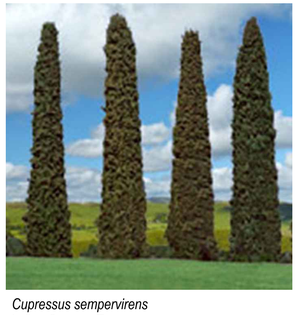
*Tristania conferta*
Brisbane Box Tree



*Rhus lancea*
African Sumac



*Magnolia graniflora 'Samuel Sommer"*
*Southern Magnolia Tree*



*Cupressus sempervirens*
Italian Cypress Tree



*Prunus ilicifolia*
Holly Leaf Cherry



*Podocarpus elongatus 'Monmal'*
Icee Blue Yellow-wood

***Note: Proposed Trees have been reviewed against attachment 7 Undesirable plant species(Target Species) from the Orange City Fire Department Vegetation Management Guidelines.***

***Note: Proposed Plants have been reviewed against attachment 7 Undesirable plant species(Target Species) from the Orange City Fire Department Vegetation Management Guidelines.***



*Aeonium 'Voodoo'*
Voodoo Aeonium



*Agave Americana*
Blue Agave



*Aloe Striata*
Coral Aloe



*Aloe 'Always Red'*
'Always' Red Aloe



*Bougainvillea*
Bougainvillea



*Bulbine frutescens*
Bulbine



*Callistemon viminalis 'Little John'*
Bottlebrush



*Carex divulsa*
Berkeley Sage



*Ceanothus 'Julia Phelps'*
California Lilacs



*Dasylirion longissimum*
Mexican Grass Tree



*Dianella 'Little Rev'*
Flax Lily



*Echeveria*
Echeveria



*Epilobium canum*
California Fuchsia



*Heteromeles arbutifolia*
Toyon



*Kniphofia Uvaria 'Flamenco'*
Flamenco Red Hot Pocker



*Lantana 'New Gold'*
New Gold Lantana



*Lavandula dentata*
Lavender



*Leucadendron sp.*
Conebush



*Muhlenbergia capillaris 'Pink'*
Pink Muhly Grass



*Raphiolepis indica*
Indian Hawthorn



*Rosmarinus sp. 'Huntington Carpet*
Groundcover/Prostrate Rosemary



*Senecio mandraliscae 'Blue Chalk Sticks'*
No Common Name



*Salvia sp.*
Sage



*Westringia sp.*
Coastal Rosemary



*Yucca 'Bright Star'*
Bright Star Yucca



*Bougainvillea 'Barbara Karst'*
Barbara Karst Bougainvillea Vine



*Macfadyena ungis-cati*
Cat's Claw Vine



*Pandorea jasminoides 'Lady Di'*
White Bower Vine

Rancho Ridge LLC.

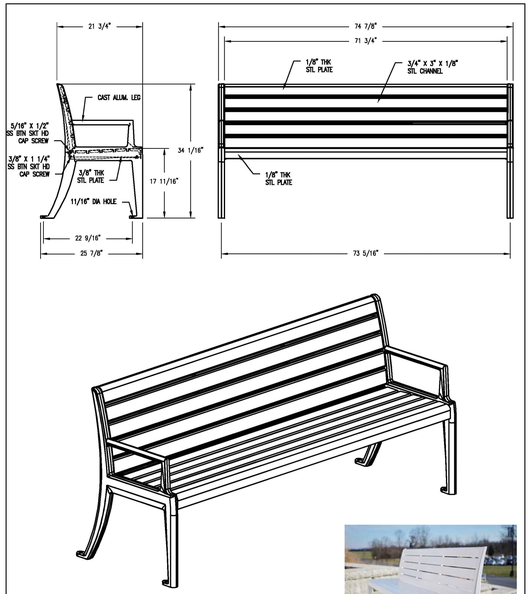
Schematic - 6th City Submittal | Project No.: RR01-2022-D
Date: September 24, 2025

L-6

# Plant Images - Shrubs, Ground Cover and Vines

# 647 N. RANCHO SANTIAGO BLVD.

studio PAD Landscape Architecture



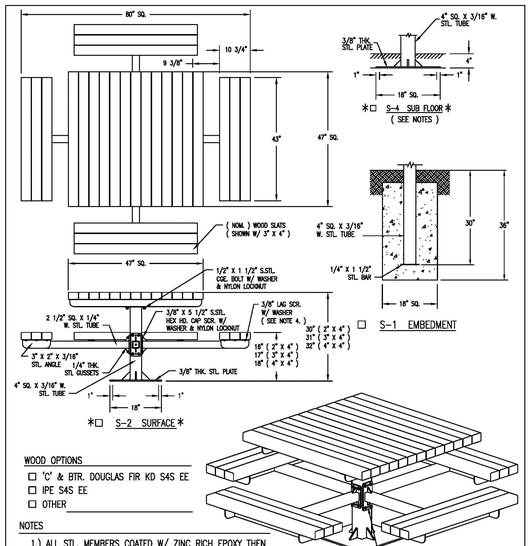


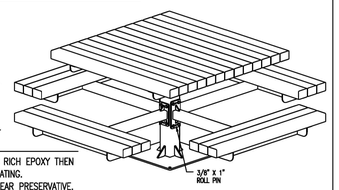



NOTES:
1.) ALL ALUM & STL. MEMBERS COATED W/ ZINC RICH EPOXY THEN FINISHED W/ POLYESTER POWDER COATING.
2.) 1/2" X 3 3/4" EXPANSION ANCHOR BOLTS PROVIDED.

| DuMor, inc. | BENCH | DATE DRAWN : 10/15/19<br>DRAWN BY : RDH<br>DATE REV. :<br>REV. BY : | REV. A | DRAWING NUMBER 505–60HC | SHEET 1 OF 2 |
|---|---|---|---|---|---|

Metal Bench by Dumor
Color: Bronze



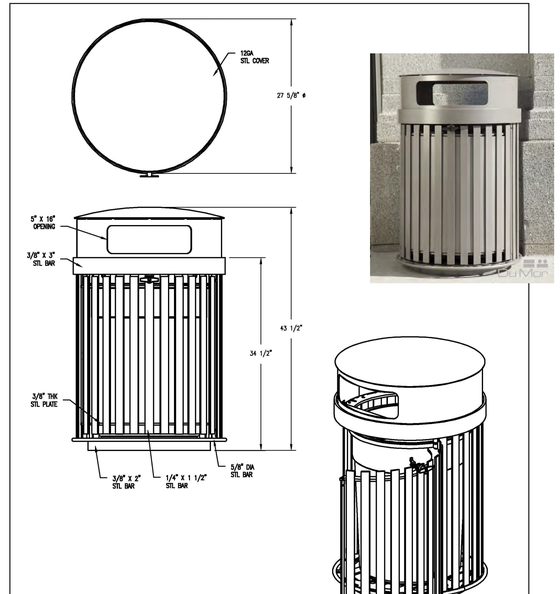

WOOD OPTIONS
☐ 'C' & BTR. DOUGLAS FIR KD S4S EE
☐ IPE S4S EE
☐ OTHER _____

NOTES
1.) ALL STL. MEMBERS COATED W/ ZINC RICH EPOXY THEN FINISHED W/ POLYESTER POWDER COATING.
2.) ALL WOOD MEMBERS TREATED W/ CLEAR PRESERVATIVE.
3.) 1/2" X 3 3/4" EXPANSION ANCHOR BOLTS FOR OPTIONS S-2 AND S-4.
4.) USE 3/8" X 2" S.STL. BUTTON SOCKET HEAD LAG SCREWS FOR 3" X 4" & 4" X 4" SLATS. USE 3/8" X 1 1/2" S.STL. HEX HD LAG SCREWS FOR 2" X 4" SLATS.
* UPCHARGE APPLIES TO SUPPORT OPTION, CONSULT YOUR LOCAL REPRESENTATIVE.

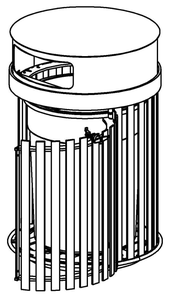
W/ 4 SEATS
☐ 76–24 ( 2" x 4" )
☐ 76–34 ( 3" x 4" )
☐ 76–44 ( 4" x 4" )

| DuMor, inc.<br>P.O. Box 142 Mifflintown, PA 17059–0142 | SCALE : NONE<br>DATE DRAWN : 3/22/94<br>DRAWN BY : AH<br>DATE REV. : 12/15/11<br>REV. BY : RDH | TITLE : PEDESTAL TABLE | REV. K | DRAWING NUMBER 76 SERIES–4 | SHEET 1 OF 2 |
|---|---|---|---|---|---|

Pedestal Table by Dumor
Ipe Wood or Recycled Plastic in Walnut Color
Base Color: Bronze



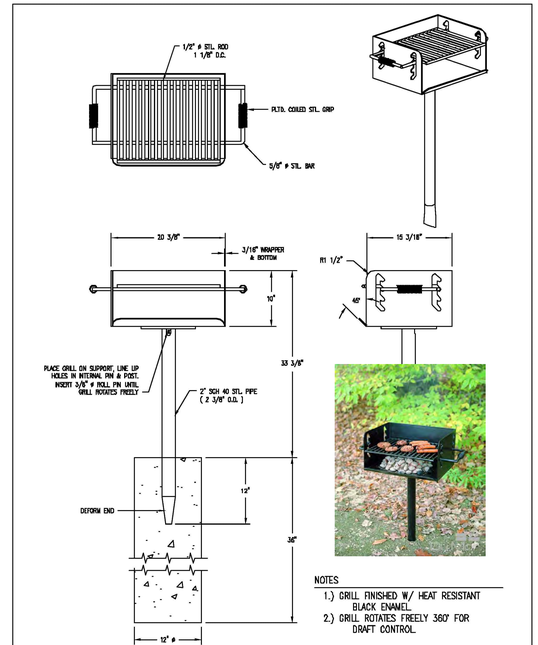


NOTES
1.) ALL STL. MEMBERS COATED W/ ZINC RICH EPOXY THEN FINISHED W/ POLYESTER POWDER COATING.
2.) 1/2" X 3 3/4" EXPANSION ANCHOR BOLTS PROVIDED ( QTY 3 ).
3.) RECYCLING UNIT HINGE FOR REMOVAL OF 32 GAL LINER.

| DuMor, inc. | RECEPTACLE | DATE DRAWN : 11/10/16<br>DRAWN BY : JSB<br>DATE REV. :<br>REV. BY : | REV. A | DRAWING NUMBER 287–32–SO | SHEET 1 OF 2 |
|---|---|---|---|---|---|

Metal Receptacle by Dumor
Base Color: Bronze





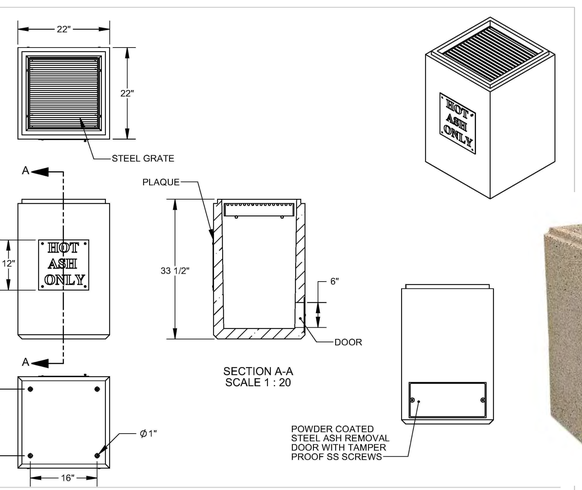

NOTES
1.) GRILL FINISHED W/ HEAT RESISTANT BLACK ENAMEL.
2.) GRILL ROTATES FREELY 360° FOR DRAFT CONTROL.

| DuMor, inc.<br>P.O. Box 142 Mifflintown, PA 17059–0142 | SCALE : NONE<br>DATE DRAWN :3/22/94<br>DRAWN BY : CDC<br>DATE REV. : 9/28/05<br>REV. BY : JSB | TITLE : GRILL | REV. B | DRAWING NUMBER 21–00 | SHEET 1 OF 2 |
|---|---|---|---|---|---|

Steel Grill by Dumor
Base Color: Black

PMC
PRECAST CONCRETE PRODUCTS MANUFACTURING CO.

PART# : 500-0715
MODEL: HOT ASH
WEIGHT: 650 LBS
MATERIAL: CONCRETE



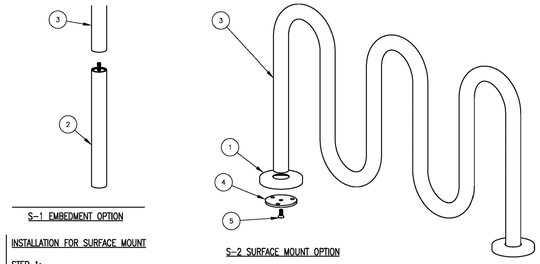

APPROVED MANUFACTURER
Petersen Concrete Leisure Products
Division of Petersen Mfg. Co., Inc.
2741 Hwy 30
Denison, IA 51442 800-832-7383

**Petersen Manufacturing Company Inc.**

PROPRIETARY AND CONFIDENTIAL
*THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF PETERSEN MFG. CO.. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF PETERSEN MFG. CO. IS PROHIBITED.*

30 - Gallon Concrete Hot Coal Receptacle by Petersen
Color: Light Brown Smooth Concrete




INSTALLATION FOR SURFACE MOUNT

STEP 1:
USE 1 – PC. BIKE LOOP, SURFACE MOUNT ( 3 )
2 – PCS. 3/8" THK SURFACE MOUNT PLATE ( 4 )
2 – PCS. 10 GA X 8" DIA ANCHOR PLATE COVER ( 1 )
2 – PCS. 5/8" X 1 1/2" SS FLT SKT HD CAP SCREW ( 5 )
SLIDE 10 GA X 8" DIA ANCHOR COVER ( 1 ) OVER BIKE LOOP, SURFACE MOUNT ( 3 ) LEGS. ATTACH 3/8" THK. SURFACE MOUNT PLATE ( 4 ) TO BIKE LOOP, SURFACE MOUNT ( 3 ) USING HARDWARE ( 5 ).

STEP 2:
ANCHOR ACCORDINGLY.

INSTALLATION FOR PLASTIC PLUG HOT-DIPPED GALV ONLY

INSERT PLASTIC PLUG INTO HOLE ON TOP OF EACH LOOP

| ITEM | QTY | PART NO | DESCRIPTION |
|---|---|---|---|
| ( S-2 OPTION ) 1 | 2 | 0–125–04 | 10 GA X 8" DIA STL COVER W/ 3 1/8" DIA HOLE |
| ( S-1 OPTION ) 2 | 2 | 0–125–09/S–1 | EMBEDMENT EXTENSION |
| 3 | 1 | 0–125–30/S–2 | 3–PEAK LOOP BIKE RACK |
| ( S-2 OPTION ) 4 | 2 | 0–63–00–03 | 3/8" THK SURFACE MOUNT PLATE |
| ( S-2 OPTION ) 5 | 2 | 1–12–102 | 5/8" X 1 1/2" SS FLT SKT HD CAP SCR |

| DuMor, inc.<br>P.O. Box 142 Mifflintown, PA 17059–0142 | SCALE : NONE<br>DATE DRAWN :2/12/99<br>DRAWN BY : CDC<br>DATE REV. : 02/24/12<br>REV. BY : ESS | TITLE : BIKE RACK ASSEMBLY | REV. E | DRAWING NUMBER 125–30 | SHEET 2 OF 2 |
|---|---|---|---|---|---|

Bike Rack by Dumor
Base Color: Bronze



Wood or Aluminum Overhead Structure
Paint Brown to Match Architecture

*Conceptual image to show large shade structure.

# Amenity & Site Furnishings Specification Sheets

Rancho Ridge LLC.

Schematic - 6th City Submittal | Project No.: RR01-2022-D | Date: September 24, 2025 | L-7

# 647 N. RANCHO SANTIAGO BLVD.

studio PAD Landscape Architecture
31755 La Cienega Drive (Ste 165) Laguna Hills CA 92653 (www.studio-PAD.com)

## LIGHTING SCHEDULE

| | SYMBOL | MANUFACTURER/MODEL/DESCRIPTION | QTY |
|---|---|---|---|
| 1 | | FX Luminaire NP<br>Large directional up light ideal for large landscape features. 8.38in. H x 2.66in. Dia.<br>Order code: NP, Aluminum Alloy, (BZ) Bronze Metallic, Long Slot Spike<br>Lamp: NP-6LED, 8.2W\|9.7VA, 2700K, Beamspread: Narrow Flood | 15 |
| 2 | | SVE-3 - Pole Light<br>Area Pole Light, HID - Direct Lighting Sales, Model San Vicente #SVE-3<br>Cast Aluminum, Textured Bronze, RA21 Radius, On DBC-1 Base & 10` round pole.<br>Lamp: Per Elec. Eng., Per Elec. Eng., Per Elec. Eng.<br>Accessories: On DBC-1 Base & 10` round pole. | 12 |
| 3 | | FX Luminaire DE<br>Down light ideal for large applications. 9.7in. H x 3.0in. Dia.<br>Order code: DE, Aluminum Alloy, (BZ) Bronze Metallic, Mini-Mount<br>Lamp: DE-9LED, 10W\|10.7VA, 2700K, Beamspread: Spot | 4 |
| 4 | | GFCI - Outlet<br>Exterior Electrical GFI Outlet<br>Cast Aluminum, Textured Architectural Bronze, Wall | 1 |
| 5 | | FX Luminaire LC<br>Large scale up light used for wide scale elements. 6.5in. H x 4.5in. W x 3.0in. D.<br>Order code: LC, Aluminum Alloy, (AB) Antique Bronze, Long Slot Spike<br>Lamp: LC-9LED, 11.2W\|13.5VA, 2700K, Beamspread: Very Wide Flood | 1 |
| 6 | | Bollard-3901_Louver by DALS Lighting<br>Cast aluminum, Textured Architectural Bronze, Surface, with footing, Final location by Elec. Eng. Footing specs per Manufacturer. Lamp: Per Elec. Eng., Per Manuf., Per Elec. Eng. | 8 |


4

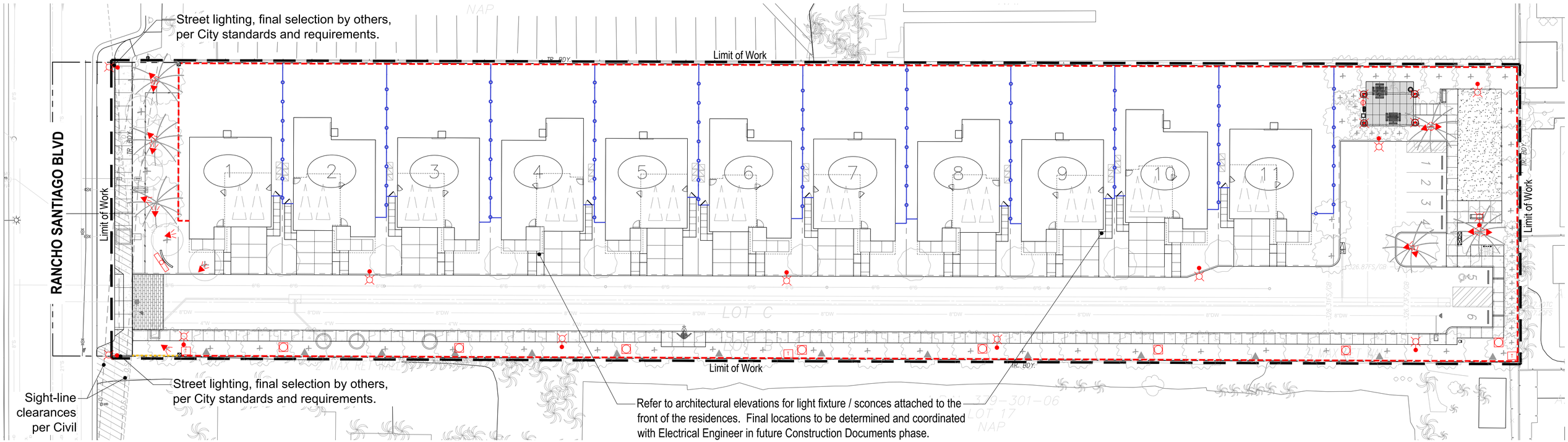

2


6


1


3


5




NOTE: all lighting is direct, controlled, and screened so as to not spill over onto adjacent properties
NOTE: Photometric plan to be submitted and approved by the City prior to the issuance of building permits. Minimum lighting on all pedestrian aisles/passageways shall be at least .50 foot-candles at the ground level during the hours of darkness.

0 10' 20' 40'
Scale: 1" = 20'

# Schematic Lighting Plan

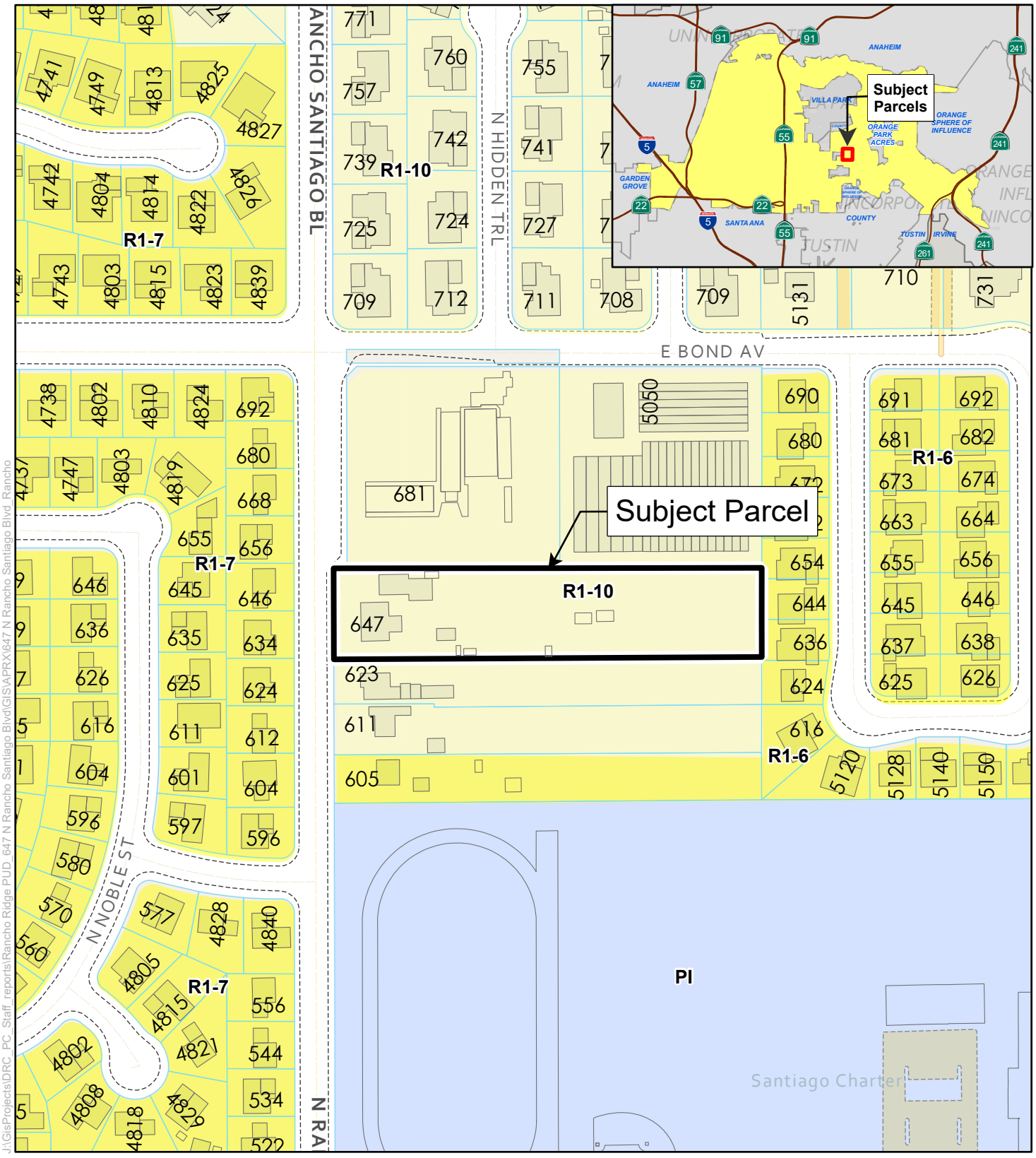
Rancho Ridge LLC.

Schematic - 6th City Submittal | Project No.: RR01-2022-D
Date: September 24, 2025

L-8

# 647 N. RANCHO SANTIAGO BLVD.

studio PAD Landscape Architecture
31195 La Baronia Drive, Ste. 1650
Laguna Hills CA 92653 (www.studio-PAD.com)




City of Orange
Geographic Information System

**Legend**

- Parcels
- Subject Parcels

**Zoning:**

- PI
- R1-6
- R1-7
- R1-10
- R1-15
- R1-20

N W E S

0 100 200 Feet

3/24/2026

Source: City of Orange (2026)

**Project Number:** ZC-1318
**Address:** 647 N Rancho Santiago Blvd
**Zoning:** R1-10

647 N RANCHO SANTIAGO BLVD

# VICINITY MAP

SAGECREST
PLANNING + ENVIRONMENTAL

INITIAL STUDY/CEQA ANALYSIS UNDER CEQA GUIDELINES §15183



# RANCHO RIDGE RESIDENTIAL

647 N Rancho Santiago Blvd

Orange, CA 92869

February 12, 2026

27128 Paseo Espada, Suite 1524, San Juan Capistrano, CA 92675
www.sagecrestplanning.com

# City of Orange

## Initial Study/CEQA Analysis Under CEQA Guidelines §15183
for the

## Rancho Ridge Residential Development Project
(Tentative Tract Map No. 0052-23, Conditional Use Permit No. 3203-23, Major Site Plan Review No. 1137-23, and Design Review No. 5119-23)

**Prepared for**

**City of Orange**
Community Development
Planning Division
300 E. Chapman Avenue
Orange, CA 92866

Contact:
**Applicant**
Rancho Ridge, LLC
11625 Wander Lane
Dallas, Texas 75230

**Prepared By**

SAGECREST
PLANNING + ENVIRONMENTAL

27128 Paseo Espada, Suite 1524
San Juan Capistrano, CA 92675
949.996.7243
Contact: David Blumenthal, AICP

February 12, 2026

# TABLE OF CONTENTS

**1. INTRODUCTION ..... 1**
1.1. PURPOSE AND BACKGROUND ..... 1
1.2. OVERVIEW OF CEQA GUIDELINES § 15183 ..... 3
1.3. DOCUMENTS INCORPORATED BY REFERENCE ..... 5
1.4. CONTACT PERSON ..... 6

**2. PROJECT SUMMARY AND ENVIRONMENTAL DETERMINATION ..... 7**
2.1 PROJECT SUMMARY ..... 7
2.2 ORGANIZATION OF ENVIRONMENTAL ANALYSIS ..... 9
2.3 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED ..... 11
2.4 DETERMINATION ..... 12

**3. PROJECT DESCRIPTION ..... 13**
3.1 BACKGROUND ..... 13
3.2 PROJECT CHARACTERISTICS ..... 14
3.3 PROJECT OPERATIONS ..... 17
3.4 PROJECT APPROVALS ..... 18

**4. EVALUATION OF ENVIRONMENTAL IMPACTS ..... 24**
4.1 AESTHETICS AND VISUAL RESOURCES ..... 26
4.2 AGRICULTURE AND FORESTRY RESOURCES ..... 36
4.3 AIR QUALITY ..... 40
4.4 BIOLOGICAL RESOURCES ..... 60
4.5 CULTURAL RESOURCES ..... 71
4.6 ENERGY ..... 81
4.7 GEOLOGY AND SOILS ..... 88
4.8 GREENHOUSE GAS EMISSIONS ..... 100
4.9 HAZARDS AND HAZARDOUS MATERIALS ..... 109
4.10 HYDROLOGY AND WATER QUALITY ..... 122
4.11 LAND USE PLANNING ..... 132
4.12 MINERAL RESOURCES ..... 136

4.13 NOISE ..... 140
4.14 POPULATION AND HOUSING ..... 162
4.15 PUBLIC SERVICES ..... 166
4.16 RECREATION ..... 183
4.17 TRANSPORTATION ..... 189
4.18 TRIBAL CULTURAL RESOURCES ..... 198
4.19 UTILITIES AND SERVICE SYSTEMS ..... 202
4.20 WILDFIRE ..... 209

**5. LIST OF PREPARERS ..... 216**

**6. REFERENCES ..... 217**

## TABLES

Table 1 - Surrounding Land Use ..... 8
Table 2 – General Plan Policies (Scenic Quality and Aesthetics) ..... 33
Table 3 – Construction-Related Regional Pollutant Emissions ..... 52
Table 4 – Maximum Number of Acres Disturbed Per Day ..... 52
Table 5 – Local Construction Emissions at the Nearest Receptors ..... 53
Table 6 - Regional Operational Pollutant Emissions ..... 54
Table 7 – Project-Related Greenhouse Gas Emissions ..... 103
Table 8 – Project Consistency with CARB Scoping Plan Policies and Measures . 104
Table 9 – Construction Noise Levels (dBA Leq) ..... 151
Table 10 – Increase in Existing Noise Levels Along Roadways as a Result of Project (dBA CNEL) ..... 154
Table 11 – Construction Vibration Levels at the Nearest Receptors ..... 157
Table 12 – Existing and Future Park Acreage Needs ..... 186

## FIGURES

Figure 1 – Regional Vicinity ..... 19
Figure 2 – Site Location – Aerial View ..... 20
Figure 3 – General Plan Land Use Designation ..... 21
Figure 4 – Zoning Map ..... 22
Figure 5 – Conceptual Site Plan ..... 23

Figure 6 – Project Site Agricultural Designation ..... 120

Figure 7 – Fire Hazard Severity Zones ..... 121

Figure 8 – Mineral Resource Map ..... 139

Figure 9 – Noise Monitoring Locations ..... 161

**APPENDICES***

***Appendix A –*** *Rancho Ridge Infill Project Air Quality, Global Climate Change, and Energy Impact Study, Ganddini Group, Inc. March 31, 2023*

**Appendix B –** *Rancho Ridge Infill Project Biological Technical Report,* Noreas, January 2023

**Appendix C –** *Rancho Ridge Infill Project Transportation Study Screening Assessment*, Ganddini Group, Inc., February 12, 2026

**Appendix D –** *Preliminary Geotechnical Investigation, Proposed Residential Development 647 North Rancho Santiago Boulevard,* Albus & Associates, August 2022

**Appendix E –** *Phase I Environmental Site Assessment – 647 North Rancho Santiago Boulevard,* Partner Engineering and Science, March 5, 2021

**Appendix F –** *Preliminary Hydrology Analysis for Rancho Ridge Tentative Tract Map No. 19279,* Hunsaker & Associates, Inc., May 15, 2024

**Appendix G** – *Preliminary Water Quality Management Plan – Rancho Ridge – Tentative Parcel Map No. 19279,* Hunsaker & Associates, Inc., March 23, 2023

**Appendix H** – *Noise Impact Analysis Rancho Ridge Infill Project,* Ganddini Group, Inc., March 27, 2023

**Appendix I** – *Fire Behavior Modeling Summary*, Dudek, August 2025

**Appendix J** – *Conceptual Fuel Modification Plan*, Dudek, August 2025

*Please note that the technical studies appended in this document were prepared with a previous scope of 13 single-family dwelling units instead of 11 single-family dwelling units. While the appendices referenced indicate analysis based on units that exceed the currently proposed 11 units, the appendices' analyses are still applicable to the Proposed Project. The Proposed Project consists of fewer dwelling units than originally evaluated. Therefore, the Proposed Project is not expected to result in any new or more substantial impacts than what was previously analyzed for the larger scope of work.

## ACRONYMNS

| Acronym | Definition |
|---|---|
| AB 32 | Assembly Bill 32 |
| AB 52 | Assembly Bill 52 |
| AER | Annual Emission Reporting |
| ADA | Americans with Disabilities Act |
| ADT | Average Daily Traffic |
| AFY | Acre Feet Per Year |
| AQMP | Air Quality Management Plan |
| APE | Area of Potential Effect |
| APN | Assessor Parcel Number |
| BMPs | Best Management Practices |
| CAAQS | California Ambient Air Quality Standards |
| CARB | California Air Resources Board |
| CDF | California Department of Finance |
| CDFW | California Department of Fish and Wildlife |
| CERCLA | Comprehensive Environmental Response, Compensation, & Liability Act |
| CEQA | California Environmental Quality Act |
| City | City of Orange |
| CNEL | Community Noise Equivalent Level |
| CO | Carbon Monoxide |
| CRHR | California Register of Historic Resources |
| CVC | California Vehicle Code |
| dBA | A-Weighted Decibels |
| DIF | Development Impact Fees |
| DF | Design Features |
| DOSH | California Division of Safety and Health |
| DPM | Diesel Particulate Matter |
| DTSC | Department of Toxic Substances Control |
| EPA | Environmental Protection Agency |
| ESA | Endangered Species Act |
| FAR | Floor Area Ratio |
| FEMA | Federal Emergency Management Agency |
| FMMP | Farmland Mapping Management Program |
| GHG | Greenhouse Gas |
| GP PEIR | City of Orange General Plan Program Environmental Impact Report |
| HCP | Habitat Conservation Plan |
| gpd/acre | Gallons per Day per Acre |
| ITE | Institute of Transportation Engineers |
| LID | Low Impact Design |

| | |
|---|---|
| LOS | Level of Service |
| LST | Localized Significance Threshold |
| mgd | Millions of Gallons per Day |
| MMRP | Mitigation Monitoring and Reporting Program |
| MRZ | Mineral Resources Zone |
| MS4 | Municipal Separate Storm Water Sewer System |
| NAAQS | National Ambient Air Quality Standards |
| NAHC | Native American Heritage Commission |
| NCCP | Natural Communities Conservation Plan |
| ND | Negative Declaration |
| NO2 | Nitrogen Dioxide |
| NOx | Nitrogen Oxides |
| NPDES | National Pollutant Discharge Elimination System |
| OGP | Orange General Plan |
| OSHA | Occupational Safety and Health Administration |
| Pb | Lead |
| PM-2.5 | Particulate Matter Less Than 2.5 Microns in Diameter |
| PM-10 | Particulate Matter Less Than 10 Microns in Diameter |
| PRIMMP | Paleontological Resource Impact Mitigation Monitoring Program |
| RCRA | Resource Conservation and Recovery Act |
| RTP | Regional Transportation Plan/Sustainable Communities Strategy |
| RWQCB | Regional Water Quality Control Board |
| SB 100 | Senate Bill 100 |
| SARWQCB | Santa Ana Regional Water Quality Control Board |
| SGMA | Sustainability Groundwater Management Act |
| SF | Square Feet |
| SCAB | South Coast Air Basin |
| SCAG | Southern California Association of Governments |
| SCAQMD | South Coast Air Quality Management District |
| SLF | Sacred Lands File |
| SO2 | Sulfur Dioxide |
| $SO_x$ | Sulfur Oxide |
| SRA | Source Receptor Areas |
| SWPPP | Stormwater Pollution Prevention Plan |
| SWRCB | State Water Resources Control Board |
| TIA | Traffic Impact Analysis |
| VMT | Vehicle Miles Traveled |
| VOC | Volatile Organic Compounds |
| USDA-NRCS | U.S. Department of Agriculture, Natural Resources Conservation Service |
| UWMP | Urban Water Management Plan |

# 1. INTRODUCTION

## 1.1. Purpose and Background

Rancho Ridge, LLC. (Applicant) proposes to establish a Planned Unit Development (PUD) and to subdivide the lot into 11 parcels, each improved with a single-family residence with attached private garages and driveways. Additional improvements would include private and common usable open space and landscaping as well as a twenty-five-foot-wide interior street, giving access throughout the site (Proposed Project). The Proposed Project is located at 647 N. Rancho Santiago Blvd. and consists of a total land area of 1.92-acres (APN 379-301-05). The Project Site is zoned for Single-Family Residential (R-1-10) and has a General Plan land use designation for Low Density Residential.

The Project Site is designated as Low Density Residential by the Orange General Plan (OGP) and is zoned R-1-10. The Project proposes a Conditional Use Permit to establish a Planned Unit Development (PUD), which includes a Zone Change to update the zoning designation from R-1-10 to R-1-10 (PUD), a Major Site Plan Review, a Design Review, and a Tentative Tract Map to allow the Project Site to be subdivided into 11 residential parcels and three common area lots. The Proposed Project would be consistent with Land Use Policy 1.3, "Provide a range of housing densities and types to meet the diverse needs and lifestyles of residents" by allowing a housing density that is consistent with the neighborhood and adding new units to the City's housing stock. The Proposed Project is subject to the approval of the following entitlements:

- Approval of Tentative Tract Map No. 0052-23 to split existing parcel into 11 parcels (APN 379-301-05)
- Approval of Zone Change
- Approval of Conditional Use Permit No. 3203-23
- Approval of Major Site Plan Review No. 1137-23
- Approval of Design Review No. 5119-23

The Proposed Project includes the construction of 11 single-family detached dwellings each with an attached garage and driveway, associated landscaping and common and private open space. The Project Site would be developed on 1.92 acres with a density of 5.7 dwelling units per acre (du/ac). Six of the eleven units would consist of three bedrooms, 3 bathrooms, and would be approximately 2,425 square feet. Five of the eleven units would consist of three bedrooms, a loft, 2.5-3.0 bathrooms, and would be approximately 2,724 square feet. Each unit would provide two covered parking spaces in attached garages, totaling 22 covered parking spaces for the Project. The Proposed Project would also provide 17 guest parking spaces for the entire site, 1 on each private driveway and 6 on the eastern portion of the Project Site.

The Proposed Project would have two plan types. Plan 1 features 3 bedrooms and 3.0 bathrooms, totaling 2,425 square feet per unit. Plan 2 contains 3 bedrooms, a loft and 2.5-3.0 bathrooms, totaling 2,724 square feet per unit.

The Proposed Project would provide approximately 0.32-acres of landscaping in the form of front yards and walking paths, approximately 0.43-acre of private usable space in the form of private backyards, and 0.13-acre of common open space in the eastern portion of the Project Site. Additionally, the Proposed Project would require the closure of one existing driveway at the northwestern site boundary along Rancho Santiago Blvd. The second existing driveway located at the southwestern site boundary along Rancho Santiago Blvd would be reconstructed for the proposed two-way access driveway and associated landscaping, signage, and pavement.

The Proposed Project also features additional improvements including walls, site lighting, and circulation.

Wall improvements include: a 5'-6" high vinyl fence surrounding the north, east, and west individual lot boundaries, a 5'-9" high split face concrete masonry unit (CMU) wall with precision cap along the northern, eastern, and southern Project Site boundaries and at Lot 1, and a 3'-6" high split face CMU retraining wall with precision cap at the southwestern corner of the Project site. Site lighting improvements consist of light poles with step motion sensors distributed along sidewalks and bollard lights at the center of the Project site.

The Proposed Project is considered a project under the California Environmental Quality Act (Public Resource Code § 21000 et seq.: "CEQA"). The primary purpose of CEQA is to inform the public and decision makers as to the potential impacts of a project and to allow an opportunity for public input to ensure informed decision-making. CEQA requires all state and local government agencies to consider the environmental effects of projects over which they have discretionary authority. CEQA also requires each public agency to mitigate or avoid any significant environmental impacts resulting from the implementation of projects subject to CEQA.

Pursuant to Section 15367 of the CEQA Guidelines, the City of Orange is the Lead Agency for the Project. The Lead Agency is the public agency that has the principal responsibility for carrying out or approving a project. The City, as the Lead Agency for the Project, is responsible for preparing environmental documentation in accordance with CEQA to determine if approval of the discretionary actions requested and subsequent development of the Proposed Project would have a significant impact on the environment.

## 1.2. Overview of CEQA Guidelines § 15183

This exemption analysis evaluates whether the potential environmental impacts of the Proposed Project are addressed in the City of Orange General Plan Program Environmental Impact Report (GP PEIR) (SCH #2006031117) pursuant to the California Environmental Quality Act (CEQA) Guidelines (CEQA Guidelines) Section 15183 (Exemption Checklist). California Public Resources Code (PRC) Section 21083.3 and State CEQA Guidelines § 15183 states that "projects which are consistent with the development density established by the existing zoning, community plan, or general plan policies for which an Environmental Impact Report (EIR) was certified shall not require additional environmental review, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site" (State CEQA Guidelines Section 15183(a) and PRC Section 21083.3(b)). The State CEQA Guidelines further state that "[i]f an impact is not peculiar to the parcel or to the project, has been addressed as a significant effect in the prior EIR, or can be substantially mitigated by the imposition of uniformly applied development policies or standards [...] then an additional EIR need not be prepared for the project solely on the basis of that impact" (State CEQA Guidelines Section 15183(c))."

(1) As set forth in State CEQA Guidelines Section 15183(d), the additional environmental review exemption applies to projects which meet the following conditions: The project is consistent with:
    a. A community plan adopted as part of a general plan,
    b. A zoning action which zoned or designated the parcel on which the project would be located to accommodate a particular density of development, or
    c. A general plan of a local agency, and
(2) An EIR was certified by the lead agency for the zoning action, the community plan, or the general plan.

Additionally, Section 15183(e) states that a public agency shall limit its examination of environmental effects to those which the agency determines, in an initial study or other analysis:

(1) Are peculiar to the project or the parcel on which the project would be located,
(2) Were not analyzed as significant effects in a prior EIR on the zoning action, general plan, or community plan, with which the project is consistent,
(3) Are potentially significant off-site impacts and cumulative impacts which were not discussed in the prior EIR prepared for the general plan, community plan, or zoning action, or
(4) Are previously identified significant effects which, as a result of substantial new information which was not known at the time the EIR was certified, are

determined to have a more severe adverse impact than discussed in the prior EIR.

The GP PEIR analyzed the impacts of buildout of the General Plan. As discussed in this analysis, the Proposed Project is consistent with the land uses identified for the Project Site in the General Plan. The Proposed Project site has a General Plan land use designation of Low Density Residential and is Single-Family Residential (R-1-10). The Proposed Project would establish a Planned Unit Development (PUD) and subdivide the lot into 11 parcels, each improved with single family residence, which is within the assumptions and land use and growth projections of the General Plan. As such, the GP PEIR adequately anticipated and analyzed the impacts of the Proposed Project, identified applicable Mitigation Measures necessary to reduce impacts of the Proposed Project, and the Proposed Project implements the applicable Mitigation Measures. The Proposed Project, therefore, qualifies for an exemption from additional environmental review as set forth in State CEQA Guidelines Section 15183.

Specifically, the Proposed Project qualifies for the exemption because the following findings can be made:

1. **The Project is consistent with the development density established by existing zoning, community plan or general plan policies for which an EIR was certified.** The Project Site is designated as Low Density Residential by the City of Orange General Plan and is zoned R1-10. The Project would establish a PUD and subdivide the lot into 11 parcels, each improved with a single-family residence. The Project Site has been designed to function as a traditional subdivision, while applying the flexible standards of the PUD. Each parcel within the Project would be at least 4,438 square feet and meet the development standards set forth in the Orange Municipal Code (OMC) Section 17.16.060.

2. **There are no Project specific effects which are peculiar to the Project or its site, and which the GP PEIR failed to analyze as significant effects.** The Proposed Project is similar to other properties in the area. All surrounding properties are designated for single-family residential. The Project Site does not support any peculiar environmental features, and the Proposed Project would not result in any peculiar effects. In addition, as explained in the Exemption Checklist below, Project impacts were adequately analyzed by the GP PEIR. The GP PEIR identified that the General Plan buildout would have significant and unavoidable environmental effects related to air quality, transportation/traffic, and climate change (greenhouse gas emissions). The GP PEIR also identified nine (10) environmental impact areas for which Mitigation Measures were required to reduce potential environmental impacts to a less than significant level: (1) aesthetics, (2) biological resources, (3) cultural resources, (4) hazards

and hazardous materials, (5) hydrology/water quality, (6) noise, (7) public services and utilities, (8) transportation/traffic, (9) recreation, and (10) geology/soils.

3. **There are no potentially significant off-site and/or cumulative impacts which the GP PEIR failed to evaluate.** The Proposed Project is consistent with the land use characteristics of the development considered by the GP PEIR and would represent a small part of the growth that was forecasted for the build-out of the General Plan. The GP PEIR considered the incremental impacts of the Project, and as explained further in the Exemption Checklist below, no significant off-site or cumulative impacts that were not previously evaluated have been identified.

4. **There is no substantial new information which results in more severe impacts than anticipated by the GP PEIR.** As substantiated in the Exemption Checklist below, no new information has been identified which would result in a determination of a more severe impact than what had been anticipated by the GP PEIR.

5. **The Project will undertake feasible Mitigation Measures specified in the GP PEIR.** As explained in the Exemption Checklist below, the Proposed Project would undertake feasible Mitigation Measures specified in the GP PEIR. These GP PEIR Mitigation Measures will be undertaken through Proposed Project design, compliance with regulations and ordinances, the Proposed Project's conditions of approval, and City permit processing.

### 1.3. Documents Incorporated by Reference

The following reports and/or studies are applicable to development of the Project Site and are hereby incorporated by reference:

- *City of Orange – 2010 General Plan*, City of Orange, 2010, available at https://www.cityoforange.org/our-city/departments/community-development/general-plan.
- *City of Orange General Plan Final Program Environmental Impact Report*, City of Orange, 2010, available at https://www.cityoforange.org/our-city/departments/community-development/general-plan.
- *City of Orange 2021-2029 Housing Element*, City of Orange, adopted October 2023, available at https://www.cityoforange.org/our-city/departments/community-development/general-plan.
- *Orange Municipal Code,* available at http://orangecity-ca.elaws.us/code/coor.

## 1.4. Contact Person

Any questions about the preparation of the Initial Study, its assumptions, or its conclusions should be referred to the following:

Attn:
City of Orange
Planning Division
300 E. Chapman Avenue
Orange, CA 92866
Phone: (714) 744-2225

## 2. PROJECT SUMMARY AND ENVIRONMENTAL DETERMINATION

### 2.1 Project Summary

| | | |
|---|---|---|
| **1.** | **Project Title:** | Rancho Ridge Residential Development Project |
| **2.** | **Lead Agency Name: Address** | City of Orange<br>Planning Division<br>300 E. Chapman Avenue<br>Orange, CA 92866 |
| **3.** | **Contact Person:** | David Blumenthal, AICP<br>dblumenthal@sagecrestplanning.com<br>(714) 313-3713 |
| **4.** | **Project Location:** | East side of Rancho Santiago Boulevard<br>South of East Bond Avenue<br>West of Ranchroad Drive<br>North of East Walnut Avenue<br><br>Site Acres: 1.92-acres<br><br>Site Addresses: 647 N. Rancho Santiago Boulevard<br>Orange, CA 92869<br><br>Topographic Quad (USGS 7.5"): Orange<br><br>Topographic Quad Coordinates: T4 South, R9 West<br><br>Latitude: 33°47'51.3"N, Longitude: 117°48'03.6"W<br><br>APN: 379-301-05 |
| **5.** | **Project Sponsor's Name/Address:** | Rancho Ridge, LLC<br>11625 Wander Lane<br>Dallas, TX 75230 |
| **6.** | **General Plan Designation:** | Low-Density Residential (LDR) |
| **7.** | **Zoning Designation:** | Single-Family Residential (R1-10) |

**8. Description of Project:**

The Project proposes to establish a Planned Unit Development (PUD) and subdivide the lot into 11 parcels, each improved with a single-family residence. The Project Site is located at 647 N. Rancho Santiago Blvd (APN 379-301-05). The lot and unit configuration were selected to allow the development to operate as a traditional subdivision. The Proposed Project would offer two unique floor plans consisting of three-bedrooms with a loft depending on the floor plan. Unit sizes vary from 2,419 square feet (sq. ft.) to 2,724 sq. ft. Each of the homes would be two-stories and include an attached two-car enclosed garage and a driveway in front of the garage. Entitlements include the following: Tentative Tract Map (No. 0052-23), Conditional Use Permit (No. 3203-23), Zone Change, Major Site Plan Review (No. 1137-23) and Design Review (No. 5119-23).

**9. Surrounding Land Uses:**

Surrounding land uses are identified in **Table 1** - *Surrounding Land Use*. The Project Site is currently unimproved, but historical uses have included agriculture and residential developments. All surrounding properties are designated Low Density Residential.

**Table 1 - Surrounding Land Use**

| Direction | Land Use Description |
|---|---|
| North | Orange Hill Presbyterian Church and associated surface parking and Santiago Greenhouse |
| East | Single-family residential homes |
| South | Single-family residential homes and commercial services (debris removal service company and tree maintenance company) |
| West | N Rancho Santiago Boulevard and single-family residential neighborhood beyond N Rancho Santiago Boulevard |

**10. Other Public Agencies Whose Approval is Required:**

The following discretionary approvals are required for the proposed Project:

*Federal Agencies:*

- There are no federal agencies in which discretionary approvals are required.

*Local Agencies:*

- City of Orange:
  - Adopt CEQA compliance documents.
  - Approval of Tentative Tract Map No. 0052-23 to split existing parcel into 11 lots (APN 379-301-05)

- Approval of Conditional Use Permit No. 3203-23 to allow for a Planned Unit Development that allows for an alternative to standard residential development wherein the existing General Plan densities
- Approval of Major Site Plan Review No. 1137-23
- Approval of Design Review No. 5119-23
- Approval of Zone Change to rezone the property from R-1-10 to R-1-10 (PUD)

- Santa Ana Regional Water Quality Control Board:
  - Approval of a National Pollutant Discharge Elimination System (NPDES) permit to ensure that construction site drainage velocities are equal to or less than the pre-construction conditions and downstream water quality is not worsened.

**11. California Native American Consultation:**

Assembly Bill 52 (AB 52), signed into law in 2014, amended CEQA and established new requirements for tribal notification and consultation. AB 52 applies to all projects for which a notice of preparation or notice of intent to adopt a negative declaration/mitigated negative declaration is issued after July 1, 2015. CEQA Compliance can be achieved through review and approval of an Exemption pursuant to CEQA Guidelines Section 15183. Therefore, Native American consultation was not required for this Project.

## 2.2 Organization of Environmental Analysis

This Initial Study is based on an Environmental Checklist Form (Checklist), as suggested in §15063(d)(3) of the State CEQA Guidelines, as amended, and includes a series of questions about the project for each of the listed environmental topics. The Checklist evaluates whether or not there would be significant environmental effects associated with the development of the project and provides Mitigation Measures, when required, to reduce impacts to a less than significant level.

Section 4 provides a discussion of the potential environmental impacts of the Proposed Project. The evaluation of environmental impacts follows the questions provided in the Checklist provided Appendix G to the State CEQA Guidelines. Environmental effects are evaluated to determine if the Project would result in a potentially significant impact triggering additional review under CEQA Guidelines Section 15183. This CEQA Checklist provides an analysis in support of a determination of whether the Project would result in:

- an equal or less severe impact than previously identified in the Orange General Plan (OGP) Final Program Environmental Impact Report (GP PEIR), or
- new impacts, or a substantial increase in the severity of a significant impact as disclosed in the GP PEIR.

The effect of the Proposed Project is categorized into one of the following five categories of possible determinations:

| Project Peculiar Impact that is not Substantially Mitigated by Uniform Applied Policies | Significant Impact not Analyzed as Significant in the GP PEIR | Potentially Significant Offsite or Cumulative Impact not Discussed in the GP PEIR | Adverse Impact More Severe Based on Substantial New Information | No New Impact |
|---|---|---|---|---|

- Items checked "Peculiar Impact that is Not Substantially Mitigated" indicates that the Project could result in a peculiar impact, including a physical change that belongs exclusively or especially to the Project or that is a distinctive characteristic of the Project or the Project Site and that peculiar impact is not substantially mitigated by the imposition of uniformly applied development policies or standards.
- Items checked "Significant Impact not Analyzed as Significant Effect in GP PEIR" indicates that the Project could result in a significant effect that was not analyzed as significant in the GP PEIR.
- Items checked "Potentially Significant Offsite or Cumulative Impact not Discussed in the GP PEIR" indicate the Project could result in a significant offsite or cumulative impact that was not discussed in the GP PEIR.
- Items checked "Adverse Impact More Severe based on Substantial New Information" indicate that previously identified significant effects, which as a result of substantial new information which was not known at the time the GP PEIR was certified, are determined to have a more severe adverse impact than discussed in the GP PEIR with build-out of the Project.
- Items checked "No New Impact" indicates that the potential impacts from the Project have been adequately analyzed in the GP PEIR or does not have a significant impact on the environment.

## 2.3 Environmental Factors Potentially Affected

Based on the analysis in Section 4, the Proposed Project could potentially affect ("Potentially Significant") the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor and identifies where Mitigation Measures would be necessary to reduce all impacts to less than significant levels.

| | | |
|---|---|---|
| ☐ Aesthetics | ☐ Agriculture and Forestry Resources | ☐ Air Quality |
| ☐ Biological Resources | ☐ Cultural Resources | ☐ Energy |
| ☐ Geology and Soils | ☐ Greenhouse Gas Emissions | ☐ Hazards and Hazardous Materials |
| ☐ Hydrology and Water Quality | ☐ Land Use and Planning | ☐ Mineral Resources |
| ☐ Noise | ☐ Population and Housing | ☐ Public Services |
| ☐ Recreation | ☐ Transportation | ☐ Tribal Cultural Resources |
| ☐ Utilities and Service Systems | ☐ Wildfire | ☐ Mandatory Findings of Significance |

## 2.4 Determination

On the basis of this initial evaluation, the following finding is made:

| | |
|---|---|
| X | The Proposed Project WOULD NOT result in: 1) a peculiar impact that was not identified as a significant impact under the prior EIR; 2) a significant impact that was not analyzed as significant in the prior EIR; 3) a potentially significant offsite impact or cumulative impact not discussed in the prior EIR; or 4) a more severe impact due to substantial new information that was not known at the time the prior EIR. NO FURTHER ACTION is required and a Notice of Determination (Section 15094) will be filed indicating that the Proposed Project IS ELIGIBLE for an EXEMPTION under State CEQA Guidelines Section 15183. |
| | The Proposed Project would result in: 1) a peculiar impact that was not identified as a significant impact under the prior EIR; 2) a significant impact that was not analyzed as significant in the prior EIR; 3) a potentially significant offsite impact or cumulative impact not discussed in the prior EIR; or 4) a more severe impact due to substantial new information that was not known at the time the prior EIR. I find that FURTHER ENVIRONMENTAL REVIEW is necessary to analyze those effects that are subject to CEQA, and therefore, this Project is NOT ELIGIBLE for an EXEMPTION under State CEQA Guidelines Section 15183. |

Signature _____ Date _____

Name _____ Title _____

# 3. PROJECT DESCRIPTION

## 3.1 Background

The Project Site is located at 647 N. Rancho Santiago Boulevard in the City of Orange (City), Orange County, California (APN: 379-301-05) (see **Figure 1** – *Regional Vicinity* and **Figure 2** – *Site Location Map – Aerial View*). Review of available historical aerial imagery, topographic maps, and historical documentation shows that the Project Site was first used for single-family residential around 1896-1898 and agricultural land sometime around 1938-1950. In 1964, the Project Site contained two small structures that were likely single-family residences. Sometime before 1972, the building on site was redeveloped and expanded on the western portion of the site, while the eastern portion of the site remained undeveloped, and the property to the north developed the church building and plant nursery that stand today. The single-family homes across Rancho Santiago Blvd to the west were developed sometime between 1966 and 1972. The single-family homes to the east of the site were developed sometime between 1972 and 1980. Aerial photographs from 1980 show that the property gained an addition of a pool near the buildings, and either small buildings or storage containers on the eastern portion of the site. The site remained with this development, with small improvements to buildings, storage and shade coverings on the eastern portion of the site, and changes in landscaping until sometime before 2022, where historical images show the development to be demolished. From 2022 until the present time, the site is left vacant with a concrete pad in the northwestern corner and a driveway in the southwestern corner of the site. and The remainder of the site covered by dirt, shrubs and a few trees along the western boundary.

The Project Site is currently comprised as a single parcel with a total acreage of 1.92-acres. As discussed above, the Project Site is currently vacant, but historical uses have included agricultural and single-family residential uses. The Project Site is designed to accommodate the Proposed Project of 11 subdivided parcels, each improved with a single-family residence.

*Project Site Setting*

The Project Site is approximately 323 feet south of the Bond Avenue centerline and is currently vacant, but historical uses have included agricultural and residential developments. The northern and eastern site boundaries are bound by a masonry wall, while the southern and western site boundaries are bound by a chain-linked fence. The western site boundary also contains two paved driveway entry points. Surrounding land uses include Orange Hill Presbyterian Church and Santiago Greenhouse to the north, N Rancho Santiago Boulevard and single-family residences to the west, single-family residences to the east, and single-family residences and a tree maintenance company to the south.

*Site Zoning*

As shown in **Figure 3** – *General Plan Land Use Designation* and **Figure 4** – *Zoning Map,* the parcel is zoned Single-Family Residential (R1-10) and has an OGP land use designation of Low Density Residential. The Project proposes to utilize a Planned Unit Development (PUD) to propose a zone change from R-1-10 to R-1-10 (PUD). According to the OGP, "*Table LU-3 indicates the corresponding zone district that applies to each General Plan land use designation.*" The Proposed Project would comply with all the development standards established in the zoning code for the PUD except the minimum lot area. The lot area has been modified for consistency with the General Plan land Use Designation Density. Furthermore, the project would comply with the design guidelines established in the City of Orange Infill Residential Design Guidelines.

## 3.2 Project Characteristics

The Proposed Project would be to establish a Planned Unit Development (PUD) and subdivide the lot into 11 parcels, each improved with a single-family residence as shown in **Figure 5** – *Conceptual Site Plan***.** The lot and unit configuration were selected to allow the development to operate as a traditional subdivision. The Proposed Project would offer two unique floor plans consisting of 3-bedrooms with a loft depending on the floor plan. Unit sizes vary from 2,419 square feet to 2,724 square feet. Each of the homes would be two-stories and provide a two-car enclosed garage and a two-car driveway in front of the garage.

Each detached single-family residence would provide a 10' minimum setback from the common driveway, 5' setback from the side property line, and 20' or 34' rear property line. Access to the Project Site is located off of Rancho Santiago Boulevard. Access to each of the parcels would be provided through a 25-foot-wide common driveway easement that runs along the southern portion of the Project Site. A 30-foot wide Fire Department hammerhead that would meet the City's standards is provided on the eastern side of the common driveway easement, which would also double for trash truck turn around. The 25-foot-wide common driveway also provides sufficient space to accommodate all necessary utilities for the units (utility easement would be recorded).

The Project Site is designated as Low Density Residential by the Orange General Plan and is zoned R-1-10. According to the General Plan, "*Table LU-3 indicates the corresponding zone district that applies to each General Plan land use designation.*" Furthermore, this development would be consistent with Land Use Policy 1.3, "*Provide a range of housing densities and types to meet the diverse*

*needs and lifestyles of residents*" by allowing a housing density that is consistent with the neighborhood and adding new units to the City's housing stock.

The Proposed Project includes the following:

Utilities and Services:

Water services, including domestic water supply, sanitary sewer and recycled water services, would be provided by the Metropolitan Water District of Southern California (MWD).

The Southern California Gas Company has facilities in the area to service gas to the Proposed Project. Natural gas services are subject to change based on supply conditions and are designed to comply with federal agencies, environmental regulations, and local jurisdiction policy.

Electrical Infrastructure would be serviced by Southern California Edison. SCE may need to conduct utility studies to assess whether additions or modifications to the existing electrical infrastructure are required to serve the Proposed Project. Site plans, contracts and agreements, applicable fees, local permits, and required easement documents are necessary before SCE can schedule construction.

Both Cox Internet and AT&T have facilities to provide telecommunications and cable services.

Trash services would be served by CR&R Incorporated to supply trash can placements.

### 3.2.1 Construction Timing

The Proposed Project is expected to begin construction in 2025. Construction completion and operations would be expected sometime in 2027.

Construction activities include the following:

Demolition: Demolition would require the use of one concrete/industrial saw, one rubber-tired dozer, and one tractor/loader/backhoe for eight (8) hours per day. The total estimated time for demolition is estimated to be 42 construction days.

Grading: Grading the Project Site would require the use of one grader and one rubber-tired dozer for 8 hours a day, and two tractors/loaders/backhoes for seven (7) hours per day. The total estimated time for grading the Project Site is 15 construction days.

Building Construction: Building construction of the 11 homes would be the longest part of the construction process, estimating a time frame of 422 construction days. Building construction would require the use of one crane, one forklift, and one tractor/loader/backhoe for six (6) hours per day, and one generator set and three welders for 8 hours per day.

Paving: The paving process would require the use of one cement and mortar mixer and one paver for 6 hours per day, one roller for 7 hours per day, and one paving equipment and one tractor/loader/backhoe for 8 hours per day. The total estimated time for paving is estimated to be 24 construction days.

Architectural Coating: The architectural coating would require one air compressor for 6 hours per day for 25 construction days.

The long-term energy demand for the project construction operations would not result in a wasteful or inefficient use of energy. The project construction operations would not conflict with or obstruct the State's or Local plans for renewable energy or energy efficiency.

### 3.2.2 Best Management Practices During Construction

The following best management practices would be incorporated into the Proposed Project's construction specifications to identity how the Proposed Project would conform to Federal, State, and Local regulations:

- **Migratory Bird Treaty Act Compliance.** Bird nesting season generally extends from February 1 through September 15 in southern California and specifically, April 15 through August 31 for migratory passerine birds. To avoid impacts to nesting birds (common and special status) during the nesting season, a qualified Avian Biologist will conduct pre-construction Nesting Bird Surveys (NBS) prior to Project-related disturbance to nestable vegetation to identify any active nests. If no active nests are found, no further action will be required. If an active nest is found, the biologist will set appropriate no-work buffers around the nest which will be based upon the nesting species, its sensitivity to disturbance, nesting stage and expected types, intensity and duration of disturbance. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved no-work buffer zone shall be clearly marked in the field, within which no disturbance activity shall commence until the qualified biologist has determined the young birds have successfully fledged and the nest is inactive.
- **Accommodation for Unanticipated Cultural/Paleo Resources.** In the event that evidence of archaeological resources is unearthed during construction activities, all work within 50 feet of the discovery will be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds. No disturbance will occur in the vicinity of the find until the Project Site is evaluated by the archaeologist and the find is recorded or treated per the recommendations of the qualified archaeologist.

- **Public Resources Code (Human Remains).** In the event that human remains are discovered, there shall be no disposition of such human remains, other than in accordance with the procedures and requirements set forth in California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98. These code provisions require notification of the County Coroner and the Native American Heritage Commission, who in turn must notify those persons believed to be most likely descended from the deceased Native American for appropriate disposition of the remains. Excavation or disturbance may continue in other areas of the Project Site that are not reasonably suspected to overlie adjacent remains or archaeological resources.
- **National Pollution Discharge Elimination System.** Because the Project Site is greater than 1 acre, the applicant is required by the Santa Ana Regional Water Quality Control Board to prepare a Stormwater Pollution Prevention Plan (SWPPP) to address water quality and runoff during construction to comply with the State of California General Construction Permit. The SWPPP will outline the source control and/or treatment control Best Management Practices (BMPs) to avoid or mitigate runoff pollutants at the construction site to the "maximum extent practicable." All recommendations in the Plan shall be implemented during area grading and construction. The Proposed Project shall comply with each of the recommendations detailed in the Plan, and other such measure(s) as the City deems necessary to mitigate potential stormwater runoff impacts.
- **South Coast Air Quality Management District (SCAQMD).** During construction, the applicant is required to comply with various rules and regulations from the SCAQMD, including dust control and architectural coatings.

Based on the report by CalEEMod, the construction activities would have less than significant regional air quality impact and a less than significant localized impact.

## 3.3 Project Operations

The Proposed Project would fulfill the City's Housing Element goal (Goal 1, Goal 2) to facilitate the development of high-quality neighborhoods and housing stock and to accommodate Orange's Regional Housing Needs Allocation (RHNA). The Project Site in Orange is designed to accommodate the development of 11 two-story single-family homes that range in size from 2,425 square feet to 2,724 square feet.

The Proposed Project would include activities typical of residential development, such as landscape maintenance, daily vehicle trips for residents' departure and arrival, street cleaning, and common open space. The GP PEIR anticipated a

population of 153,522 and total housing units to be 66,850 by 2030, using SCAG 2004 Growth Forecast. According to the U.S. Census Bureau, the City's current (July 2023) population is 138,337[1] and the average persons per household from 2018 through 2022 was 2.98. According to this data, the Proposed Project will increase the population by approximately 33 persons with the addition of 11 single-family dwellings.

Operation of the Proposed Project would require electricity for multiple purposes, including cooling, lighting, appliances, and various equipment. Project operation would require natural gas for various purposes, including water heating and natural gas appliances. Petroleum fuel consumption for the Proposed Project is associated with automobile and truck trips traveling to and from the Project Site.

## 3.4 Project Approvals

The following approvals and permits are required from the City of Orange to implement the Proposed Project:

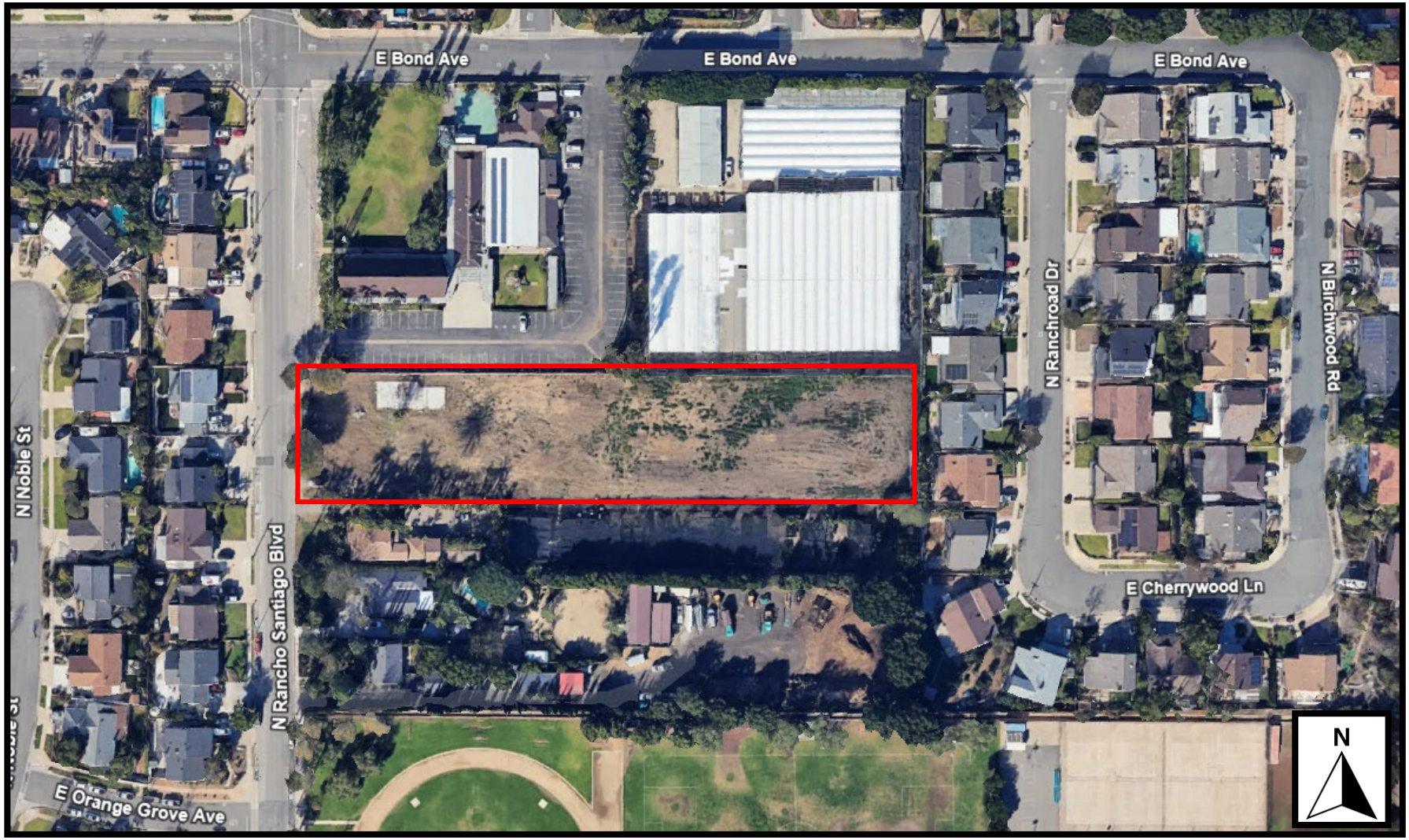
- Adopt Initial Study/CEQA Guidelines Section 15183 Analysis with the determination that the analysis has been prepared in compliance with the requirements of CEQA.
- Approval of Tentative Tract Map No. 0052-3 to subdivide the parcel into 11 lots
- Approval of Conditional Use Permit No. 3203-23 to allow the Planned Unit Development (PUD) to provide an alternative to standard residential development wherein the existing General Plan densities
- Zone Change to rezone the property from R-1-10 to R-1-10 (PUD)
- Approval of Major Site Plan Review No. 1137-23
- Approval of Design Review No. 5119-23

[1] U.S. Census Bureau QuickFacts: Orange city, California



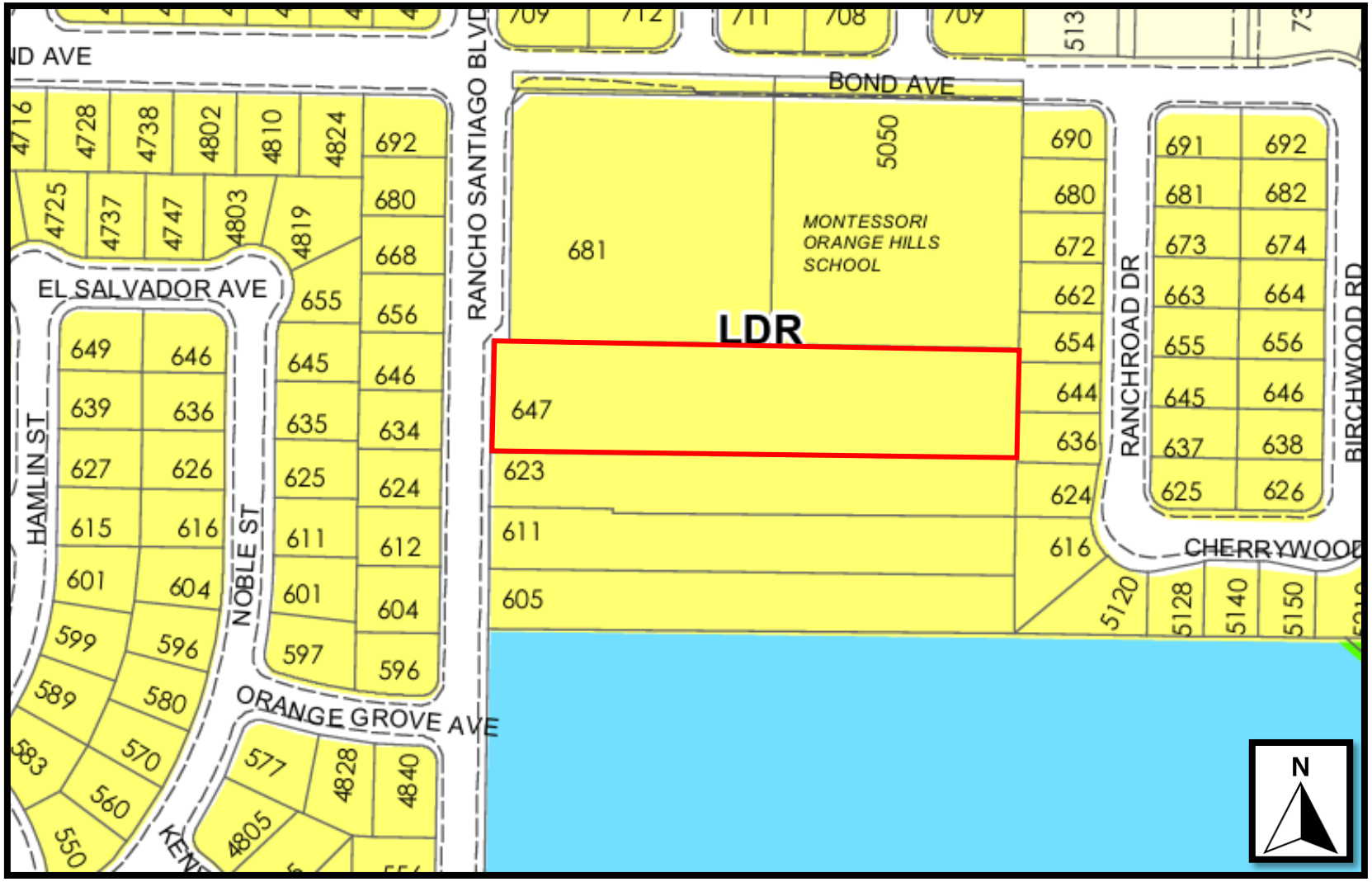

Project Location
-Not to Scale

Figure 1: Regional Vicinity
*Source: Google Earth*




Project Location
-Not to Scale

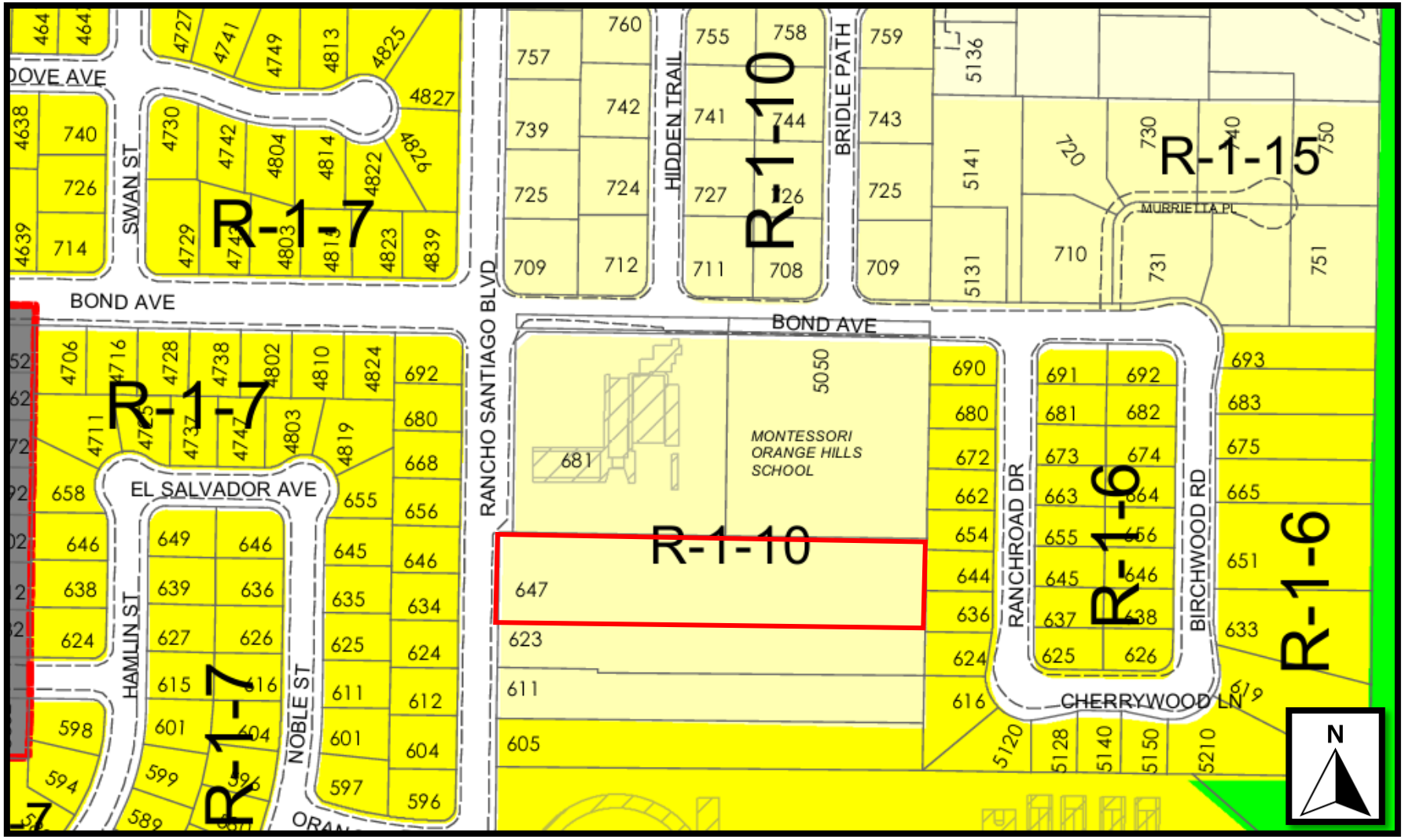
Figure 2: Site Location
*Source: Google Earth*




Project Location
-Not to Scale

Figure 3: General Plan Designation

*Source: City of Orange*




Project Location
-Not to Scale

Figure 3: Zoning Map
*Source: City of Orange*

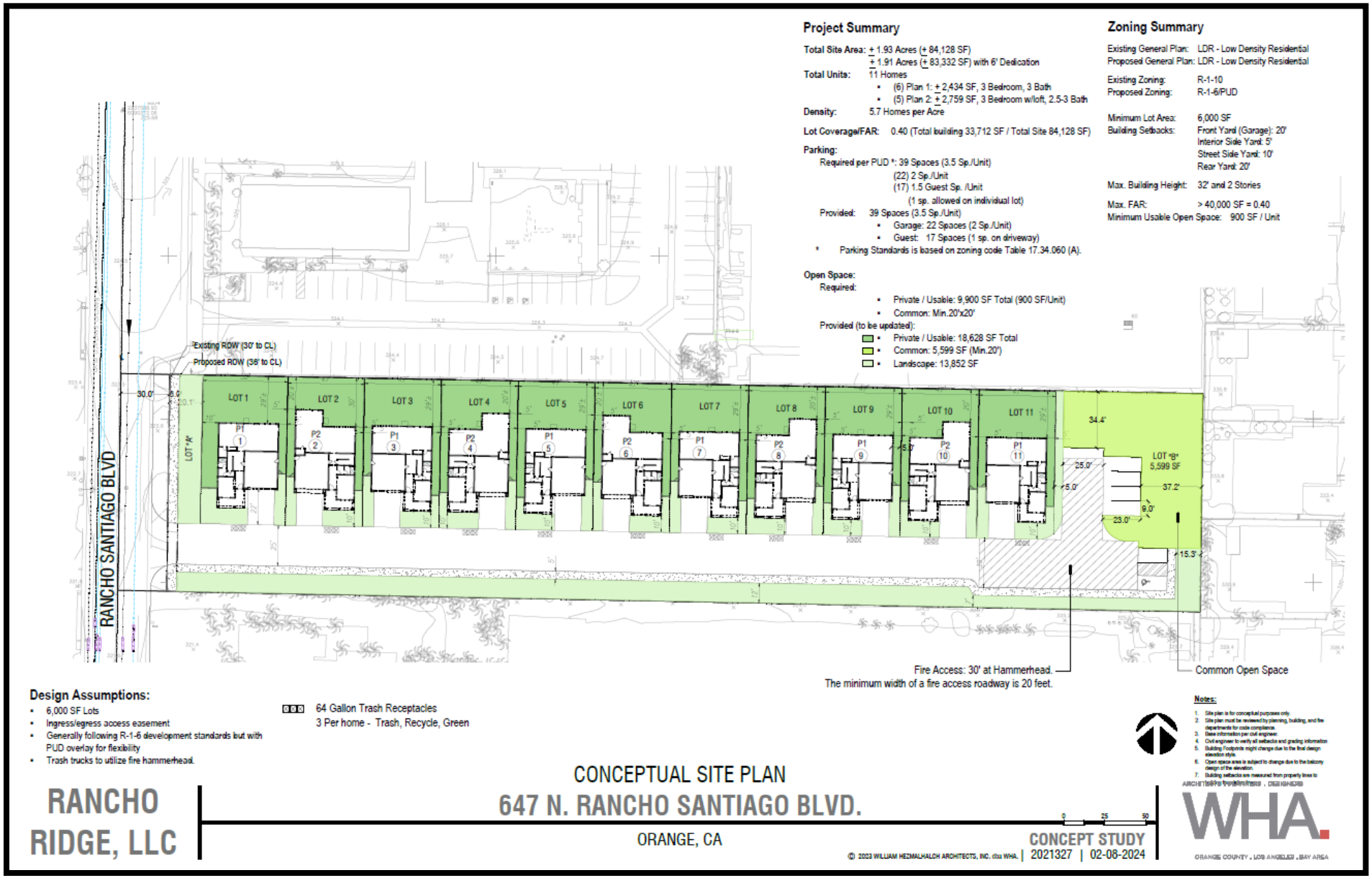



Figure 5: Conceptual Site Plan

*Source: William Hezmalhalch Architects, INC. (WHA)*

## Project Summary

**Total Site Area:** ± 1.93 Acres (± 84,128 SF)
± 1.91 Acres (± 83,332 SF) with 6' Dedication

**Total Units:** 11 Homes
- (6) Plan 1: ± 2,434 SF, 3 Bedroom, 3 Bath
- (5) Plan 2: ± 2,759 SF, 3 Bedroom w/loft, 2.5-3 Bath

**Density:** 5.7 Homes per Acre

**Lot Coverage/FAR:** 0.40 (Total building 33,712 SF / Total Site 84,128 SF)

**Parking:**
Required per PUD *: 39 Spaces (3.5 Sp./Unit)
(22) 2 Sp./Unit
(17) 1.5 Guest Sp. /Unit
(1 sp. allowed on individual lot)
Provided: 39 Spaces (3.5 Sp./Unit)
- Garage: 22 Spaces (2 Sp./Unit)
- Guest: 17 Spaces (1 sp. on driveway)

* Parking Standards is based on zoning code Table 17.34.060 (A).

**Open Space:**
Required:
- Private / Usable: 9,900 SF Total (900 SF/Unit)
- Common: Min.20'x20'

Provided (to be updated):
- Private / Usable: 18,628 SF Total
- Common: 5,599 SF (Min.20')
- Landscape: 13,852 SF

## Zoning Summary

Existing General Plan: LDR - Low Density Residential
Proposed General Plan: LDR - Low Density Residential

Existing Zoning: R-1-10
Proposed Zoning: R-1-6/PUD

Minimum Lot Area: 6,000 SF
Building Setbacks: Front Yard (Garage): 20'
Interior Side Yard: 5'
Street Side Yard: 10'
Rear Yard: 20'

Max. Building Height: 32' and 2 Stories

Max. FAR: > 40,000 SF = 0.40
Minimum Usable Open Space: 900 SF / Unit

## Notes:

1. Site plan is for conceptual purposes only.
2. Site plan must be reviewed by planning, building, and fire departments for code compliance.
3. Base information per civil engineer.
4. Civil engineer to verify all setbacks and grading information
5. Building Footprints might change due to the final design elevation style.
6. Open space area is subject to change due to the balcony design of the elevation.
7. Building setbacks are measured from property lines to building foundation lines.

## Design Assumptions:

- 6,000 SF Lots
- Ingress/egress access easement
- Generally following R-1-6 development standards but with PUD overlay for flexibility
- Trash trucks to utilize fire hammerhead.

64 Gallon Trash Receptacles
3 Per home - Trash, Recycle, Green

Figure 5: Conceptual Site Plan
*Source: William Hezmalhalch Architects, INC. (WHA)*

## 4. EVALUATION OF ENVIRONMENTAL IMPACTS

This analysis has been prepared to determine whether the Proposed Project would result in any new significant impacts or a substantial increase in the severity of previously identified significant impacts in the General Plan PEIR.

1) All answers must take account of the whole action involved, including offsite as well as onsite, cumulative as well as Project-level, indirect as well as direct, and construction as well as operational impacts.
2) A list of "Supporting Information Sources" must be attached and other sources used, or individuals contacted should be cited in the Narrative Summary for each section.
3) Response column heading definitions:
   a) **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 Environmental Impact Report (EIR) is required.
   b) **Potentially Significant Unless Mitigation Incorporated** applies where the incorporation of Mitigation Measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact". The Mitigation Measures must be described, along with a brief explanation of how they reduce the effect to a less than significant level.
   c) **Less Than Significant Impact** applies where the Project creates no significant impacts, only "Less Than Significant impacts".
   d) **Impacts Analyzed in GP PEIR; No New Impact** applies where the impacts for the category were analyzed in the GP PEIR and implementation of the Proposed Project would not result in any new impacts that were not analyzed in the GP PEIR.
   e) **No Impact** applies where a Project does not create an impact in that category. 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 proposed (e.g., the Project falls outside of 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 would not expose sensitive receptors to pollutants, based on a Project-specific screening analysis).
4) Earlier analyses may be used where, pursuant to a tiering, program EIR, Master EIR, or other California Environmental Quality Act (CEQA) process, an effect has been adequately analyzed in an earlier EIR or negative declaration (§ 15062(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 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.

5) Incorporate into the checklist any references to information sources for potential impacts (e.g., the General Plan, zoning ordinance). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

6) 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 significant.

## 4.1 Aesthetics and Visual Resources

### *Impact Analysis*

| CEQA THRESHOLDS | Project Peculiar Impact that is not Substantially Mitigated by Uniform Applied Policies | Significant Impact not Analyzed as Significant in the GP PEIR | Potentially Significant Offsite or Cumulative Impact not Discussed in the GP PEIR | Adverse Impact More Severe Based on Substantial New Information | No New Impact from GP PEIR |
|---|---|---|---|---|---|
| **I. AESTHETICS:** Except as provided in Public Resources Code Section 21099, would the project: | | | | | |
| a) Have a substantial adverse effect on a scenic vista? | | | | | X |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | | | | | X |
| c) In nonurbanized 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 a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | | | | | X |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | | | | | X |

### *General Plan PEIR Mitigation Measures*

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| **5.1-1** Upon adoption of the General Plan, the City will initiate and update the Zoning Code. The update will | Mitigation Measure is not applicable. |

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| create zoning districts to implement policies in the Elements for Land Use, Noise, Urban Design, and Cultural Resources. This and all future updates to the Zoning Code will include an active public participation process.<br><br>Specific revisions of the Zoning Code will be completed to address:<br><br>• A designation process for cultural resources to be listed in the City's local register, to include a broad range of historic resources, including separate or individual buildings, structures, objects, and sites, as well as districts and archaeological resources;<br>• Adaptive reuse of potential and listed historic resources. The City will consider provisions for including Neighborhood Character Areas (NCAs) as a zoning overlay. The following planning areas may be considered for this zoning revision: the El Modena, Cypress Street Barrio, and Railroad/Packinghouse Corridor neighborhoods.<br>• Development interface with Santiago Creek, the Santa Ana River, and other open space areas.<br><br>(**Implementation Program I-1**)<br><br>Until such time as the City adopts the Zoning Ordinance, all new development shall comply with the lighting, design, viewshed and related standards set forth in the current Zoning Code, or the standards established through a development agreement or specific plan for a particular development project. | However, the Proposed Project would comply with the lighting, design, viewshed, and related standards set forth in the Zoning Code. |
| **5.1-2** Prepare new design criteria for public gathering spaces, tourist commercial uses, rural development character, viewshed protection and preservation, and additional policies for mixed use development and transit-oriented development as needed. New design criteria should also include landscape standards that provide buffers such as open space, urban green zones, and other appropriate transitions between lower density, single-family neighborhoods and higher density development. Design criteria should also address standards for the provision of community gathering spaces within private development, incentives to provide accessible open spaces in commercial and mixed-use corridors, and | Mitigation Measure is not applicable. |

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| guidelines for the preservation of visual points of interest throughout the community. (**Implementation Program I-6**) | |
| **5.1-3** Prepare, adopt, and implement a pedestrian-oriented streetscape master plan as part of the City's decision to enhance the walkability of public spaces, with the goal of promoting multimodal transportation options. This plan will include the City's key commercial corridors, such as Tustin Street, Chapman Avenue, Main Street, and Katella Avenue. The master plan should integrate concepts discussed for these corridors throughout the General Plan related to pedestrian facilities, streetscapes, urban green zones, façade improvements, and signage. (**Implementation Program I-13**) | Mitigation Measure is not applicable. |
| **5.1-4** Develop a Streetscape Improvement Program for major and minor streetscapes, bikeways, and trails that includes standard plans and design criteria for unified lighting; paving materials and patterns; and landscaping such as street trees, median and slope planting, and landscaped parkways.<br><br>The Streetscape Improvement Program also includes development of specific standards to define and designate the following City Scenic Highways:<br><br>• Jamboree Road<br>• Santiago Canyon Road<br>• Newport Boulevard<br><br>(**Implementation Program I-14**) | Mitigation Measure is not applicable. |
| **5.1-5** Update design guidelines to incorporate the elements of community design character that reflect Orange's historic and cultural background. Require new development to incorporate the elements of the community's character and design into its projects. Determine how to retrofit the existing commercial, industrial, institutional, and mixed-use areas to include the community character elements. Community character elements can include, but are not limited to, architectural style, landscape style, streetscape, and signage. (**Implementation Program I-24**) | Mitigation Measure is applicable. The Proposed Project would be built with high-quality materials that would be consistent with the surrounding residential land uses. |

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| **5.1-6** Seek and develop appropriate incentives for project applicants and developers that provide public access to private green spaces in new, infill, and existing development. Work to establish neighborhood identity through the use of green spaces. When developed, incorporate applicable incentives into the Zoning Code to facilitate the provisions of applicable green spaces. Establish a program to transfer to the City, through land exchanges, purchases, or long term no-fee leases, land that is not currently in productive use such as derelict land, tax delinquent land, surplus road and highway rights-of-way, and other land located adjacent to existing open spaces, waterways, or trails. (**Implementation Program I-25**) | Mitigation Measure is not applicable. |
| **5.1-7** Comply with all City procedures in the review of proposed development projects and use the site plan review process to ensure that applicable General Plan policies and City standards and regulations are applied to proposals for specific development projects. (**Implementation Program III-2**) | Mitigation Measure is applicable. The Proposed Project would comply with all City procedures for review processes. The Proposed Project complies with the applicable General Plan policies and City standards and regulations. |
| **5.1-8** As part of the development application and review process, coordinate with SCE, Time Warner Cable, Cox Communications Orange County, The Gas Company, AT&T, cellular telephone service providers, and other local utilities to assess capacity and infrastructure needs to support new development or redevelopment activities. Require that utilities be moved underground consistent with the City's Master Utility Undergrounding Plan. (**Implementation Program V-1**) | Mitigation Measure is applicable. The Proposed Project would include coordination with all applicable utility providers to assess capacity and infrastructure needs. |
| **5.1-9** Adopt, review, implement, and update as necessary the following master plans, standards, and guidelines:<br>• Scenic highway standards for Santiago Canyon Road, Jamboree Road, and Newport Boulevard<br>• Historic Preservation Design Standards for Old Towne<br>• Design guidelines and/or standards for large complexes or districts of potential or listed historical resources | Mitigation Measure is not applicable. |

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| • Street Tree Master Plan<br>• Tustin Street Design Standards<br>• Design standards for areas where the General Plan is changing land uses, including the Southwest Project Area, Chapman Avenue, and South Main Street<br>• Redevelopment Plan<br>(**Implementation Program V-1**) | |

***Discussion***

*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 nonurbanized 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 and 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?*

***Narrative Summary: Impacts Analyzed in General Plan PEIR (a-d)***

**Less Than Significant Impacts with Mitigation.** The GP PEIR analyzed the aesthetic impacts associated with the implementation of the OGP. The GP PEIR identified that implementation of programmatic Mitigation Measures would reduce potential impacts to a less than significant level. Individual development projects would be required to undergo project-specific environmental review and Mitigation Measures would be identified to reduce any significant impacts associated with a project. Mitigation Measures 5.1-1 through 5.1-9 encourage the City to establish programs and updates to the OGP and Zoning Code to create standards, policies and procedures for new development projects to follow in order to maintain and improve community character and reduce impacts to scenic vistas and scenic resources. Proposed development under the OGP in some portions of the eastern planning area would change the nature of the scenic resources. Mitigation Measures 5.1-1 through 5.1-7 and 5.1-9 would reduce the potential impacts from buildout of the OGP to a less than significant level. Mitigation Measure 5.1-8 ensures that current utilities and infrastructure have capacity to accommodate future development projects. In the urbanized portion of the planning area, OGP implementation would increase the density and intensity of development, that may result in the alteration of the visual character of unique neighborhoods. Mitigation Measures 5.1-1 through 5.1-9

would reduce these potential impacts to a less than significant level by establishing design and development standards and guidelines for future development, including revisions of the Zoning Code and OGP. Additionally, new development associated with the OGP Buildout may increase light and glare in the community but would be reduced to a less than significant level with implementation of Mitigation Measures 5.1-1 through 5.1-4. Mitigation Measures 5.1-1 through 5.1-4 requires new development to follow the City's applicable design criteria, zoning code revisions, master plans, programs, and guidelines.

Therefore, impacts related to scenic vistas, scenic resources, visual character, and light and glare are reduced to a less than significant level with implementation Mitigation Measures 5.1-1 through 5.1-9.

***Impacts Associated with the Proposed Project:***

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

**No New Impacts.** A scenic vista is the view of an area that is visually or aesthetically pleasing from a certain vantage point, typically viewed from some distance away. Aesthetic components of a scenic vista include (1) scenic quality, (2) sensitivity level, and (3) view access. A scenic vista can be impacted by a development project having visual impacts by directly diminishing the scene quality of the vista or by blocking the view corridors or "vista" of the scenic resources. Important factors to determine whether a proposed project would have an effect on a scenic vista include the project's proposed height, mass, and location relative to surrounding land uses and travel corridors. The Proposed Project does not contain a scenic vista; however, the City of Orange has scenic viewscape corridors along Santiago Canyon Road and Jamboree Road in Santiago Hills and East Orange. Portions of the City's planning area contain scenic vistas or resources, such as Irvine Lakes, grassy valleys, rugged hillside, rock outcroppings, and window canyons, of which can be viewed from Santiago Canyon Road. The Proposed Project is not expected to impact these scenic resources or viewpoints.

The Proposed Project is located approximately 540 feet west of the El Modena Open Space. The OGP mentions the El Modena Open Space as one of the many ecological and biological resources part of the Central and Coastal Orange County Natural Communities Conservation Plan (NCCP) Habitat Reserve (Natural Resources Element, NR-9, NR-33). The Proposed Project proposes to develop 11 two-story dwellings on a vacant site. There are one-to-two-story single-family residential homes in between the Project Site and El Modena Open Space area. The Proposed Project does not propose any features that would impact any scenic vistas. Additionally, the Proposed Project would adhere to GP PEIR Mitigation Measures 5.1-1 through 5.1-9, which require new developments to adhere to the City's Zoning Code and any other applicable design standards. Therefore, GP PEIR Mitigation Measures 5.1-1 through 5.1-9 would reduce the any

impacts on scenic vistas to a less than significant level. The Proposed Project is not located on or immediately adjacent to any scenic vistas. Therefore, the Proposed Project would not result in a new significant impact or in a substantial increase in the severity of the impacts identified in the GP PEIR, and no new mitigation is required.

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

**No New Impacts.** The GP PEIR Mitigation Measure 5.1-4 designates Jamboree Road, Santiago Canyon Boulevard, and Newport Boulevard as City Scenic Highways to preserve the scenic nature of the open space adjacent to the road. The Project Site is located approximately 2.2-miles west of Jamboree Road, one mile south of Santiago Canyon Boulevard, 1.6-mile west of Newport Boulevard. The Proposed Project does not propose any features that would impact the City Scenic Highways. As discussed in threshold a, the Proposed Project is not expected to impact the City's viewscape corridors, including rock outcroppings. The Proposed Project does not substantially damage any scenic resources and scenic highways, and no new impacts would occur and no new mitigation would be required.

*c) In nonurbanized 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 and other regulations governing scenic quality?*

**No New Impacts.** The Project Site is located in an urbanized area, zoned as Single-Family Residential (R-1-10), and has a OGP land use designation of Low Density Residential. The Proposed Project intends for the Project Site to remain Single-Family Residential with a PUD overlay. The Proposed Project would comply with the R-1-10 and PUD standards, as applicable.

Although the Proposed Project would substantially alter the existing character of the Project Site by changing it from vacant to residential structures, it would not degrade the aesthetic quality of the Project Site surroundings. The buildings would be aesthetically pleasing with neutral color tones, architectural pop-out elements, and on-site improvements. The Proposed Project would provide landscaping throughout the Project Site consisting of trees, shrubs, and groundcover. The Proposed Project would be in conformance with surrounding properties as well as zoning and other regulations governing scenic quality.

The Proposed Project would comply with several General Plan policies regarding scenic quality and aesthetics:

**Table 2 – General Plan Policies (Scenic Quality and Aesthetics)**

| Policy | Project Compliance |
|---|---|
| **Goal LU-1: Meet the present and future needs of all residential and business sectors with a diverse and balanced mix of land uses** | |
| **Policy LU-1.3:** Provide a range of housing densities and types to meet the diverse needs and lifestyles of residents | The Proposed Project would provide a different housing density than surrounding properties to diversify the types of housing within the area. |
| **Policy LU-1.4:** Ensure that new development reflects existing design standards, qualities, and features that are in context with nearby development. | The Proposed Project includes similar design standards and features to surrounding development, developed with aesthetically pleasing neutral color tones, landscaped areas and architectural pop-out elements. |
| **Goal UD-6:** Encourage contextually appropriate infill development projects and property renovations | |
| **Policy UD-6.2:** Ensure that new infill development contributes positively to the quality of the surrounding corridor or neighborhood, including the potential to provide additional park space, and minimize the visibility of on-site parking | The Proposed Project would improve the quality of the land as well as provide additional usable open space. The attached garages minimize the visibility of on-site parking. |
| **Policy UD-6.5:** Provide logical transitions between higher intensity development within the City's established commercial, office, and institutional corridors and nearby single-family neighborhoods. Scale, massing, and the location of services within these corridors should respond sensitively to adjacent residential uses. | The Proposed Project proposes Low Density Residential development in a predominantly Low Density Residential area, but varies with Single Family zoning requirements, such as density and development standards, creating more ability to transition to higher intensity of development to surrounding areas. |
| **Goal NR-7:** Protect significant view corridors, open space, and ridgelines within the urban environment. | |
| **Policy NR-7.3:** Encourage the development of landscaped medians and parkway landscaping along arterial streets in public and private projects, and encourage the state to provide freeway landscaping. | All frontages of the Project Site, including along Rancho Santiago Blvd., would be landscaped. There are pedestrian connections from Rancho Santiago Blvd. into the Project Site that are landscaped. The Proposed Project entry via Rancho Santiago Blvd also includes an entry |

| | |
|---|---|
| | monument and entry driveway with enhanced paving. |
| Source: Orange General Plan – Land Use Element and Urban Design Element | |

Compliance with the General Plan goals and policies will ensure the Project does not conflict with applicable regulations governing scenic quality. Therefore, the impact is less than significant, and no new mitigation is required.

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

**No New Impacts.** The Project Site is located on a Single Family Residential (R-1-10) zoned parcel, which is currently vacant and not emitting any light. The Project Site is in an urbanized area and surrounded by primarily residential and commercial uses. All lighting would be consistent with the requirements of the OMC Section 17.12.030 – Lighting. Generally, the standards state that lighting on any premises shall be directed, controlled screened or shaded so that direct glare and reflections are contained within the boundaries of the parcel, not to shine directly on surrounding premises. Lighting shall be controlled to prevent glare and direct light of any public sidewalks or thoroughfares. All lighting fixtures shall be appropriate in scale, intensity, and height to the use served. As such, the Project would not create a new source of substantial light or glare that would adversely affect day or nighttime view in the area and impacts are anticipated to be less than significant, and no new mitigation is required. There are no new impacts beyond what is analyzed in the GP PEIR.

### *Conclusion*

The Proposed Project would not result in a new significant impact or in a substantial increase in the severity of the aesthetic impacts previously identified in the GP PEIR, and no mitigation would be required. Implementation of the Proposed Project would not contribute to a project specific or cumulatively considerably adverse impact. The Proposed Project would not result in any peculiar impacts or any new significant impacts that were not already discussed in the GP PEIR. Accordingly, no further review is required. With regards to the issue area of Aesthetics, the following findings can be made:

1. No peculiar impacts to the Project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed by the GP PEIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the GP PEIR.
4. No Mitigation Measures contained within the GP PEIR would be required because Project-specific impacts would be less than significant. GP PEIR uniformly applied development policies and

standards have been implemented through the Proposed Project.

## 4.2 Agriculture and Forestry Resources

### *Impact Analysis*

| CEQA THRESHOLDS | Project Peculiar Impact that is not Substantially Mitigated by Uniform Applied Policies | Significant Impact not Analyzed as Significant in the GP PEIR | Potentially Significant Offsite or Cumulative Impact not Discussed in the GP PEIR | Adverse Impact More Severe Based on Substantial New Information | No New Impact from GP PEIR |
|---|---|---|---|---|---|
| **II. AGRICULTURE AND FORESTRY 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 Dept. 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.<br><br>Would the project: | | | | | |
| 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? | | | | | X |
| b) Conflict with existing zoning for agricultural use or a Williamson Act contract? | | | | | X |
| 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))? | | | | | X |

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

### *General Plan PEIR Mitigation Measures*

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| No GP PEIR Mitigation Measures were required. | - |

### *Discussion*

*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 nonagricultural 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 nonagricultural use or the conversion of forest land to non-forest use?*

#### *Narrative Summary: Impacts Analyzed in the GP PEIR (a-d)*

**Less than Significant Impact.** According to the OGP, there are four different areas located within the City's planning area that are considered Important Farmland. Location 1 is designated by the Department of Conservation as Farmland of Statewide Importance and Unique Farmland, and is located at the intersection of Chapman Avenue and Jamboree Road. The OGP designates Location 1 as Public Facilities and Institutions (PFI), allowing for development of public and institutional facilities, schools, and major utility easements and properties. Although this location is designated as Farmland of Statewide Importance and Unique Farmland, previous development and grading of the property have

substantially decreased the possibility of using the Project Site for agricultural production in the future. Location 2 is designated Unique Farmland and is currently being used as a potted plant nursery. Location 3 contains Unique Farmland designated as open space. The Important Farmland in this area is currently being used as a plant nursery, not under active cultivation. Location 4 is also designated as open space, where the Important Farmland in this location is currently being used as a plant nursery and contains a row of greenhouses. Implementation of the OGP would not alter the designation of location 2, 3 or 4, nor result in the loss of the land for future agricultural use. No conversion of farmland to nonagricultural use would occur with the implementation of the General Plan. Additionally, no land within the planning area is currently under the Williamson Act contract. No Mitigation Measures have been identified as there are no significant impacts to agricultural resources.

### *Impacts Associated with the Proposed Project (a-d):*

**No New Impacts.** The Proposed Project involves the subdivision of the existing parcel into 11 individual lots to develop 11 single-family homes and associated garages, landscaping, common open space, and driveways. According to the California Department of Conservation (DOC) California Important Farmland Finder (CIFF), the Project Site is designated as rural residential land and is not designated as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. The Proposed Project would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses. The Project Site is not currently zoned for agricultural uses and does not propose to rezone any forest land, timberland, or timberland zoned Timberland Production. According to the DOC's California Williamson Act Enrollment Finder, the Project Site also does not contain land subject to a Williamson Act contract (**Figure 6** – *Agricultural Designation Map*). Although the Project Site was historically used for agricultural *Project Site Agricultural Designation Map* fields from at least 1946 to sometime before 1963, the Project Site has since been developed for residential uses and is not currently zoned for timberland uses or subject to use as forest land or timberland production. No new impacts related to conflict with existing for forest land, timberland, or timberland production would occur. Additionally, no new impacts related to loss of, or conversion of farmland or forest land to nonagricultural uses would occur. Therefore, no mitigation would be required.

### *Conclusion*

The Proposed Project would not result in any impacts to agricultural or forestry resources beyond those identified in the previously certified GP PEIR. Therefore, no mitigation is required. The Project would not result in any new significant impacts or in a substantial increase in the severity of impacts evaluated in the GP

PEIR that would render Section 15183 inapplicable to the Project. With regards to the issue area of Agricultural and Forestry Resources, the following findings can be made:

1. No peculiar impacts to the Project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed by the GP PEIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the GP PEIR.
4. No Mitigation Measures contained within the GP PEIR would be required because Project-specific impacts would be less than significant. GP PEIR uniformly applied development policies and standards have been implemented through the Proposed Project.

## 4.3 Air Quality

Ganddini performed an Air Quality Assessment for the Proposed Project to assess potential impacts to air quality (**Appendix A** – *Rancho Ridge Infill Project Air Quality, Global Climate Change, and Energy Impact Analysis, City of Orange,* Ganddini Group, March 31, 2023).

### *Regulatory Setting*

Air pollutants are regulated at the national, state, and regional level. The United States Environmental Protection Agency (EPA) regulates at the national level under the Clean Air Act of 1970. It is responsible for setting and enforcing the National Ambient Air Quality Standards (NAAQS) for atmospheric pollutants. The California Air Resources Board (CARB), which is a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and state air pollution control programs within California. In this capacity, the CARB conducts research, sets the California Ambient Air Quality Standards (CAAQS), compiles emission inventories, establishes emission standards, develops suggested control measures, provides oversight of local programs, and prepares the State Implementation Plan. The South Coast Air Quality Management District (SCAQMD) is responsible for comprehensive air pollution control in the South Coast Air Basin (SCAB). The SCAQMD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emission sources, and enforces such measures through educational programs or fines, when necessary. The SCAQMD is directly responsible for reducing emissions from stationary, mobile, and indirect sources.

There are six common air pollutants, called criteria pollutants, which were identified in the Clean Air Act of 1970.

- Ozone ($O_3$)
- Nitrogen Dioxide ($NO_2$)
- Carbon Monoxide (CO)
- Sulfur Dioxide ($SO_2$)
- Lead (Pb)
- Particulate Matter (PM10 and PM2.5)

The EPA and CARB designate air basins where ambient air quality standards are exceeded as "nonattainment" areas. If standards are met, the area is designated as an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered "unclassified." National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards.

The Project Site is in the City of Orange, which is part of the SCAB region that includes the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County. The SCAQMD's 2022 Air Quality Management Plan (AQMP) assesses the attainment status of the SCAB. The 2022 AQMP builds upon measures already in place from previous AQMPs. It also includes a variety of additional strategies such as regulation, accelerated deployment of available cleaner technologies (e.g., zero emission technologies, when cost-effective and feasible, and low NOx technologies in other applications), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other Clean Air Act measures to achieve the 2015 8-hour ozone standard. The 2022 AQMP was approved and adopted by CARB on January 26, 2023.

### *Environmental Setting*

The South Coast Air Basin is a 6,600-square-mile coastal plain bounded by the Pacific Ocean to the southwest and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The ambient concentrations of air pollutants are determined by the amount of emissions released by sources and the atmosphere's ability to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, atmospheric stability, and sunlight. Therefore, existing air quality conditions in the area are determined by such natural factors as topography, meteorology, and climate, in addition to the amount of emissions released by existing air pollutant sources.

Atmospheric conditions such as wind speed, wind direction, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants. The topography and climate of southern California combine to make the Basin an area of high air pollution potential. The Basin is a coastal plain connecting broad valleys and low hills, bounded by the Pacific Ocean to the west and high mountains around the rest of the perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds.

The usually mild climatological pattern is disrupted occasionally by periods of extremely hot weather, winter storms, or Santa Ana winds. During the summer months, a warm air mass frequently descends over the cool, moist marine layer produced by the interaction between the ocean's surface and the lowest layer of the atmosphere. The warm upper layer forms a cap over the cool marine layer and inhibits the pollutants in the marine layer from dispersing upward. In addition, light winds during the summer further limit ventilation. Furthermore, sunlight triggers

the photochemical reactions that produce ozone. The region experiences more days of sunlight than any other major urban area in the nation except Phoenix[2].

### *Local Air Quality*

The air quality at any site is dependent on the regional air quality and local pollutant sources. Regional air quality is determined by the release of pollutants throughout the air basin. Area sources, including architectural coatings and consumer products subcategories, are the major contributor to VOC emissions. Mobile sources, stationary point source, and stationary area source categories are the top contributors to NOx, SOx, and PM2.5 emissions, respectively[3].

Estimates of the existing emissions in the Basin provided in the 2022 AQMP indicate that collectively, mobile sources account for 46 percent of the VOC, 85 percent of the NOx emissions, 89 percent of the CO emissions and 29 percent of directly emitted PM2.5, with another 18 percent of PM2.5 from road dust. Stationary sources are responsible for most of the SOx emissions in the Basin, with the point source category (larger facilities subject to AER requirements) contributing 49 percent of total SOx emissions. Non-vehicle related area sources, such as commercial cooking are the predominant source of directly emitted PM2.5 emissions, contributing 41 percent of total emissions.

The SCAQMD has divided the South Coast Air Basin into fourteen general forecasting areas and 38 Source Receptor Areas (SRA) for monitoring and reporting local air quality. The SCAQMD provides daily reports of the current air quality conditions in each general forecast area and SRA. The monitoring areas provide a general representation of the local meteorological, terrain, and air quality conditions within the SCAB.

The Project Site is located in the Central Orange County Air Monitoring Source Receptor Area (SRA 17). Data for the project-specific air quality analysis was taken from the Anaheim-Pampas Lane monitoring station (Anaheim Station). The Anaheim Station is located approximately 8.33 miles northwest of the Project Site at 1630 W Pampas, Anaheim.

[2] 2022 Air Quality Management Plan, South Coast Air Quality Management District (2022). Accessed on August 3, 2024. https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/final-2022-aqmp.pdf?sfvrsn=16

[3] *Ibid.*

## *Impact Analysis*

| CEQA THRESHOLDS | Project Peculiar Impact that is not Substantially Mitigated by Uniform Applied Policies | Significant Impact not Analyzed as Significant in the GP PEIR | Potentially Significant Offsite or Cumulative Impact not Discussed in the GP PEIR | Adverse Impact More Severe Based on Substantial New Information | No New Impact |
|---|---|---|---|---|---|
| **III. 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: | | | | | |
| a) Conflict with or obstruct implementation of the applicable air quality plan? | | | | | X |
| 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? | | | | | X |
| c) Expose sensitive receptors to substantial pollutant concentrations? | | | | | X |
| d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people? | | | | | X |

## *General Plan PEIR Mitigation Measures*

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| **5.3-1** Comply with all provisions of CEQA. In addition to thresholds that may be established or adopted by the City in the future, utilize the following thresholds and/or | Mitigation Measure is applicable. However, it should be noted that the Proposed Project would adhere to the latest |

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| procedures for CEQA analysis of proposed projects, consistent with policies adopted within the General Plan:<br>• Circulation<br>o LOS D (volume to capacity [V/C] ratio less than or equal to 0.90) shall be the lowest acceptable level of service for both roadway segments and peak-hour intersection movements.<br>o Orange County's Congestion Management Plan (CMP) specifies LOS E (V/C ratio less than or equal to 1.00) as the operating standard for roadways on the CMP highway system.<br>o Projects that increase V/C by 0.01 or more on affected roadway segments or intersections experiencing LOS E or F conditions without the proposed project are considered to create significant impacts, and mitigation is required.<br>All future development proposals shall be reviewed by the City for potential regional and local air quality impacts per CEQA. If potential impacts are identified, mitigation will be required to reduce the impact to a level less than significant, where technically and economically feasible. (**Implementation Program III-1**) | provisions of CEQA, which no longer utilizes LOS to determine significance of transportation impacts (SB 743). Vehicle Miles Traveled (VMT) is used in place of LOS. |
| **5.3-2** Require major employers of 100 persons or more to institute TDM Plans. Such plans establish incentives to encourage employees to carpool, take public transportation, bicycle, or use some means other than private automobiles to get to and from work. (**Implementation Program III-5**) | Mitigation Measure is not applicable. |
| **5.3-3** The City strongly encourages new development and major renovation projects to employ green building techniques and materials. Encourage proposed development projects throughout the City to use Leadership in Energy and Environmental Design (LEED®) Standards developed by the U.S. Green Building Council or similar third-party verified program. Encourage building orientations and landscaping that enhance natural lighting and sun exposure. Prepare guidelines for sustainable development to encourage incorporation of these practices in new development. These guidelines will | Mitigation Measure is applicable. The Proposed Project would comply with State Title 24 building construction standards, Energy Star conservation standards, and any applicable mandatory regulations and standards. |

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| include measures to maximize soil permeability to address related storm water and surface-water runoff issues.<br><br>Require compliance with State Title 24 building construction standards and Energy Star conservation standards for all development projects.<br><br>Climate change Mitigation Measures identified in the General Plan EIR shall be incorporated as implementation programs and applied to new development projects upon adoption of the General Plan. (**Implementation Program III-11**) | |
| **5.3-4** Use public education activities to accomplish the following objectives:<br>• Educate residents regarding air and water quality, including the effects of urban<br>• runoff;<br>• Raise public awareness about the importance of "green building" techniques; and<br>• Educate the public regarding the benefits of recycling and waste reduction.<br><br>Coordinate education activities and make materials available to residents. Utilize all available media including forums, flyers, brochures, email, videos, interpretive displays, workshops, and the City's website and cable television channel to accomplish these objectives. Fully utilize the resources of the Orange Public Library to disseminate this information. Explore partnerships with local schools and educators to develop various educational programs related to historic preservation, personal and community safety, and environmental awareness. (**Implementation Program IV-3**) | Mitigation Measure is not applicable. |
| **5.3-5** Participate in regional efforts to implement TDM requirements and support implementation of the employer TDM provisions of the SCAQMD AQMP by working with the SCAQMD to identify employers within Orange most suitable for participation in the TDM programs to achieve major reduction of VMT. (**Implementation Program IV 6**) | Mitigation Measure is not applicable. |
| **5.3-6** Work with SCAQMD and SCAG to implement the AQMP and meet all federal and state air quality standards for pollutants. Participate in any future amendments and updates to the AQMP. (**Implementation Program V-10**) | Mitigation Measure is applicable. The Proposed Project would comply with all applicable regulations |

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| | and rules of the SCAQMD and the AQMP. |
| **5.3-7** The City shall require each project applicant to implement the following measures to reduce the exposure of sensitive receptors to TACs from mobile sources, as a condition of project approval:<br>• Activities involving idling trucks shall be oriented as far away from and downwind of existing or proposed sensitive receptors as feasible.<br>• Strategies shall be incorporated to reduce the idling time of main propulsion engines through alternative technologies such as IdleAire, electrification of truck parking, and alternative energy sources for TRUs to allow diesel engines to be completely turned off.<br>• Proposed developments shall incorporate site plans that move sensitive receptors as far as feasibly possible from major roadways (100,000+ average daily trips).<br>• Projects containing sensitive receptors (such as residences, schools, day care centers, and medical facilities) on sites within 500 feet of a freeway must demonstrate that health risks relating to diesel particulates would not exceed acceptable health risk standards prior to project approval. | Mitigation Measure is applicable. The Proposed Project shall implement the following measures to reduce the exposure of sensitive receptors to TACs from mobile sources. |

### *Discussion*

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

***Narrative Summary: Impacts Analyzed in the GP PEIR (a)***

**Significant and Unavoidable Impact.** The GP PEIR discusses the OGP's impact with the Air Quality Management Plan (AQMP). In preparation of the AQMP, SCAQMD and the Southern California Association of Governments (SCAG) relied on population growth projects in the region to forecast, inventory, and allocate regional emissions from land use and development-related sources. For the purposes of analyzing consistency with the AQMP, the GP PEIR assumed that if the General Plan would accommodate population growth substantially greater than anticipated in the AQMP, then the OGP would conflict with the AQMP. According to SCAG projections, the population in Orange would increase to 153,522 persons in 2030. The OGP, however, could accommodate a population of 194,543 beyond 2030. The GP PEIR states that the General Plan buildout would result in an increase of approximately 23,478 dwelling units, 35.7 million square feet of

nonresidential building area over existing conditions, and a net population increase of approximately 57,844 persons.

The GP PEIR states that the OGP would result in emissions in excess of thresholds for criteria air pollutants and precursors for which the region is in nonattainment and would increase population (and thus VMT) beyond that anticipated by SCAG. Therefore, the OGP would conflict with SCAQMD air quality planning efforts (OGP, page 5.3-28).

The GP PEIR assumed that all trips and associated emissions would be new to the City. The GP PEIR assessed air quality short-term impacts and long-term impacts from future development allowed by the General Plan. The GP PEIR relies on the significance criteria established by CARB and SCAQMD. Construction-related emissions of criteria air pollutants (e.g. $PM_{10}$) and ozone precursors (ROG and NOx) were assessed in accordance with methodologies recommended by CARB and SCAQMD. Emissions of criteria air pollutants and ozone precursors associated with new growth under the OGP were treated as new to the City as a conservative (worst-case) assumption.

Mitigation Measure 5.3-6 requires the City to work with the SCAQMD and SCAG to ensure consistency with the AQMP. The OGP intended to accommodate growth primarily through land use focus areas in already developed areas of the City. Many of the focus areas are adjacent to existing transit services and within walking distance of commercial services. Additionally, the development in these areas would primarily be mixed use development. These factors could lead to a reduction in VMT. However, even with implementation of these goals, policies, and programs, and Mitigation Measure 5.3-6 anticipated population and development consistent with the OGP under the proposed project could lead to operational (mobile-source and area-source) emissions that exceed thresholds. Therefore, this impact would be significant and unavoidable.

***Impacts Associated with the Proposed Project (a):***

**No New Impacts.** The Proposed Project would not conflict with or obstruct implementation of the SCAQMD Air Quality Management Plan (AQMP). The AQMP establishes thresholds for criteria pollutants. Projects that exceed any of the indicated daily thresholds should be considered as having an individually and cumulatively significant air quality impact and are not in compliance with the AQMP. The primary purpose of the air quality plan is to bring an area that does not attain federal and state air quality standards into compliance with those standards pursuant to the requirements of the Clean Air Act and California Clean Air Act. A Proposed Project should be considered to be consistent with the AQMP if it furthers one or more policies and does not obstruct other policies. The SCAQMD CEQA Handbook identifies two key indicators of consistency:

Criterion 1: Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

Criterion 2: Whether the project will exceed the assumptions in the AQMP, or increments based on the years of project buildout and phase.

Based on the air quality modeling analysis contained in **Appendix A** and included in **Tables 4 through 8** below, neither short-term construction impacts, nor long-term operations impacts would result in significant impacts based on the SCAQMD regional and local thresholds of significance. Therefore, the Proposed Project is not projected to contribute to the exceedance of any air pollutant concentration standards and is found to be consistent with the AQMP for Criterion 1.

Regarding Criterion 2, the AQMP incorporates land use assumptions from local general plans and regional growth projections developed by SCAG to estimate stationary and mobile air emissions associated with projected population and planned land uses, namely SCAG's 2020 Regional Transportation Plan/Sustainable Communities Strategy (RTP). If the proposed land use is consistent with the local general plan, then the impact of the project is presumed to have been accounted for in the AQMP. This is because the land use and transportation control sections of the AQMP are based on the SCAG regional growth forecasts, which incorporates projections from local general plans.

The Project Site is designated as Low Density Residential in the General Plan and is zoned R-1-10. The Project proposes 11 single-family homes on approximately 1.93-acres. The Project proposes to establish a PUD to update the Project Site's zoning from R-1-10 to R-1-10 (PUD). The Proposed Project will comply with all the development standards established in the zoning code for the PUD except the minimum lot area. The lot area has been modified for consistency with the General Plan land use designation density. The Project is not requesting an amendment to the zoning map to rezone the property. In accordance with California Government Code Section 65589.5(j)(4), "For purposes of this section, a proposed housing development project is not inconsistent with the applicable zoning standards and criteria, and shall not require a rezoning, if the housing development project is consistent with the objective general plan standards and criteria but the zoning for the Project Site is inconsistent with the general plan. If the local agency has complied with paragraph (2), the local agency may require the proposed housing development project to comply with the objective standards and criteria of the zoning which is consistent with the general plan, however, the standards and criteria shall be applied to facilitate and accommodate development at the density allowed on the Project Site by the general plan and proposed by the proposed housing development project." The California Department of Housing and Community Development (HCD)

reaffirmed that cities could not require a rezone/reclassification in the Housing Accountability Act Technical Assistance Advisory, issued on September 15, 2020. The project would comply with the R-1-10 and PUD standards, as applicable.

Furthermore, the SCAQMD acknowledges that strict consistency with all aspects of the AQMP is not required in order to make a finding of no conflict. Rather, a project is considered to be consistent with the AQMP if it furthers one or more policies and does not obstruct other policies. The project would implement contemporary energy-efficient technologies and regulatory/operational programs required per Title 24, CALGreen and City standards. Generally, compliance with SCAQMD emissions reductions and control requirements also act to reduce project air pollutant emissions. In combination, project emissions-reducing design features and regulatory/operational programs are consistent with and support overarching AQMP air pollution reduction strategies. Project support of these strategies promotes timely attainment of AQMP air quality standards and would bring the project into conformance with the AQMP. Therefore, the Proposed Project is not anticipated to exceed the AQMP assumptions for the Project Site and is found to be consistent with the AQMP for the second criterion.

Based on the above, the Proposed Project would not result in an inconsistency with the SCAQMD AQMP. A less than significant impact would occur, and no mitigation would be required. No new significant or peculiar impacts from what is analyzed in the GP PEIR are found and the Proposed Project would not result in a new significant impact or in a substantial increase in the severity of the impacts identified in the GP PEIR.

*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?*

***Narrative Summary: Impacts Analyzed in the GP PEIR (b)***

**Potentially Significant Impact.** *Short-Term Impacts:* Construction-related emissions are described as short-term or temporary in duration and have the potential to represent a significant impact with respect to air quality. The OGP identifies future land uses and does not contain specific development proposals. Buildout of the OGP is dependent on individual housing decisions, employment opportunities, provision of services for housing and supporting commercial uses, land use decisions of the City and other public agencies, regional transportation planning decisions, the decisions of financial institutions related to development projects, and other similar factors. Therefore, construction-related emissions associated with the General Plan implementation are speculative and cannot be determined broadly. Construction-related activities would result in emissions of criteria air pollutants and ozone precursors from site preparation (e.g., excavation, grading, and clearing); exhaust from off-road equipment, material

delivery trucks, and worker commute vehicles; vehicle travel on paved and unpaved roads; and other miscellaneous activities (e.g. building construction, asphalt paving, application of architectural coatings and trenching for utility installation). Emissions of ozone precursors are associated primarily with exhaust from off-road construction equipment, worker commute trips, and other construction-related activities.

The GP PEIR conducted modeling that assumed a 20-year planning horizon and compared the estimated emissions from buildout of the OGP with the applicable SCAQMD significance thresholds. Based on the modeling conducted, construction-related activities would result in emissions of ROG, NOX, PM10, and PM2.5 that exceed SCAQMD's significance thresholds. SCAB is already in nonattainment for these pollutants. Thus, construction-related emissions of ozone precursors could violate or contribute substantially to an existing or projected air quality violation, and/or expose sensitive receptors to substantial pollutant concentrations. The GP PEIR concludes that because of the large amount of development and potential for simultaneous construction of multiple sites, the nonattainment status of the SCAB, and modeled emissions that exceed applicable thresholds, implementation of the OGP could result in a cumulatively considerably net increase of any criteria pollutant for which the project region is non-attainment under SCAQMD air quality standards.

Compliance with OGP policies, relevant SCAQMD rules, and implementation of Mitigation Measures 5.3-1 and 5.3-7 would reduce short-term, construction-related emissions, but not to a less than significant level. Construction-related emissions of criteria air pollutants and precursors would still exceed significance thresholds; for this reason such emissions could violate or contribute substantially to an existing or projected air quality violation, and/or expose sensitive receptors to substantial pollutant concentrations. As a result, this impact would remain significant and unavoidable. Individual development projects would be required to undergo project-specific environmental review. If project-level significant impacts are identified, specific Mitigation Measures would be required.

*Long-Term Impacts:* The General Plan PEIR modeled area- and mobile-source emissions using URBEMIS 2007 Version 9.2.4 to estimate emissions for land use development projects based on proposed land use types and zones, trip generation increases, and default settings and parameters attributable to analysis period and site location (OGP PEIR, page 5.3-23). Based on the modeling conducted for the General Plan, operational activities would result in emissions of ROG, $NO_x$, CO, $PM_{10}$, and $PM_{2.5}$ that exceed the SCAQMD's applicable thresholds. Thus, operational emissions of these ozone precursors and particulate matter could violate or contribute substantially to an existing or projected air quality violation, and/or expose sensitive receptors to substantial pollutant concentrations. This is a potentially significant impact.

The General Plan could accommodate stationary sources of pollutants that would be required to obtain permits to operate in compliance with SCAQMD rules. The permit process would ensure that these sources would be equipped with the required emission controls, and that individually, these sources would not cause a significant environmental impact. There is no available methodology to reliably estimate these emissions; nonetheless, the emissions from these sources would be additive to the estimated area-source and mobile-source emissions described above. The OGP contains numerous goals, policies, and implementation programs intended to improve air quality, such as encouraging the use of regional rail and transit to relieve traffic congestion. Compliance with the OGP policies and implementation of Mitigation Measures 5.3-1 through 5.3-7 would reduce operational air quality impacts at a programmatic level, but not to a less than significant level. As a result, this impact would remain significant and unavoidable. Individual development projects would be required to undergo project-specific environmental review. If project-level significant impacts are identified, specific Mitigation Measures would be required.

***Impacts Associated with the Proposed Project (b)***

**No New Impacts.** Air pollution is largely a cumulative impact resulting from emissions generated over a large geographic region. The nonattainment status of regional pollutants is a result of past and present development, and the SCAQMD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are used to determine whether a project's individual emissions would have a cumulatively considerable contribution to air quality. If a project's emissions exceeded the SCAQMD's significance thresholds, it would be considered to have a cumulatively considerable contribution. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.

*Short-Term Impacts:* The maximum construction-related criteria pollutant emissions are shown below in **Table 3**. Table 3 shows that none of the Proposed Project's emissions would exceed regional thresholds. Therefore, a less than significant regional air quality impact would occur from construction of the Project.

**Table 3 – Construction-Related Regional Pollutant Emissions**

| Activity | Pollutant Emissions (pounds/day) | | | | | |
|---|---|---|---|---|---|---|
| | ROG | $NO_X$ | CO | $SO_2$ | $PM_{10}$ | $PM_{2.5}$ |
| Maximum Daily Emissions[1,2] | 9.81 | 16.50 | 17.40 | 0.03 | 3.76 | 2.09 |
| SCAQMD Thresholds | 75 | 100 | 550 | 150 | 150 | 55 |
| **Exceeds Thresholds?** | **No** | **No** | **No** | **No** | **No** | **No** |

Source: CalEEMod Version 2022.1.1.6
Notes:
1. On-site emissions from equipment operated on-site that is not operated on public roads. On-site demolition and grading PM10 and PM2.5 emissions show compliance with SCAQMD Rule 403.
2. Construction, painting, and paving phases may overlap.

Construction-related air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the SCAB. The Proposed Project has been analyzed for the potential local air quality impacts created from: construction-related fugitive dust and diesel emissions; from toxic air contaminants; and from construction-related odor impacts. As shown in **Table 4**, the maximum number of acres disturbed in a day would be 2 acres during grading. The local air quality emissions from construction were analyzed using SCAQMD's Mass Rate Localized Significant Threshold (LST) Look-up Tables and methodology.

**Table 4 – Maximum Number of Acres Disturbed Per Day**

| Activity | Equipment | Number | Acres/8hr-day | Total Acres |
|---|---|---|---|---|
| **Demolition** | Rubber Tired Dozers | 1 | 0.5 | 0.5 |
| | Crawler Tractors[1] | 1 | 0.5 | 0.5 |
| | **Subtotal for Phase** | - | - | **1** |
| **Grading** | Graders | 1 | 0.5 | 0.5 |
| | Rubber Tired Dozers | 1 | 0.5 | 0.5 |
| | Crawler Tractors[1] | 2 | 0.5 | 1 |
| | **Subtotal for Phase** | **-** | **-** | **2** |

Source: SCAQMD Fact Sheet for Applying CalEEMod to Localized Significance Thresholds, 2011b.
Notes:
1. Tractor/loader/backhoe is a suitable surrogate for a crawler tractor per SCAQMD staff.

**Table 5** shows the on-site emissions from the CalEEMod model for the different construction phases and the LST emissions thresholds. As shown in Table 5, none of the analyzed criteria pollutants would exceed the local emissions thresholds at the nearest sensitive receptors. Therefore, the Proposed Project does not result in a cumulatively considerably increase of any criteria pollutant and does not result

in any additional increase beyond what is already analyzed in the GP PEIR. Therefore, the Proposed Project does not result in any new impacts beyond what is analyzed in the GP PEIR. Potential impacts associated with construction emissions would be less than significant, and no mitigation would be required, and the Proposed Project impacts would not be substantially greater than those identified in the GP PEIR.

**Table 5 – Local Construction Emissions at the Nearest Receptors**

| Activity | On-Site Pollutant Emissions (pounds/day) | | | |
|---|---|---|---|---|
| | $NO_X$ | CO | $PM_{10}$ | $PM_{2.5}$ |
| Demolition | 13.20 | 12.20 | 0.58 | 0.53 |
| Grading | 15.90 | 15.40 | 3.50 | 2.02 |
| Building Construction | 9.44 | 10.10 | 0.37 | 0.34 |
| Paving | 4.41 | 6.48 | 0.18 | 0.71 |
| Architectural Coating | 0.86 | 1.13 | 0.02 | 0.02 |
| SCAQMD Thresholds | 115 | 715 | 6 | 4 |
| **Exceeds Threshold?** | **No** | **No** | **No** | **No** |

Source: Calculated from CalEEMod and SCAQMD's Mass Rate Look-up Tables for 2-acres, to be conservative, at a distance of 25 meters in SRA 17 Central Orange County.
Notes:
1. The nearest sensitive receptors to the Project include the single-family residential uses located adjacent to the east and south and approximately 60-feet (~18 meters) to the west of the Project Site; therefore, the 25-meter threshold was used.
The Project would disturb up to a maximum of 2 acres a day during grading (see Table 5).

*Long-Term Impacts:* The on-going operation of the Proposed Project would result in a long-term increase in air quality emissions due to project-generated vehicle trips and on-going use of the Proposed Project. The worst-case summer or winter criteria pollutant emissions created from the Project's long-term operations have been calculated. Operational activities associated with the Proposed Project would result in emissions of ROG, NOx, CO, $SO_2$, PM10, and PM2.5, however, none are above the SCAQMD thresholds as shown in **Table 7**. The results show that none of the SCAQMD regional thresholds would be exceeded. Therefore, a less than

significant regional air quality impact would occur from operation from the Project.

**Table 6 - Regional Operational Pollutant Emissions**

| Activity | Pollutant Emissions (lbs/day)[1] | | | | | |
|---|---|---|---|---|---|---|
| | ROG | NOx | CO | SO2 | PM10 | PM2.5 |
| Maximum Daily Emissions | 1.17 | 0.51 | 2.90 | 0.01 | 0.22 | 0.06 |
| SCAQMD Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| **Exceeds Threshold?** | **No** | **No** | **No** | **No** | **No** | **No** |
| Source: CalEEMod Version 2022.1.1.6; the higher of either summer or winter emissions. | | | | | | |

Since the Proposed Project would not introduce any substantial stationary sources of emissions, CO is the benchmark pollutant for assessing local area air quality impacts from post-construction motor vehicle operations. No violations of the state and federal CO standards are projected to occur, based on the magnitude of traffic the Proposed Project is anticipated to generate. The Project would only generate approximately 100 daily vehicle trips. The 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan) showed that an intersection which has a daily traffic volume of approximately 100,000 vehicles per day would not violate the CO standard. Therefore, as the Proposed Project includes only up to 100 vehicle trips per day, the intersection volumes would fall far short of 100,000 vehicles per day, and no CO "hot spot" modeling was performed. No significant long-term impact on local air quality is anticipated with the on-going use of the Project.

Project-related air emissions from on-site sources such as architectural coatings, landscaping equipment, on-site usage of natural gas appliances as well as the operation of vehicles on-site may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Air Basin. According to SCAQMD LST methodology, LSTs would apply to the operational phase of a project, if the project includes stationary sources, or attracts mobile sources (such as heavy-duty trucks) that may spend long periods queuing and idling at the Project Site; such as industrial warehouse/transfer facilities. The Proposed Project involves the development of the site with a residential use and does not include such uses. Therefore, due to the lack of stationary source emissions, no long-term localized significance threshold analysis is warranted.

The Project Site is located in an area that is out of attainment for ozone, PM10, and PM2.5. The greatest cumulative impact on the quality of regional air cell would be the incremental addition of pollutants mainly from increased traffic

volumes from residential, commercial, and industrial development and the use of heavy equipment and trucks associated with the construction of these projects. Air quality would be temporarily degraded during construction activities that occur separately or simultaneously. However, in accordance with the SCAQMD methodology, projects that do not exceed the SCAQMD criteria or can be mitigated to less than criteria levels are not significant and do not add to the overall cumulative impact. Project operations would generate emissions of NOx, ROG, CO, PM10, and PM2.5, which would not exceed the SCAQMD regional or local thresholds and would not be expected to result in ground level concentrations that exceed the NAAQS or CAAQS.

Therefore, operation of the Proposed Project would not result in a cumulatively considerable net increase for nonattainment of criteria pollutants or ozone precursors. Therefore, potential impacts associated with regional air quality would be less than significant, and no mitigation would be required. No new impacts from what is analyzed in the GP PEIR are found.

*c) Expose sensitive receptors to substantial pollutant concentrators?*

**Narrative Summary: Impacts Analyzed in the GP PEIR (c)**

**Significant and Unavoidable.** With implementation of the General Plan, new or modified toxic air contaminants (TACs) could be placed near existing sensitive receptors, and new sensitive receptors could be developed near existing sources of TACs.

*Construction-Related Emissions:* Construction-related activities would result in short-term emissions of diesel PM from the exhaust of offroad heavy-duty diesel equipment for site preparation (e.g., excavation, grading, and clearing), paving, application of architectural coatings; and other miscellaneous activities. However, emission standards in the Clean Air Act and SCAQMD rules and regulations mitigate TACs, which would also reduce particulate matter exhaust emissions. The GP PEIR concludes that because "the use of off-road heavy-duty diesel equipment would be temporary and would combine with the highly dispersive properties of diesel PM, further reductions in exhaust emissions would occur, and construction-related activities would be typical to similar development-type projects, and construction-related TAC emissions would not expose sensitive receptors to substantial concentrations of TACs. It is also important to note that compliance with the construction dust mitigation requirements would also reduce particulate matter exhaust emissions. As a result, this impact would be less than significant" (OGP, page 5.3-29).

*Operational Emissions:* The General Plan anticipates construction of light industrial and commercial land uses, which may potentially include stationary sources of TACs, such as dry-cleaning establishments, gasoline-dispensing facilities, and diesel-fueled backup generators. These types of stationary sources, in addition to

any other stationary sources that may emit TACs, would be subject to SCAQMD's rules and regulations. Given compliance with applicable rules and regulations, operation of stationary sources would not result in the exposure of sensitive receptors to TACs at levels exceeding SCAQMD's significance thresholds, and this impact would be less than significant. Furthermore, the stationary sources of TAC emissions in the City would be required to be permitted and regulated to prevent new land use compatibility conflicts. Therefore, there would be no incompatibility of proposed land uses with existing sources of TAC emissions. This impact would also be less than significant. However, because of uncertainty with respect to determination and location of tenants, frequency of diesel-fueled trucks visiting the proposed land uses, and distances between trucking activities and sensitive receptors at final buildout of the General Plan and associated mobile emissions of diesel exhaust, this impact would be potentially significant. Implementation of Mitigation Measures 5.3-1 through 5.3-7 would reduce the exposure of sensitive receptors to on road mobile source emissions, but not to a less than significant level. This impact would remain significant and unavoidable.

### *Impacts Associated with the Proposed Project (c)*

**No New Impacts.** Those who are sensitive to air pollution include children, elderly, and persons with preexisting respiratory or cardiovascular illnesses. For purposes of CEQA, the SCAQMD considers a sensitive receptor to be a location where a sensitive individual could remain for 24 hours, such as residences, hospitals, or convalescent facilities (South Coast Air Quality Management District 2008). Commercial and industrial facilities are not included in the definition because employees do not typically remain on-site for 24 hours.

As discussed under threshold b, project-related construction and operational air emissions may have the potential to exceed the State and Federal air quality standards in the vicinity of the Project Site, even though these pollutant emissions would not be significant enough to create a regional impact to the SCAB. In order to assess local air quality impacts the SCAQMD has developed Localized Significance Thresholds (LSTs) to assess the Proposed Project-related air emissions. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard. LSTs are developed based on the ambient concentrations of four applicable air pollutants for source receptor area (SRA-17) – Central Orange County.

The nearest sensitive receptors to the Project Site are the single-family residential uses located adjacent to the east and south and approximately 60 feet (~18 meters) to the west (across Rancho Santiago Boulevard) of the Project Site. In addition, Enderby Field/Santiago Charter Middle School is located approximately 215 feet south of the Project Site. Other air quality sensitive land uses are located further from the Project Site and would experience lower impacts. The nearest

existing sensitive receptors are located along the western and southern boundaries of the Project Site, less than 25 meters (82 feet) from potential areas of on-site construction and operational activity. Although receptors are located closer than 25 meters (82 feet) to the Project Site, SCAQMD LST methodology states that projects with boundaries located closer than 25 meters (82 feet) to the nearest receptor should use the LSTs for receptors located at 25 meters (82 feet). As shown in Table 5 above, none of the analyzed criteria pollutants would exceed the local emissions thresholds at the nearest sensitive receptors.

Construction

The greatest potential for toxic air contaminant emissions would be related to diesel particulate emissions associated with heavy equipment operations during construction of the Project. According to the Office of Environmental Health Hazard Assessment (OEHHA) and the SCAQMD Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel idling Emissions for CEQA Air Quality Analysis (August 2003), health effects from TACs are described in terms of individual cancer risk based on a lifetime (i.e., 30-year) resident exposure duration. Given the temporary and short-term construction schedule (approximately 24 months), the project would not result in a long-term exposure as a result of Project construction. Furthermore, construction-based particulate matter (PM) emissions including diesel exhaust emissions do not exceed any local or regional thresholds.

The Proposed Project would comply with the CARB Air Toxics Control Measure that limits diesel powered equipment and vehicle idling to no more than five minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation; compliance with these requirements would minimize emissions of TACs during construction. The Proposed Project would also comply with the requirements of SCAQMD Rule 1403 if asbestos is found during the renovation and construction activities. Therefore, impacts from TACs during construction would be less than significant.

Operations

Operational emissions are calculated within CalEEMod. The program is largely based on default settings which are automatically populated throughout the model based on the imputed land use. Southern California Edison averages for utility emissions were utilized for the calculations throughout the model. CalEEMod utilized the proposed land use and then estimates worst-case air quality emissions from trip generations built into the model and includes vehicle emission rates from Emission Factors 2021. The data provided in Table 6 above shows that the on-going operations of the Proposed Project would not exceed SCAQMD local operational thresholds of significance.

Potential impacts associated with exposing sensitive receptors to substantial pollutant concentrations during construction or from operation of the Proposed

Project would be less than significant, and no mitigation would be required. Therefore, the on-going operations of the Proposed Project would create a less than significant operations-related impact to local air quality due to on-site emissions and no mitigation would be required. No new significant or substantially greater impacts from what is analyzed in the GP PEIR are found.

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

***Narrative Summary: Impacts Analyzed in the GP PEIR (d)***

**Less Than Significant Impact.** According to the GP PEIR, the General Plan does not have the potential to create objectionable odors. Therefore, this issue is not discussed further in the GP PEIR (OGP, page 5.3-17). Additionally, minor sources of odors associated with the General Plan would be associated with the construction of proposed land uses. Odors associated with diesel fumes and other minor sources would be temporary and would disperse rapidly with distance from the source; therefore, construction-generated and mobile-source odors would not result in the frequent exposure of receptors to objectionable odor emissions. As a result, short-term construction-related and long-term mobile-source related odors would be less than significant. A less than significant impact associated with short-term and long-term odor impacts would occur. No mitigation would be required.

***Impacts Associated with the Proposed Project (d)***

**No New Impacts.** The occurrence and severity of potential odor impacts depend on numerous factors. The nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints.

Potential sources that may emit odors during construction activities include the application of materials such as asphalt pavement. The objectionable odors that may be produced during the construction process are short-term in nature and the odor emissions are expected to cease upon the drying or hardening of the odor producing materials. Due to the short-term nature and limited amounts of odor producing materials being utilized, no significant impact related to odors would occur during construction of the Proposed Project. Diesel exhaust and VOCs would be emitted during construction of the project, which are objectionable to some; however, emissions would disperse rapidly from the Project Site and therefore should not reach an objectionable level at the nearest sensitive receptors.

Established requirements addressing construction equipment operations, and construction material use, storage, and disposal requirements act to minimize

odor impacts that may result from construction activities. Moreover, construction-source odor emissions would be temporary, short-term, and intermittent in nature and would not result in persistent impacts that would affect substantial numbers of people. Potential construction-source odor impacts are therefore considered less than significant.

The Proposed Project does not propose any uses or activities that would result in potentially significant operational-source odor impacts. Potential sources that may emit odors during the on-going operations of the Proposed Project would include odor emissions from the intermittent diesel delivery truck emissions and trash storage areas. Due to compliance with SCAQMD's Rule 402, no significant impact related to odors would occur during the on-going operations of the Proposed Project. Potential operational-source odor impacts are therefore considered less than significant. No new impacts from what is analyzed in the GP PEIR are found.

### *Conclusion*

The air quality impacts of the Proposed Project would be less than significant, and no Project-specific mitigation is required. The Project would not result in any new significant impacts or in a substantial increase in the severity of impacts evaluated in the GP PEIR that would render Section 15183 inapplicable to the Proposed Project. With regards to the issue area of Air Quality, the following findings can be made:

1. No peculiar impacts to the Project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed by the GP PEIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the GP PEIR.
4. No new Mitigation Measures would be required because Project-specific impacts would be less than significant. GP PEIR Mitigation Measures have been implemented.

## 4.4 Biological Resources

### *Impact Analysis*

| CEQA THRESHOLDS | Project Peculiar Impact that is not Substantially Mitigated by Uniform Applied Policies | Significant Impact not Analyzed as Significant in the GP PEIR | Potentially Significant Offsite or Cumulative Impact not Discussed in the GP PEIR | Adverse Impact More Severe Based on Substantial New Information | No New Impact from GP PEIR |
|---|---|---|---|---|---|
| **IV. BIOLOGICAL RESOURCES:** Would the project: | | | | | |
| 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 Wildlife or U.S. Fish and Wildlife Service? | | | | | X |
| 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 Wildlife or U.S. Fish and Wildlife Service? | | | | | X |
| 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 | | | | | X |
| 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? | | | | | X |

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

### *General Plan PEIR Mitigation Measures*

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| **5.4-1** Analyze development proposals for potential impacts to significant ecological and biological resources. Require appropriate mitigation for all significant impacts if impact avoidance is not possible. Mitigation measures for habitat and species may include, but are not limited to, avoidance, enhancement, restoration, or a combination of any of the three. (**Implementation Program III-13)** | Mitigation Measure is not applicable. |
| **5.4-2** Continue to coordinate with state and federal wildlife agencies in an effort to protect rare or endangered species of plants and animals. Require that all development activities adhere to state and federal legislation that protects all sensitive plants and animals. Coordinate with these agencies for City efforts to restore portions of Santiago Creek, to develop bike trails and pathways adjacent to Santiago Creek, to recognize the archaeological significance of Santiago Creek, and to integrate natural landscape components within the design of projects adjacent to waterways. (**Implementation Program V-11**) | Mitigation Measure is not applicable. |
| **5.4-3** Prior to making land use decisions, the City will utilize available methods to estimate increases in pollutant loads and flows resulting from projected future development.<br>The City will follow the most current National Pollutant Discharge Elimination System (NPDES) Permit and County of Orange Drainage Area Master Plan and the City Drainage Area Management Plan to ensure that the City complies with applicable state and federal regulations. Applicants for new development and redevelopment projects shall prepare and submit plans | Mitigation Measure is applicable. The Proposed Project would follow all applicable provisions listed in the NPDES. A Preliminary Hydrology Analysis and a Preliminary Water Quality Management Plan (PWQMP) were prepared for the Proposed Project. The PWQMP and Hydrology |

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| to the City, as well as implement plans demonstrating accomplishment of the following:<br>• Use structural and nonstructural best management practices (BMPs) to mitigate projected increases in pollutant loads and flows;<br>• Control the velocity of pollutant loading flows during and after construction;<br>• Limit areas of impervious surfaces and preserve natural areas;<br>• Limit directly connected areas of impervious surfaces;<br>• Use natural treatment systems such as wetlands and bioswales to treat storm runoff where technically and economically feasible;<br>• Provide on-site infiltration and runoff and temporary on-site retention areas;<br>• Limit disturbance of natural water bodies, natural drainage systems, and highly erodible areas; and<br>• Use pollution prevention methods, source controls, and treatment using small collection strategies located at, or as close as possible to, the source.<br>In addition, applicants for large development projects are required to prepare and implement plans that meet site predevelopment hydrologic conditions and to control runoff on-site where technically feasible. (**Implementation Program III-8**) | Study list BMPs and treatment systems for the Project Site. |
| **5.4-4** Comply with all provisions of the NPDES permit, and support regional efforts by the Santa Ana Regional Water Quality Control Board (RWQCB) to improve and protect surface water quality. (**Implementation Program V-9**) | Mitigation Measure is applicable. The Proposed Project would comply with all provisions of the NPDES permit. |
| **5.4-5** Support compliance with the Central Orange County NCCP/HCP. Participate in any future update to the NCCP/HCP. Coordinate with the Fire Department and related agencies to ensure consideration of NCCP habitat areas when planning fuel modification zones. (**Implementation Program V-13**) | Mitigation Measure is not applicable. |
| **5.4-6** Continue to work with local and regional open space preservation organizations and state and federal agencies to identify and conserve urban open space and protect lands accessible for public use. Pursue grants and other resources to plan for open space preservation and, as appropriate, purchase properties | Mitigation Measure is not applicable. |

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| to be included in the open space system. Use conservation easements where feasible as part of the City's open space acquisition program. (**Implementation Program V-14**) | |

### *Discussion*

*a) Would the project 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?*

### *Narrative Summary: Impacts Analyzed in the GP PEIR (a)*

**Less Than Significant with Mitigation.** The GP PEIR evaluated the potential for implementation of the OGP to impact biological resources in the City. According to the GP PEIR, the majority of development allowed by the OGP would occur through infill, redevelopment, and intensification in the OGP land use focus areas. Development in these areas is not expected to affect sensitive species as these areas are already urbanized. The GP PEIR discusses that grading, excavation, and construction activities associated with the buildout of the OGP in the eastern portion of the City's planning area may potentially impact sensitive species and their habitats. Development within these areas may reduce existing habitat for some special status plant and wildlife species due to increases in lighting, noise, pets, and fragmentation of wildlife habitat. These factors may also disrupt wildlife movement along established corridors.

Three species (coastal California gnatcatcher, coastal cactus wren, and orange-throated whiptail lizard) were designated as "target species" by the NCCP/HCP to be used as umbrella species to guide the design of a permanent habitat system within the Central and Coastal Subregion. Areas designated as NCCP Habitat Reserve as needed by the three species are designated by the OGP as Open Space or Recreational Commercial consistent with the NCCP. According to the GP PEIR, development in these sensitive areas is not expected under the implementation of the OGP. The GP PEIR discusses the City's and Irvine Company's participation in the Orange County Central/Coastal NCCP process as a signatory to the implementation agreement provides the means to mitigate the direct and indirect impacts to the 39 species and four covered habitats identified within designated development sites in the NCCP/HCP area and allows development to proceed in areas not designated as "Reserve" and "Non-Reserve Open Space." The specific impact to sensitive species from future development in the City's planning area cannot be determined at the

programmatic level of analysis because no precise development projects that would follow the General Plan update were known at the time of the GP PEIR and OGP. Therefore, impacts at this program level of analysis are determined to be potentially significant.

With adherence to and implementation of the proposed policies and regulations, and implementation of Mitigation Measures 5.4-1 and 5.4-2, program-level impacts to sensitive species would be less than significant. Individual development projects would be required to undergo project-specific environmental review. If project-level significant impacts are identified, specific Mitigation Measures would be required.

***Impacts Associated with the Proposed Project (a):***

**No New Impacts.** A General Biological Technical Report was prepared for the Proposed Project by Noreas (**Appendix B** – *Rancho Ridge Infill Project General Biological Technical Report* by Noreas, January 2023). The Biological Report examines the Project Site and the results of baseline biological resources surveys and habitat assessments for the Proposed Project. The Proposed Project proposes development within areas either already developed or in a non-native plant community that does not support special-status species. The Biological Report's pedestrian survey determined that greater than 99% of the Project Site was comprised of developed, disturbed, and/or non-native land cover types. The Project is not collocated with any United States Fish and Wildlife Service (USFWS) designated critical habitat, nor were any special status species detected. No nesting birds, remnant raptor nests, or bat guano were detected within the Project Site either. The Project Site's developed and disturbed land cover has substantially decreased its value as suitable breeding, nesting, and foraging habitat for native species.

Additionally, the Project Site was assessed for its potential to support special-status species. No Federal or State listed plant species and special-status species were observed within the Biological Report's study area. The study area does not include any USFWS-designated critical habitat for plants or wildlife. The Biological Report concluded that the Project Site does not include substantive habitat requirements necessary to support special-status flora or special-status wildlife.

Therefore, the Proposed Project would not 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 Wildlife or United States Fish and Wildlife Service.

The Proposed Project may require the removal of vegetation, shrubs, or trees that could provide potential nesting habitat for common urban birds, and migratory BCC birds protected by the Migratory Bird Treaty Act (MBTA), Migratory Bird

Protection Act (MBPA), and the Fish and Wildlife Code. While the Project Site's developed and disturbed land cover have substantially decreased its value as suitable breeding, nesting, and foraging habitat for native species and plants, the following mitigation measure is recommended for implementation to further reduce any direct and indirect impacts on wildlife species. If present at the time of vegetation removal there could be direct impacts on active nests, eggs, or young. To avoid direct and indirect impacts to active bird nests, eggs, or young, preconstruction nesting bird surveys and monitoring is required as described in Regulatory Compliance **Mitigation Measure BIO-1**. With the implementation of the mitigation measure, there would be no presumption that the Proposed Project would result in the loss of individual species, nor that it would adversely affect local or regional populations of them.

**Regulatory Compliance Mitigation Measure BIO-1:** Preconstruction Nesting Bird Survey

- Training of all field staff on applicable - or relevant, and appropriate local, state, and federal regulatory agency requirements, environmental laws, and regulations associated with working around biological resources.
- No personnel working within Project limits will "take" or destroy plants, animals, or active nests (or eggs) of birds that are protected under the Federal or State Endangered Species Acts and Migratory Bird Treaty Act (MBTA).
- No personnel working within Project limits will handle - or relocate, flora or fauna.
- If possible, ground disturbing activities and vegetation removal (including tree trimming) should be timed to occur outside the typical avian nesting season (March 15th through September 1st).
- If ground disturbing activities or vegetation removal (including tree trimming) are scheduled during the bird nesting season (March 15th through September 1st), a pre-activity clearance survey for nesting birds should be conducted prior to the onset of ground disturbance. The survey should be conducted by a qualified biologist with prior experience conducting nesting bird surveys for construction projects. The study area should include the Project Site and suitable habitat within a 300-foot buffer, or a buffer size determined by the qualified biologist based on level of proposed disturbance and access. If no occupied nests are found, no additional measures are required.
- If active nests are found the biologist will map the location and document the species and nesting stage. An activity exclusion buffer will be established around occupied nests as determined by the qualified biologist and based on the species sensitivity to disturbance and the type and duration of the disturbance. The buffer zone should be maintained during

physical ground disturbing undertakings. Once the nesting has ended, the buffer may be removed.

b) *Would the project 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) *Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

***Narrative Summary: Impacts Analyzed in the GP PEIR (b-c)***

**Less Than Significant with Mitigation.** The GP PEIR states that protection of riparian habitat and wetlands would occur during standard procedures for environmental review of land development projects and City infrastructure improvements in areas where riparian habitat and wetlands could be impacted. Much of the land directly adjacent to riparian areas in the City is designated as Open Space or Open Space Park in the OGP.

The specific impact to riparian habitat and wetlands from future development in the planning area cannot be determined at this General Plan level of analysis because no precise land development projects that rely on land use changes proposed as part of the General Plan update are known at this time. Therefore, impacts at this program level of analysis are determined to be potentially significant. With adherence to and implementation of the proposed policies and regulations, and implementation of Mitigation Measures 5.4-3 and 5.4-4, program-level impacts to riparian habitat and wetlands would be less than significant. Individual development projects would be required to undergo project-specific environmental review. If project-level significant impacts are identified, specific Mitigation Measures would be required.

***Impacts Associated with the Proposed Project (b-c):***

**No New Impacts.** As discussed under threshold a, the Biological Report prepared for the Proposed Project did not detect any riparian or riverine habitats or any obvious indicators of a well-defined water conveyance bed, bank, or channel within the Project Site. According to the Biological Report, the topographic suggests that the Project Site lacks waters which are typically subject to the Clean Water Act, or Fish and Game Code Section 1600 jurisdiction. Furthermore, the National Wetland Inventory has no records of special aquatic resources within the Project Site. The Biological Report characterizes the Project Site as disturbed upland. Therefore, the Proposed Project would not 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 USFWS.

*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?*

***Narrative Summary: Impacts Analyzed in the GP PEIR (d):***

**Less Than Significant with Mitigation.** The OGP is designed to be consistent with the NCCP/HCP, which provides a permanent habitat system within the Central and Coastal subregion by designating areas as NCCP Habitat Reserve. The Habitat Reserve was designed to provide long-term protection for habitat required by native and migratory coastal sage scrub-dependent species (GP PEIR, page 5.4-23). The OGP has designated portions of the City's planning area as Non-Reserve Open Space and Open Space. The specific impact to native and migratory species from future development in the City's planning area cannot be determined at the programmatic level of analysis because no precise land development projects that rely on land use changes proposed as part of the OGP are known at the time of the GP PEIR and OGP. Therefore, impacts at this program level of analysis are determined to be potentially significant. With adherence to and implementation of the proposed policies and regulations, and implementation of Mitigation Measures 5.4-1 and 5.4-2, program-level impacts to areas of species, corridors, or nursery sites will be less than significant. Individual development projects would be required to undergo project-specific environmental review. If project-level significant impacts are identified, specific Mitigation Measures would be required.

***Impacts Associated with the Proposed Project (d):***

**No New Impacts.** According to the Biological Report, the Project Site's developed and disturbed land cover has substantially decreased its value as suitable breeding, nesting, and foraging habitat for native species. The Project Site was determined to be comprised of developed, disturbed, or non-native habitats. Furthermore, the Project Site has limited (if any) value as a low-quality migration corridor, or overland dispersal habitat for wildlife, because it is severely movement constrained by the surrounding residential, industrial, and commercial developments, and public infrastructure. The Project Site does not feature any special status-species, wetlands, or habitats. Therefore, the Project does not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with the established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Therefore, no new impacts associated with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or associated with impeding the use of native wildlife nursery sites would occur beyond what is already analyzed in the GP PEIR.

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

***Narrative Summary: Impacts Analyzed in the GP PEIR (e):***

**Less Than Significant.** The City's participation in the NCCP program, its Master Street Tree Plan, and the Tree Preservation Ordinance are the primary local measures to protect biological resources. The Master Street Tree Plan and the Tree Preservation Ordinance monitor the potential for impacts to existing trees that provide roosting and nesting habitat for native and migratory birds throughout the City. The OGP does not alter these existing documents as a result of any land use changes proposed by the OGP. Increased densities proposed to be allowed in the existing urbanized areas provide opportunity for redevelopment of existing properties currently developed with lower intensity residential or commercial uses. Redevelopment activities may potentially put existing trees at risk of removal. However, the Master Street Tree Plan and the Tree Preservation Ordinance, together with the City's existing development review and CEQA compliance procedures, provide an effective means to monitor potential impacts to native and migratory birds and to avoid significant impacts during redevelopment. Therefore, the GP PEIR concludes that potential conflicts with local measures protecting biological resources would be less than significant.

***Impacts Associated with the Proposed Project (e):***

**No New Impacts.** The Proposed Project would adhere to all applicable regulations set forth in the City's Master Street Tree Plan and Tree Preservation Ordinance. According to the GP PEIR, the City's Master Street Plan and Tree Preservation Ordinance, as well as the City's participation in the NCCP program, are the primary measures to protect biological resources. The Project would adhere to these local policies and does not propose any development in any NCCP designated areas. Therefore, the Proposed Project does not conflict with any local policies or ordinances protecting biological resources, and no new impacts associated with conflict of local policies or ordinances protecting biological resources would occur.

*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?*

***Narrative Summary: Impacts Analyzed in the GP PEIR (f):***

**Less than Significant with Mitigation.** The City is subject to the Orange County Central/Coastal NCCP Subregional Plan, which satisfies the federal, state, and local project-specific mitigation requirements for the species and habitats addressed in the NCCP/HCP. The coastal California gnatcatcher, coastal cactus wren, and orange-throated whiptail lizard, all of which are currently on the federal list of threatened or endangered species, were designated as "target species"

by the NCCP/HCP and sufficient coastal sage scrub and other essential habitat are protected to benefit a much broader range of coastal sage scrub-related species. Areas within the City's planning area that are designated as NCCP Habitat Reserve are also designated as Open Space or Recreational Commercial by the OGP to be consistent with the NCCP.

The OGP is consistent with the NCCP/HCP and includes implementation programs to continue efforts to identify and conserve lands suitable for inclusion in the open space Reserve system and for collection of "in-lieu" fees to the Nature Reserve of Orange County (NROC) for the native areas that would be removed due to development. This continued participation in the NCCP/HCP implementation programs would reduce any significant impact on local habitat conservation planning efforts. However, as development in and adjacent to existing natural areas located in the urbanized portion of the City continues, direct and indirect impacts to natural areas interface planning could occur and would be potentially significant. With adherence to and implementation of the proposed policies and regulations, and implementation of Mitigation Measures 5.4-5 and 5.4-6, program-level impacts to habitat conservation planning would be less than significant. Individual development projects would be required to undergo project-specific environmental review. If project-level significant impacts are identified, specific Mitigation Measures would be required.

***Impacts Associated with the Proposed Project (f):***

**No New Impacts.** The Proposed Project is not located in any NCCP designated areas nor is the Project Site located on any areas designated as Open Space or Recreational Commercial by the OGP. The Project Site is located on a site that is designated as Low Density Residential and zoned as R-1-10. The surrounding uses are developed with residential, commercial, and church uses. The Proposed Project does not feature any special status species, habitats, or wetlands and would adhere to the City's applicable regulations and standards for development. Therefore, the Proposed Project does not conflict with the adopted NCCP/HCP, and no impacts would occur.

***Conclusion***

The Proposed Project would not result in any new or substantially greater impacts beyond those identified in the previously certified GP PEIR. Additionally, no new information of substantial importance that was not known and could not have been known at the time the GP PEIR was certified is available that would change the prior finding of less than significant impact with mitigation incorporated. With regards to the issue area of Biological Resources, the following findings can be made:

1. No peculiar impacts to the Proposed Project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed by the GP PEIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the GP PEIR.
4. Feasible Mitigation Measures contained within the GP PEIR apply to the Proposed Project. With mitigation, Project-specific impacts are less than significant.

## 4.5 Cultural Resources

### *Impact Analysis*

| CEQA THRESHOLDS | Project Peculiar Impact that is not Substantially Mitigated by Uniform Applied Policies | Significant Impact not Analyzed as Significant in the GP PEIR | Potentially Significant Offsite or Cumulative Impact not Discussed in the GP PEIR | Adverse Impact More Severe Based on Substantial New Information | No New Impact from GP PEIR |
|---|---|---|---|---|---|
| **V. CULTURAL RESOURCES:** Would the project: | | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5? | | | | | X |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5? | | | | | X |
| c) Disturb any human remains, including those interred outside of formal cemeteries? | | | | | X |

### *General Plan PEIR Mitigation Measures*

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| **5.5-1** Comply with all provisions of CEQA. In addition to thresholds that may be established or adopted by the City in the future, use the following thresholds and/or procedures for CEQA analysis of proposed projects, consistent with policies adopted within the General Plan:<br>• Historic and Cultural Resources<br>o "Historical resource" for the purposes of CEQA shall mean "historic district" in the case of a contributor to a historic district.<br>o Historic resources listed in the City's Historic Register shall have a presumption of | Mitigation Measure is applicable. The Proposed Project's CEQA analysis adheres to the provisions of CEQA. |

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| significance pursuant to CEQA Statute §21084.1 and shall be treated as historical resources under CEQA.<br>o The historical significance of an archaeological historic resource is evaluated using the criteria of Public Resource Code §5024.1 and CEQA Guidelines, §15064.5 et seq.<br>(**Implementation Program III-1**) | |
| **5.5-2** Apply to the OHP for inclusion in the Certified Local Government (CLG) program. Successful application includes several requirements:<br>• Enact appropriate historic preservation regulations through an adopted historic preservation ordinance.<br>• Establish an adequate and qualified historic preservation review commission.<br>• Maintain a system for the survey and inventory of historic properties.<br>• Provide for adequate public participation in the historic preservation program.<br>• Satisfactorily perform the responsibilities delegated to the CLG.<br>(**Implementation Program I-16**) | Mitigation Measure is not applicable. |
| **5.5-3** Create the Historic Register, which will serve as the local register of historical resources under CEQA. Automatically include all resources previously designated, listed, or determined eligible for listing within the NRHP or California Register.<br>• Establish a process for handling voluntary requests for listing in the Historic Register. Support coordination with property owners of potential historic resources identified in the Orange Inventory, so that such potential historic resources can more readily be listed in the Historic Register.<br>• Establish a process for listing in the Historic Register those buildings, structures, objects, sites, or districts that meet the criteria.<br>• Establish procedures to remove historic resources from the Historic Register. | Mitigation Measure is not applicable. |

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| • Establish procedures for listing archaeological resources in the Historic Register. Employ appropriate criteria for evaluating potential significance of such archaeological resources as historical resources or unique archaeological resources under CEQA. Encourage voluntary listing of eligible archaeological resources. (**Implementation Program I-17**) | |
| ***5.5-4*** Pursue historic landmark district designation for three Eichler Homes tracts. Notify property owners in three Eichler tracts including Fairhaven, Fairhills, and Fairmeadow of the intent to list each of the three tracts separately as local historic districts and follow established procedures for Historic Register listing of each. (**Implementation Program I-18**) | Mitigation Measure is not applicable. |
| ***5.5-5*** Continue to maintain an accessible and periodically updated inventory of potential resources. All surveyed properties will be included in the Orange Inventory, and the Orange Inventory will be a valuable planning tool to be used in evaluating possible impacts a proposed project might have on previously evaluated potential and identified historic resources. Surveys and survey updates may be conducted by qualified preservation professionals in accordance with Secretary of Interior Standards criteria.<br><br>Properties that have attained 45 years of age and are located within a designated historic district or NCA shall be subject to survey prior to issuance of any permit for alteration or demolition.<br><br>Survey other areas where potential for historic resources may exist. Identify smaller character areas where concentrations of potential or listed historic resources reflect unique senses of time and place.<br><br>Use the Orange Inventory to identify potential historic resources for purposes of CEQA, NHPA, and NEPA review of proposed projects. Only if potential historic resources in the Orange Inventory are listed in or eligible for listing in the California Register for CEQA or the NRHP for the NHPA and NEPA shall they have a presumption of significance pursuant to CEQA Statute §21084.1 and be treated as historical resources under CEQA. | Mitigation Measure is not applicable. |

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| Potential historic resources identified in the Orange Inventory may be listed in the Historic Register if they meet criteria for listing in the California Register. (**Implementation Program I-19**) | |
| **5.5-6** Actively pursue grants, loans, and other incentives to encourage historic preservation. Consider implementing conservation easements.<br><br>Develop a revolving loan program for maintenance and rehabilitation work, consistent with design standards, on listed historic resources and on resources that are contributors to listed historic districts.<br><br>Develop a voluntary conservation easement program to preserve listed historic resources and contributors to listed historic districts. Provide a potential tax benefit to property owners. Establish a partnership with local preservation organizations to accept, hold, and manage conservation easements on historic resources. (**Implementation Program I-20**) | Mitigation Measure is not applicable. |
| **5.5-7** Explore establishing a commemorative plaque program to allow public recognition of properties listed in the Historic Register. Develop and administer standards and guidelines for properties eligible for the commemorative plaque program. (**Implementation Program I-21**) | Mitigation Measure is not applicable. |
| **5.5-8** Officially recognize the Historic Context Statement prepared in tandem with the General Plan Update. Periodically update the Statement to add recent historical events. Officially recognize the recent completed historical and archaeological resources survey prepared in tandem with the updated General Plan. Update and maintain the inventory using the City's Geographic Information System (GIS). (**Implementation Program I-22**) | Mitigation Measure is not applicable. |
| **5.5-9** Designate El Modena, Cypress Street Barrio, the Railroad/Packinghouse Corridor, and Orange Park Acres as NCAs by establishing an NCA overlay zone and appropriate standards and regulations in the Zoning Code. (**Implementation Program I-23**) | Mitigation Measure is not applicable. |

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| **5.5-10** Require cultural resources inventories of all new development projects in areas identified with medium or high potential for archaeological or cultural resources.<br><br>Where a preliminary site survey finds medium to high potential for substantial archaeological remains, the City shall require a mitigation plan to protect the resource before issuance of permits. Mitigation may include:<br><br>• Ensuring that a qualified archaeologist is present during initial grading or trenching (monitoring);<br>• Redesigning the project to avoid archaeological resources (this is considered the strongest tool for preserving archaeological resources);<br>• Capping the site with a layer of fill; and/or<br>• Excavating and removing the archaeological resources (recovery) and implementing curation in an appropriate facility under the direction of a qualified archaeologist (interpretation).<br><br>Alert applicants for permits within early settlement areas to the potential sensitivity. If significant archaeological resources are discovered during construction or grading activities, such activities shall cease in the immediate area of the find until a qualified archaeologist can determine the significance of the resource and recommend alternative mitigation.<br><br>If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey. The final report containing site forms, site significance, and Mitigation Measures should be submitted immediately to the Orange Community Development Department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure. The final written report should be submitted to the appropriate regional archaeological Information Center within three months after work has been completed. The City shall ensure that project applicants contact the Native American Heritage Commission for a Sacred Lands File Check and a list of appropriate Native American contacts for consultation concerning the Project Site and to assist in | Mitigation Measure is applicable. As discussed below, the Proposed Project would adhere to all federal, state, and local regulations as well as GP PEIR Mitigation Measures 5.1-1 through 5.5-14 to protect archaeological resources. The Proposed Project includes best management practices in the event that archaeological resources are unearthed during construction. |

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| crafting the Mitigation Measures. (**Implementation Program III-10**) | |
| **5.5-11** Establish the Archaeological Resources Management Report (ARMR Preservation Bulletin) as the standard report format for all documentation and accept reports only from registered professional archaeologists knowledgeable in Native American cultures and/or historical archaeology (qualified archaeologists). (**Implementation Program III-14**) | Mitigation Measure is not applicable. |
| **5.5-12** Continue to use the Secretary's Standards as a basis for design review. Update the City's Demolition Ordinance to include that any approved demolition permit for listed historic resources shall be automatically subject to a delay before the permit for demolition may be issued. The property owner will strive to develop alternatives to demolition that will preserve the historic resources.<br>The Community Development Director shall appoint a City of Orange Preservation Officer (Preservation Officer). In lieu of such appointment, the Director shall serve as Preservation Officer. (**Implementation Program III-15**) | Mitigation Measure is not applicable. |
| **5.5-13** The City will continue to support efforts by California's OHP to administer federal and state-mandated historic preservation programs in California, including the following:<br>• California Historical Landmarks;<br>• California Points of Historical Interest;<br>• California Register of Historical Resources;<br>• National Register of Historic Places;<br>• Secretary of Interior Standards; and<br>• CEQA.<br>The Mills Act is another preservation tool created by the California legislature, enabling cities to enter into historical property agreements with owners of qualifying properties that result in reductions to the owners' property taxes. The agreements provide a benefit that ensures preservation and guarantees authentic rehabilitations and a high level of maintenance of historic resources. The City will continue to encourage use of the Mills Act provisions by private property owners. (**Implementation Program V-16**) | Mitigation Measure is not applicable. |

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| **5.5-14** Develop partnerships with local history and preservation organizations to prepare Historic Context Statement updates, undertake new surveys, and update surveys. Partner with local history and preservation organizations to develop a citywide interpretive program, including signs, plaques, exhibits, and other similar elements, to increase awareness of the City's history and its historic resources. (**Implementation Program V-17**) | Mitigation Measure is not applicable. |

***Discussion***

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

***Narrative Summary: Impacts Analyzed in the GP PEIR (a)***

**Less Than Significant Impact with Mitigation.** The OGP's Cultural Resources and Historic Preservation Element identifies several resources intended for designation within the City, including historic districts, Neighborhood Character Areas (NCAs), and individual resources. Under implementation of the OGP, the growth projected to occur within the City's planning area would occur primarily through infill development and adaptive reuse, primarily in the OGP land use focus areas. Land use policies in the OGP provide opportunities for adaptive reuse of historic buildings as a way to preserve the integrity of historic resources while accommodating growth. Historic resources could be vulnerable to unchecked development activities and infrastructure or other public works improvements and could result in damage to or demolition of historic resources. This is a potentially significant impact.

However, the GP PEIR states that there are a number of federal, state, and local regulations in place to protect historic resources in the City. The proposed policies listed in the OGP include a variety of regulations and incentives aimed at preserving both publicly and privately owned historic and cultural resources. An example of a policy is to maintain an accessible inventory of designated and potential historic resources. According to the GP PEIR, implementation of the existing regulations and the OGP policies would adequately control and regulate activities with the potential to impact historic resources. With adherence to and implementation of the OGP policies and regulations as well as implementation of Mitigation Measures 5.5-1 through 5.5-9, and 5.5-12 through 5.5-14, program-level impacts to historic resources would be less than significant. Individual development projects would be required to undergo project-specific environmental review. If project-level significant impacts are identified, specific Mitigation Measures would be required (GP PEIR, page 5.5-23).

***Impacts Associated with the Proposed Project (a)***

**No New Impacts.** According to the GP PEIR Figure 5.5-3, the Project Site is not located in any area that is considered a resource recommended for designation. The Proposed Project is not located in any historic district or NCA and is not considered an individual resource (GP PEIR, page 5.5-18). Additionally, the City has a Historic Preservation Viewer map online that shows if a site is located within any historic district or are considered to be a historic resource or eligible to be one. According to the viewer, the Project Site is not located within any historic districts nor is it considered a historic resource site. The nearest historic resource is the Jones Estate located approximately 0.38-mile southeast of the Project Site. The Project Site is also not mapped as a historic place according to the National Park Service (NPS) National Register of Historic Places map viewer. The Proposed Project does not cause a substantial adverse change in the significance of a historic resource pursuant to PRC §15064.5. Therefore, there are no impacts associated with historic resources, and no mitigation is required.

*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 formal cemeteries?*

***Narrative Summary: Impacts Analyzed in General Plan PEIR (b-c)***

**Less Than Significant Impact with Mitigation.** The GP PEIR indicated a potential for archaeological resources, including human remains, to exist in or near the City. Development pursuant to the OGP has the potential to impact known or unknown archaeological and paleontological resources. Specifically, the development of residential or urban land uses, roads, and infrastructure (e.g. storm water, wastewater, or domestic/recycled water lines) may impact buried archaeological and paleontological resources, including human remains, located throughout undeveloped portions of the City. The GP PEIR includes a figure that lists areas within the City that are of historical archaeological sensitivity overlap. Therefore, implementation of the OGP could result in potentially significant impacts to archaeological resources. However, the GP PEIR states that there are a number of federal, state, and local regulations in place to protect cultural resources in the City. Implementation of these existing regulations largely controls activities with the potential to impact cultural resources, including archaeological resources. The GP PEIR states that the OGP includes a variety of proposed policies aimed at preserving cultural resources, such as identifying, designating, and protecting historically and culturally significant archaeological resources or sites (GP PEIR, page 5.5-23). With adherence to proposed policies and regulations, and implementation of Mitigation Measures 5.5-1, 5.5-10 and 5.5-11, program-level impacts to archaeological resources, including archaeological resources, paleontological resources, and disturbance of human remains, would

be less than significant. Individual development projects would be required to undergo project specific environmental review. If project-level significant impacts are identified, specific Mitigation Measures would be required under CEQA.

### *Impacts Associated with the Proposed Project (b-c)*

**No New Impacts.** According to the GP PEIR, the development of residential or urban land uses, roads, and infrastructure may impact buried archaeological and paleontological resources, including human remains, located throughout undeveloped portions of the City. There is also potential for unknown and previously undisturbed archaeological, paleontological, and human remains to be found within the developed areas of the City. However, previously excavated areas are generally considered to have a low potential for archaeological resources (GP PEIR, page 5.16-9). Figure 5.5-2 of the GP PEIR shows areas of historical and archaeological sensitivity within the City's planning area. According to the figure, the Project Site is potentially located within the Grijalva Adobe Canal historical archaeology sensitive area of the Spanish/Mexican Period (1800-1870). Therefore, the Proposed Project has potential to impact archaeological resources. However, the Proposed Project would adhere to all federal, state, and local regulations as well as GP PEIR Mitigation Measures 5.5-1 through 5.5-14 to protect archaeological resources.

As part of the Project's BMPs, in the event that evidence of archaeological resources is unearthed during construction activities, all work within 50 feet of the discovery would be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds. No disturbance would occur in the vicinity of the find until the Project Site is evaluated by the archaeologist and the find is recorded or treated per the recommendations of the qualified archaeologist. In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the remains are determined to be Native American, the Coroner shall notify the NAHC in Sacramento within 24 hours. In accordance with California PRC, Section 5097.98, the NAHC must immediately notify those persons it believes to be the Most Likely Descendant (MLD) from the deceased Native American. The MLD shall complete their inspection within 48 hours of being granted access to the site. The MLD would then determine, in consultation with the property owner, the disposition of the human remains.

Additionally, the Project Site has historically been developed for residential uses. The Proposed Project proposes to construct 11 single-family residential dwellings. Therefore, no new impacts than what has already been analyzed in the GP PEIR

are anticipated to occur in regard to archaeological resources. The Proposed Project would follow standard unanticipated discovery regulatory measures for archaeological resources. No Mitigation Measures are required. With implementation of the required regulatory measures below, impacts to archaeological and historical resources would be less than significant.

### *Conclusion*

Implementation of recommended regulatory measures would reduce the potential impacts of the Proposed Project associated with Cultural Resources to less than significant. The Proposed Project does not result in any new significant impacts peculiar to the project or property, a substantial increase in the severity of the impacts evaluated in the GP EIR, or potentially significant off-site or cumulative impacts that would render Section 15183 inapplicable to the project. With regards to the issue area of Cultural Resources, the following findings can be made:

1. No peculiar impacts to the Project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed by the GP PEIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the GP PEIR.
4. Feasible Mitigation Measures and uniformly applied development policies and standards contained within the GP PEIR apply to the Proposed Project. Standard regulatory practices provide protection for archaeological resources and reduce potential impacts to less than significant.

## 4.6 Energy

### *Impact Analysis*

| CEQA THRESHOLDS | Project Peculiar Impact that is not Substantially Mitigated by Uniform Applied Policies | Significant Impact not Analyzed as Significant in the GP PEIR | Potentially Significant Offsite or Cumulative Impact not Discussed in the GP PEIR | Adverse Impact More Severe Based on Substantial New Information | No New Impact from GP PEIR |
|---|---|---|---|---|---|
| **VI. ENERGY:** Would the project: | | | | | |
| a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | | | | | X |
| b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | | | | | X |

### *General Plan PEIR Mitigation Measures*

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| **5.12-13** As part of the development application and review process, coordinate with SCE, Time Warner Cable, Cox Communications Orange County, The Gas Company, AT&T, cellular telephone service providers, and other local utilities to assess capacity and infrastructure needs to support new development or redevelopment activities. Require that utilities be moved underground consistent with the City's Master Utility Undergrounding Plan. (**Implementation Program V-1**) | Mitigation Measure is applicable. The Proposed Project would coordinate with local utilities to assess capacity and infrastructure needs. |
| **5.12-14** The City strongly encourages new development and major renovation projects to employ green building techniques and materials. Encourage proposed development projects throughout the City to incorporate LEED® Standards developed by the U.S. Green Building Council or an equivalent program. Encourage building orientations and landscaping that enhance natural | Mitigation Measure is applicable. The Proposed Project would comply with the City's Municipal Code, applicable design |

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| lighting and sun exposure. Prepare guidelines for sustainable development to encourage incorporation of these practices in new development. These guidelines would include measures to maximize soil permeability to address related stormwater and surface-water runoff issues. Require compliance with State Title 24 building construction standards and Energy Star conservation standards for all development projects. (**Implementation Program III-11**) | standards, and Title 24 standards. |

### *Discussion*

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

### *Narrative Summary: Impacts Analyzed in the GP PEIR (a)*

**Significant and Unavoidable.** The City certified the GP PEIR before the above checklist items were added to the State CEQA Guidelines. However, the topic of energy is addressed in the GP PEIR Section 5.12 – Public Services and Utilities and Section 5.15 – Climate Change. Development pursuant to the General Plan land use policy would result in the consumption of energy resources, including nonrenewable resources, through activities such as fuel consumed by construction vehicles and equipment. Fossil fuels are typically used for construction vehicles and other equipment during site clearing, grading, paving, and building. This use would have an irreversible effect on such resources. The buildout of the General Plan represents a long-term commitment to the consumption of energy resources.

The consumption of energy in the studied existing buildings is estimated to have emitted approximately 352,050 metric tons of carbon dioxide-equivalent (MTCO2e). Energy consumption in the same building types under buildout of the General Plan is expected to result in approximately 643,996 MTCO2e per year. Overall, greenhouse gas emissions associated with building energy consumption under future development capacity of the General Plan would increase by about 83 percent relative to existing conditions (GP PEIR, page 5.15-21).

Water consumption associated with various activities under the OGP is embedded with energy by virtue of the amount of energy consumed in collecting, extracting, conveying, treating, and distributing water to end users, and treating and disposing of wastewater. According to the GP PEIR, the existing demand for the embodied energy of water is estimated to result in 58,797 MTCO2e per year, while projected demand for the embodied energy of water at

buildout of the OGP would be 59,297 MTCO2e per year, an increase of less than one percent relative to existing conditions (GP PEIR, page 5.15-22). Existing GHG emissions from VMT, building energy consumption, and the embodied energy of water consumption were estimated to be approximately 2,072,493 MTCO2e in 2004, while the GHG emissions under the buildout of the OGP in 2030 are projected to be approximately 3,519,569 MTCO2e.

Overall, while the GP PEIR was certified before the checklist items related to energy were added to State CEQA Guidelines, the GP PEIR discusses an overall significant environmental impact due to the buildout of the OGP in regard to energy and energy consumption. Therefore, implementation of the OGP would have a significant and unavoidable impact in regard to energy.

***Impacts Associated with the Proposed Project (a)***

**No New Impacts.** The Proposed Project would not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation. The three main types of energy expected to be consumed by the Proposed Project include electricity, natural gas, and petroleum products in the form of gasoline and diesel fuel. The Proposed Project's electricity would be provided by Southern California Edison (SCE). SCE is an investor-owned public utility operating as a subsidiary of Edison International. As of 2022, SCE's energy comes from 8.4% Nuclear, 0.1% Biomass and Waste, 5.5% Geothermal, 15.1% Solar, 9.4% Wind, 15.2% Natural Gas, 0.8% Eligible Hydroelectric, 3.3% Large Hydroelectric, and 42% unspecified sources. Natural gas would be provided to the Proposed Project by Southern California Gas (SoCalGas). Project-related vehicle trip energy consumption would be predominantly gasoline and diesel fuel. Gasoline and other vehicle fuels are commercially provided commodities and would be available to the patrons and employees of the Proposed Project via commercial outlets.

Information from the CalEEMod version 2022.1.1 output (**Appendix A**) was utilized to generate estimates of the Proposed Project's electricity, natural gas, and fuel consumption for construction and operational aspects of the Proposed Project.

*Construction Energy*

Construction of the Proposed Project would include demolition, site preparation, grading, building construction, paving, and application of architectural coatings. The Proposed Project is anticipated to start construction no sooner than September 2024 with completion estimated by 2026. It is anticipated to be operational in 2026. The modeling assumed 13 residential units.

As mentioned previously, electrical service would be provided by SCE. The total electricity usage from the Proposed Project's construction related activities is estimated to be approximately 20,192 kWh.

The Proposed Project's construction phase would consume electricity and fossil fuels as a single energy demand, meaning that once construction is completed, their use would cease. This includes gasoline and diesel fuel usage for auto and truck trips during construction and operation, and off-road equipment usage during construction, which is anticipated to be completed in one phase. Proposed Project construction would represent a "single event" diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources once construction is completed. The Proposed Project's estimated energy consumption during construction is provided in **Appendix A.** In summary, the usage was estimated as follows: Proposed Project construction activities would consume an estimated 40,886 gallons of diesel fuel, while construction worker trips would consume an estimated 1,965 gallons of fuel. For vendor and hauling trips, an estimated 1,208 gallons of fuel would be consumed.

Construction equipment used over the approximately 14-month construction phase would conform to CARB regulations and California emissions standards. There are no unusual project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in construction of the project would therefore not result in inefficient, wasteful, or unnecessary consumption of fuel.

The Proposed Project would utilize construction contractors which practice compliance with applicable CARB regulation regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. Additionally, CARB has adopted the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants. Compliance with these measures would result in a more efficient use of construction-related energy and would minimize or eliminate wasteful or unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption.

Additionally, as required by California Code of Regulations Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than five minutes, thereby minimizing or eliminating 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 County building officials, and/or in response to citizen complaints.

Therefore, potential impacts associated with wasteful, inefficient, or unnecessary consumption of energy resources during construction of the Proposed Project would be less than significant, and no mitigation would be required.

*Operations*

Energy consumption in support of or related to project operations would include transportation energy demands (energy consumed by employee and patron vehicles accessing the Project Site) and facilities energy demands (energy consumed by building operations and site maintenance activities).

The Proposed Project would generate a maximum of 100 trips per day and consume an estimated 10,140 gallons of fuel per year (**Appendix C** – *Rancho Ridge Infill Project Transportation Study Screening Assessment,* Ganddini Group, Inc., December 19, 2022*)*. Trip generation and VMT generated by the Proposed Project are consistent with other similar residential land uses of similar scale and configuration. That is, the Proposed 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. Furthermore, the California Energy Commission reports the state of California consumed approximately 3.6 billion gallons of diesel and 13.6 billion gallons of gasoline in 2022. The increase in fuel consumption from the Proposed Project is insignificant in comparison to the State's demand. Therefore, project transportation energy consumption would not be considered wasteful, inefficient, or otherwise unnecessary.

Building operation and site maintenance (including landscape maintenance) would result in the consumption of electricity (provided by SCE) and natural gas (provided by SoCalGas). The annual natural gas and electricity demands are provided in the CalEEMod output in **Appendix A**. The estimated electricity demand for the Proposed Project is approximately 89,637 kWh per year. By comparison, the residential sector of Orange County consumed approximately 7,272 million kWh of electricity in 2021[4]. In addition, the estimated natural gas consumption for the Proposed Project is approximately 498,360 kBTU per year. In 2021, the non-residential sector of Orange County consumed approximately 362 million terms of gas[5]. Therefore, the increase in both electricity and natural gas demand from the Proposed Project is insignificant compared to the County's 2021 residential sector demand.

Energy use in buildings is divided into energy consumed by the built environment and energy consumed by uses that are independent of the construction of the building such as in plug-in appliances. In California, the California Building Standards Code Title 24 governs energy consumed by the built environment, mechanical systems, and some types of fixed lighting. Non-building energy use, or "plug-in" energy use can be further subdivided by specific end-use

[4] Electricity Consumption by County (ca.gov), California Energy Commission. Accessed November 30, 2024.

[5] Gas Consumption by County (ca.gov), California Energy Commission. Accessed on November 30, 2024.

(refrigeration, cooking, appliances, etc.). The Proposed Project would be required to comply with Title 24 standards.

The Proposed Project would implement the mandatory requirements of California's Building Efficiency Standards (Title 24, Part 6) to reduce energy consumption. California's building standards are some of the strictest in the nation and the Proposed Project's compliance with the Building Code would ensure that wasteful, inefficient, or unnecessary consumption of energy is minimized. The California Building Code is designed to reduce the amount of energy needed to heat or cool a building, reduce energy usage for lighting and appliances, and promote usage of energy from renewable sources. The Proposed Project's energy demands in total would be comparable to other residential projects of similar scale and configuration. Therefore, the Proposed Project's facilities' energy demands, and energy consumptions would not be considered inefficient, wasteful, or otherwise unnecessary. The Proposed Project's energy demand and energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary, and no project-specific mitigation would be required. The Proposed Project's impact is considered less than significant. The Proposed Project would not result in any new or substantially greater impacts from what is analyzed in the GP PEIR are found.

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

***Narrative Summary: Impacts Analyzed in the GP PEIR (b)***

**Less than Significant Impact.** The City certified the GP PEIR before the above checklist items were added to the State CEQA Guidelines. However, the topic of energy is addressed in the GP PEIR Section 5.12 – Public Services and Utilities and Section 5.15 – Climate Change. The GP PEIR discusses adherence to state and local plans, such as the California Renewable Energy Portfolio Standard Program, SB 107, the California Green Building Initiative, Air Resources Board, and SCAQMD rules and regulations. The OGP is required to comply with state and local plans for renewable energy or energy efficiency and does not propose any additional standards that would conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

***Impacts Associated with the Proposed Project (b)***

**No New Impacts.** The Proposed Project would comply with the California Green Building Standard Code requirements for energy efficient buildings and appliances in compliance with the State's Energy Plan and Title 24 CCR energy efficiency standards and energy efficiency programs.

An individual project does not have the ability to comply or conflict with Pavley (AB 1493) regulations because they are intended for agencies and their adoption of procedures and protocols for reporting and certifying GHG emission reductions

from mobile sources. However, the vehicles associated with the Proposed Project would be required to comply with federal and state fuel efficiency standards.

The Proposed Project would be required to meet or exceed the energy standards established in the California Green Building Standards Code, Title 24, Part 11 (CALGreen). CALGreen Standards require new buildings to reduce water consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials.

Additionally, the Proposed Project is not expected to conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The Proposed Project would purchase electricity through SCE which is subject to the requirements of California Senate Bill 100 (SB 100). SB 100 is the most stringent and current energy legislation in California, requiring that renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers and 100% of electricity procured to serve all state agencies by December 31, 2045. The Project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservations goals within the State of California. Notwithstanding, the Proposed Project proposes residential uses and would not have any long-term effects on an energy provider's future energy development or future energy conservation strategies.

Therefore, the Proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and no mitigation would be required.

### *Conclusion*

The energy impacts of the Proposed Project would be less than significant, and no Project-specific mitigation is required. With regards to the issue of Energy, the following findings can be made:

1. No peculiar impacts to the Project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed by the GP PEIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the GP PEIR.
4. No Mitigation Measures contained within the GP PEIR would be required because Project-specific impacts would be less than significant.

## 4.7 Geology and Soils

### *Impact Analysis*

| CEQA THRESHOLDS | Project Peculiar Impact that is not Substantially Mitigated by Uniform Applied Policies | Significant Impact not Analyzed as Significant in the GP PEIR | Potentially Significant Offsite or Cumulative Impact not Discussed in the GP PEIR | Adverse Impact More Severe Based on Substantial New Information | No New Impact from GP PEIR |
|---|---|---|---|---|---|
| **VII. GEOLOGY AND SOILS:** Would the project: | | | | | |
| a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | | |
| • 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. | | | | | X |
| • Strong seismic ground shaking? | | | | | X |
| • Seismic-related ground failure, including liquefaction? | | | | | X |
| • Landslides? | | | | | X |
| b) Result in substantial soil erosion or the loss of topsoil? | | | | | X |
| 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- site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | | | | | X |

| CEQA THRESHOLDS | Project Peculiar Impact that is not Substantially Mitigated by Uniform Applied Policies | Significant Impact not Analyzed as Significant in the GP PEIR | Potentially Significant Offsite or Cumulative Impact not Discussed in the GP PEIR | Adverse Impact More Severe Based on Substantial New Information | No New Impact from GP PEIR |
|---|---|---|---|---|---|
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | | | | | X |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | | | | | X |
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | | | | | X |

### *General Plan PEIR Mitigation Measures*

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| **5.6-1** Pursuant to state law, geologic and/or geotechnical studies are required for proposed new development projects located in areas identified as susceptible to landslides and liquefaction, and for areas within an Earthquake Fault Zone or within 150 feet of an active or potentially active fault. Binding mitigation strategies must be adopted.<br>Compliance with the recommendations set forth in site-specific geologic and/or geotechnical studies will be made a condition of approval for new development. In addition, the City may require applicants to incorporate measures to stabilize and maintain slopes on a site-by-site basis, such as, but not limited to, proper planting, irrigation, retaining walls, and benching.<br>(**Implementation Program III-9**) | Mitigation Measure is applicable. The Project has prepared a Preliminary Geotechnical Investigation (**Appendix D** – Preliminary Geotechnical Investigation, Proposed Residential Development, 647 North Rancho Santiago Boulevard, Albus & Associates, August 2022). The Geotechnical Investigation includes recommendations for earthwork. |

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| **5.6-2** The City will implement the following action to ensure that land use planning and real estate processes fully account for the presence of seismic hazards in Orange.<br>Work with the County of Orange and California Geological Survey to monitor and compile information on faults within the Orange planning area. | Mitigation Measure is not applicable. |
| **5.6-3** The City shall use open space easements and other regulatory techniques to prohibit development and avoid public safety hazards where the threat from seismic hazards cannot be mitigated. | Mitigation Measure is not applicable. |
| **5.6-4** The City will maintain erosion protection measures in areas susceptible to erosion. The City shall require all future development to implement erosion protection during construction in compliance with NPDES requirements. | Mitigation Measure is applicable. The Project includes BMPs that are in compliance with NPDES requirements. |

***Discussion***

*a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*

- *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.*

***Narrative Summary*: *Impacts Analyzed in the GP PEIR (a)***

**Less Than Significant with Mitigation.** The GP PEIR states that the City's planning area contains two possibly active faults, both of which could result in surface fault rupture during a seismic event. No Alquist-Priolo fault zones are located in the City. The OGP's focus areas where changes in land use and new development are anticipated are not in the vicinity of the faults. However, various land uses occur near the faults including residential development. No OGP land use changes are proposed and redevelopment of these areas under the proposed OGP is not anticipated. However, if new development adjacent to faults occurred under the OGP, it would have the potential to expose additional people and/or structures to hazards in the event of fault rupture. This is considered a potentially significant impact.

However, the OGP has policies and regulations in place to protect residents and businesses from seismic hazards and other geologic constraints, including earthquake preparedness and emergency response programs. Adherence to

federal, state, and local regulations; adherence to policies in the OGP, and implementation of Mitigation Measures 5.6-1 through 5.6-4 would reduce potential seismic effects of fault rupture to a less than significant level at the program level of analysis. Individual development projects would be required to undergo project-specific environmental review. If project-level significant impacts are identified, specific Mitigation Measures would be required under CEQA.

***Impacts Associated with the Proposed Project (a)***

**No New Impacts.** According to the Geotechnical Investigation, there are no active faults known to project through or immediately adjacent to the Project Site and the Project Site does not lie within an "Earthquake Fault Zone" as defined by the State of California in the Earthquake Fault Zoning Act. Accordingly, there is little probability of surface rupture due to faults beneath the Project Site. There are, however, several faults located in sufficiently close proximity to the Project Site. The closest known active faults to the Project Site are the Elsinore fault located 6.87 miles away from the Project Site, San Joaquin Hills fault located approximately 7.66 miles away from the Project Site, and Puente Hills (Coyote Hills) fault located approximately 7.91 miles away from the Project Site. Therefore, potential for ground rupture due to an earthquake beneath the Project Site is considered low and no mitigation would be required. No new impacts from what is analyzed in the GP PEIR are found.

- *Strong seismic ground shaking?*

***Narrative Summary: Impacts Analyzed in the GP PEIR (a)***

**Less than Significant Impact with Mitigation.** The GP PEIR states that the City's planning area is located within a seismically active region of southern California near large regional faults capable of generating strong earthquakes with high-intensity ground shaking. The potential for earthquakes along these faults to affect the planning area varies according to the intensity of the seismic event and the distance of the fault from the planning area. In general, greater earthquake intensity and closer proximity to the fault producing the earthquake would increase the intensity of ground shaking. The entire planning area is at risk for damage caused by ground shaking. Development under the OGP has the potential to expose additional people and/or structures to the hazards caused by ground shaking. This is considered a potentially significant impact.

Adherence to federal, state, and local regulations described under the Regulatory Setting (such as Building Code requirements for earthquake design); adherence to policies in the OGP and implementation of Mitigation Measures 5.6-1 through 5.6-3 would reduce the seismic effects of ground shaking to a less than significant level at the program level of analysis. Individual development projects would be required to undergo project-specific environmental review. If project-

level significant impacts are identified, specific Mitigation Measures would be required under CEQA.

### *Impacts Associated with the Proposed Project (a)*

**No New Impacts.** The Project Site is not situated within a currently established Alquist-Priolo Earthquake Fault Zone. However, the Project Site is situated in a seismically active area that has historically been affected by generally moderate to occasionally high levels of ground motion. The Project Site lies in relatively close proximity to several seismically active faults; therefore, the Proposed Project would likely experience similar moderate to occasionally high ground shaking from these fault zones, as well as some background shaking from other seismically active areas of the southern California region. The Proposed Project is required to be constructed consistent with all applicable seismic design standards contained in the current California Building Code (CBC), including Section 1613A Earthquake Loads, which would reduce impacts associated with ground shaking and seismic activity. Design and construction in accordance with the current CBC requirements and the Geotechnical Investigation's recommendations as well as the City's Mitigation Measures are anticipated to address impacts related to potential ground shaking. Therefore, potential impacts associated with adverse effects to people or structures from seismic ground shaking would be less than significant, and no mitigation would be required. The Proposed Project would not result in any new or substantially greater impacts from what is analyzed in the GP PEIR.

- *Seismic-related ground failure, including liquefaction?*

### *Narrative Summary: Impacts Analyzed in the GP PEIR (a)*

**Less than Significant Impact with Mitigation.** Liquefaction areas pose potential land use constraints, with the severity of damage to structures varying based on the type and magnitude of liquefaction failure. Portions of the City's planning area along the Santa Ana River and Santiago Creek and developed areas adjacent to these waterways have been designated significant liquefaction hazard areas (GP PEIR, 5.6-16). In the event of a major earthquake, buildings in these areas that are not anchored to bedrock material could suffer damage or failure, resulting in property loss and potential harm to persons within said buildings. Portions of all focus areas within the OGP are located within areas identified as liquefaction hazard areas, with the exception of the West Chapman Avenue/Uptown Orange focus area. The OGP allows development to occur in the vicinity of areas identified as liquefaction hazard areas. However, the level of development is likely to be more limited in these areas as a result of liquefaction hazards. Development under the OGP in liquefaction areas has the potential to expose additional people and/or structures to the hazards caused by liquefaction. This is considered a potentially significant impact.

Adherence to federal, state, and local regulations; adherence to policies in the OGP mentioned above; and implementation of Mitigation Measures 5.6-1 through 5.6-4 requiring site- specific geotechnical studies and project-level mitigation addressing liquefaction would reduce the effects of liquefaction to a less than significant level at the program level of analysis. Individual development projects would be required to undergo project-specific environmental review. If project-level significant impacts are identified, specific Mitigation Measures would be required under CEQA.

### *Impacts Associated with the Proposed Project (a)*

**No New Impacts.** Liquefaction is a seismic phenomenon in which loose, saturated, granular soils behave similarly to a fluid when subject to high-intensity ground shaking. Liquefaction occurs when three general conditions exist: 1) shallow groundwater; 2) low density non-cohesive (granular) soils; and 3) high-intensity ground motion. Liquefaction is typified by a buildup of pore-water pressure in the affected soil layer to a point where a total loss of shear strength occurs, causing the soil to behave as a liquid. Effects of liquefaction on level ground include settlement, sand boils, and bearing capacity failures below structures. The Geotechnical Investigation for the Proposed Project found that the Project Site is not mapped for State-designated zones of potentially liquefiable soils. Groundwater was also not encountered to the maximum depth of 51.5 feet drilled during the geotechnical investigation site exploration. As a result, the Geotechnical Investigation concluded that the potential for liquefaction to occur beneath the Project Site is considered very low. Additionally, the City requires all new development projects to follow recommendations listed in the projects' geotechnical investigation reports. The Proposed Project would adhere to the Geotechnical Investigation's recommendations which further reduce the potential for liquefaction. Therefore, potential impacts associated with adverse effects to people or structures from seismic-related ground failure, including liquefaction, would be less than significant, and no mitigation would be required. No new impacts from what is analyzed in the GP PEIR are found.

- *Landslides?*

### *Narrative Summary: Impacts Analyzed in the GP PEIR (a)*

**Less than Significant Impact with Mitigation.** The GP PEIR states that buildout of the OGP allows development to occur in the vicinity of areas identified as landslide hazard areas. The low hills of the northern and eastern portions of the planning area have been designated as susceptible to earthquake-induced landslides and currently contain open space as well as existing residential development. Buildings, roadways, utilities, persons, and the like located within or below these hazard areas could be subject to severe damage or injury in the event of an earthquake-induced landslide. However, the GP PEIR states that the OGP focus areas where OGP land use changes are proposed, and new development is

anticipated are not within landslide areas. However, if new development occurs in landslide areas under the OGP, it has the potential to expose additional people and/or structures to earthquake-induced landslides. This is considered a potentially significant impact.

Adherence to federal, state, and local regulations such as building code requirements described under the Regulatory Setting section; adherence to policies in the OGP mentioned above; and implementation of Mitigation Measures 5.6-1 through 5.6-4 requiring site specific geotechnical studies and project-level mitigation for projects in landslide areas would reduce the seismic effects of earthquake-induced landslides to a less than significant level at the program level of analysis. Individual development projects would be required to undergo project specific environmental review. If project-level significant impacts are identified, specific Mitigation Measures would be required under CEQA.

***Impacts Associated with the Proposed Project (a)***

**No New Impacts.** According to the Geotechnical Investigation, there are no known landslides or other slope instability issues impacting the Project Site. The Project Site is relatively level; therefore, geologic hazards associated with landsliding are not anticipated. Additionally, according to the United States Geological Survey (USGS) U.S. Landslide Inventory and Susceptibility Map viewer, the Project Site is not designated as an area susceptible to landslides. Consequently, the potential for the existence of landslides is considered less than significant. No new impacts from what is analyzed in the GP PEIR are found.

*b) Would the project result in substantial soil erosion or the loss of topsoil?*

***Narrative Summary: Impacts Analyzed in the GP PEIR (b)***

**Less than Significant Impact with Mitigation.** The eastern portion of the City's planning area is susceptible to soil erosion due to the hilly topography. The urbanized portion of the City could also be susceptible to erosion from wind and stormwater runoff associated with development activities. Development under the OGP has the potential to increase soil erosion if undertaken without erosion control. This is considered a potentially significant impact. According to the GP PEIR, adherence to federal, state, and local regulations (such as NPDES requirements for a SWPPP and compliance with the City's grading ordinance); adherence to the OGP policies; and implementation of Mitigation Measure 5.6-4 requiring development activities to implement erosion control measures during construction would reduce the effects of erosion t o a less than significant level at the program level of analysis. Individual development projects would be required to undergo project-specific environmental review. If project-level significant impacts are identified, specific Mitigation Measures would be required under CEQA.

***Impacts Associated with the Proposed Project (b)***

**No New Impacts.** According to the Geotechnical Investigation, the Project Site has soils that have a Very High expansion potential. Therefore, the Geotechnical Investigation includes recommendations that are designed to adapt to the Project Site's soil conditions. During Project construction when soil is exposed, temporary soil erosion may occur which could be exacerbated by rainfall. To control the potential for soil erosion, wind, dust, and water quality impacts, the Proposed Project is required to comply with the City's policies and regulations, including the City's Erosion Control, Sediment Control, and Water Quality Notes, as well as the GP PEIR Mitigation Measures 5.6-1 through 5.6.4. The Proposed Project would implement erosion control measures, including SCAQMD rules relating to dust control (such as SCAQMD Rule 403), and rules to protect water quality including preparing a Stormwater Pollution Prevention Plan (SWPPP) to be approved by the Santa Ana Regional Water Quality Control Board (SARWQCB). Compliance with Federal, State, and Local regulations would ensure potential impacts are less than significant. Therefore, potential impacts associated with soil erosion, or the loss of topsoil would be less than significant, and no mitigation would be required. No new impacts from what is analyzed in the GP PEIR are found.

*c) Would the project 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?*

***Narrative Summary: Impacts Analyzed in the GP PEIR (c)***

**Less than Significant Impact with Mitigation.** Landslides that occur naturally represent potential hazards to property and persons in hillside areas of the City. Buildings, roadways, utilities, persons, and infrastructure located within or below these hazard areas could be subject to severe damage or injury in the event of the emergency, The OGP allows development to occur in the vicinity of areas identified as landslide hazard areas. Additionally, the City includes several abandoned and closed landfills. Areas that have a past use of landfill may contain unstable geology and soils. OGP Plan land use focus areas where land use changes are proposed and new development is anticipated, are not within the eastern portion of the City's planning area, which is exposed to landslides. Only one of the focus areas overlaps abandoned landfills along Santiago Creek. The OGP designates this area as Open Space – Park. However, a commercial overlay has been applied to this area, which allows for future development potential for commercial purposes. The level of development is likely to be more limited in the area where unstable geologic units could be present due to the former landfill use. Development within hillside areas or on abandoned landfill sites under the OGP has the potential to expose additional people and/or structures

to landslides, subsidence, or lateral spreading from unstable geology. This is a potentially significant impact. Adherence to federal, state, and local regulations; adherence to policies in the OGP mentioned above; and implementation of Mitigation Measures 5.6-1 through 5.6-4 would reduce the seismic effects of unstable geologic units to a less than significant level at the program level of analysis. Individual development projects would be required to undergo project specific environmental review. If project-level significant impacts are identified, specific Mitigation Measures would be required under CEQA.

***Impacts Associated with the Proposed Project (c)***

**No New Impacts.** Impacts related to liquefaction and landslides are discussed under threshold a. Landsliding and liquefaction are not anticipated at the Project Site. The Project Site is relatively level. Groundwater was not encountered to the maximum depth of 51.5 feet drilled during the geotechnical site exploration. Additionally, the Project Site is not mapped for State-designated zones of liquefiable soils or landslide potential. Therefore, there are no impacts related to the potential for the existence of landslides and liquefaction. No new impacts from what is analyzed in the GP PEIR are found, and no new mitigation is required.

*d) Would the project 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?*

***Narrative Summary: Impacts Analyzed in the GP PEIR (d)***

**Less than Significant Impact.** According to the GP PEIR, much of Orange County contains soil with expansive characteristics. The OGP allows development to occur primarily in the land use focus areas, but also in portions of the eastern portion of the City's planning area, and areas that have not reached their full development potential. Therefore, development could occur in areas with expansive soil characteristics. However, the GP PEIR states that adherence to federal, state, and local regulations such as Building Code requirements for foundations, standard engineering techniques, and policies in the OGP reduce the hazards associated with expansive soils. Therefore, there is a less than significant impact in regard to expansive soil. Individual development projects would be required to undergo project-specific environmental review. If project-level significant impacts are identified, specific Mitigation Measures would be required under CEQA.

***Impacts Associated with the Proposed Project (d)***

**Less than Significant Impact.** The Geotechnical Investigation found that the near-surface soils onsite are generally anticipated to possess a Very High expansion potential. The Geotechnical Investigation requires additional testing for soil expansion prior to construction of foundations and other concrete work to confirm these conditions. The available methods for expansive soils are chemical

treatment, removal and replacement, and moisture conditioning (pre-wetting) and compaction control. Among the listed methods in the Geotechnical Report, moisture conditioning and compaction is listed as the most suitable method. Compacting the material wet side of optimum and at a lower density but with adequate strength reduces the expansion potential. The Geotechnical Investigation lists recommendations for the Project Site in order to adapt to the Project Site's expansive soils. GP PEIR Mitigation Measure 5.6-1 requires new development projects to follow recommendations listed in the geotechnical report as a Condition of Approval. Therefore, implementation of the GP PEIR Mitigation Measures would reduce the Proposed Project's impacts to expansive soils to less than significant, and no new mitigation is required.

*e) Would the project 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?*

***Narrative Summary: Impacts Analyzed in the GP PEIR (e)***

**No Impacts.** Most properties within the corporate City limits are currently served by a public sewage collection system maintained by the City (GP PEIR, page 5.6-19). The majority of development under the OGP would occur in areas already served by public sewage collection systems. Applications for new septic systems are approved by the City based on geotechnical analyses demonstrating appropriate soils. Soils incapable of inadequately supporting the use of septic tanks or alternative wastewater disposal systems have not been identified in the City's planning area. Existing properties within unincorporated islands in Orange County that fall within the planning area that may be on septic systems would likely be converted to sewer upon incorporation. No impacts posed by soils with septic tank limitations are expected. Therefore, the use of septic tanks or alternative wastewater disposal systems would not be required as part of the implementation of the OGP, and no significant impacts would occur.

***Impacts Associated with the Proposed Project (e)***

**No New Impacts.** The Proposed Project would not involve the installation of septic tanks or alternative wastewater disposal systems. Therefore, no impacts to soils associated with septic tanks or alternative wastewater disposal systems would occur, and no mitigation would be required.

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

***Narrative Summary: Impacts Analyzed in the GP PEIR (f)***

**Less than Significant Impact.** The GP PEIR states that development pursuant to the buildout of the OGP has the potential to impact unknown archaeological and paleontological resources. Ground-disturbing activities, such as construction

associated with infill, redevelopment, and/or expansion of infrastructure, have the potential to impact buried paleontological resources. Thus, development of land pursuant to the General Plan has the potential to impact significant known and unknown paleontological resources. However, the majority of new development anticipated under the General Plan would involve infill and redevelopment of existing developed areas. There is potential for unknown and previously undisturbed archaeological, paleontological, and human remains to be found within the developed areas of the City's planning area as redevelopment activities occur. Because the majority of these projects would consist of infill and redevelopment, this grading would occur on previously graded surfaces. Previously excavated areas are generally considered to have a low potential for archaeological resources, since the soil containing such resources has been removed. Sites that have been minimally excavated in the past (e.g., undeveloped parcels, vacant lots, and lots containing surface parking; undeveloped areas around historic buildings; under buildings with post, pier, slab, or shallow wall foundations without basements, etc.) have the greatest likelihood of encountering paleontological resources. This is a potentially significant impact.

According to the GP PIER, there are numerous federal, state, and local regulations that protect cultural, archaeological, and paleontological resources in the City. By implementing OGP policies; applying program-level mitigation at the General Plan level of analysis, the Old Towne Design Standards, Secretary of Interior Standards for Rehabilitation; and utilizing the site development permit and CEQA processes for individual projects, the potential impact to these cultural resources would be reduced to a less than significant level with Mitigation Measures 5.5-1 through 5.5-10.

***Impacts Associated with the Proposed Project (f)***

**No New Impacts.** Project-specific impacts are less than significant with mitigation and uniformly applied development policies incorporated. It is unlikely that the Proposed Project would directly or indirectly destroy a unique paleontological resource or site or unique geologic feature because significant portions of the Project Site have been disturbed by grading in previous developments. Although no impacts to paleontological resources are anticipated, since grading activities have a potential for encountering inadvertent resources in the Project Site, the applicant would be required to comply with **MM GEO-1**. With implementation of **MM GEO-1**, the impacts related to paleontological or geologic sites or resources would be less than significant.

**Mitigation Measures: MM GEO-1:** *Unanticipated Discovery of Cultural Resources*

Should archaeological resources (sites, features, or artifacts) be exposed during construction activities for the proposed project, all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can

evaluate the significance of the find and determine whether or not additional study is warranted. Depending upon the significance of the find, the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work such as preparation of an archaeological treatment plan, testing, or data recovery may be warranted.

### *Conclusion*

The Proposed Project is required to comply with mitigation measure **MM GEO-1** to ensure that Project-specific impacts would be less than significant. Potential impacts identified for the Proposed Project would not be greater than what were identified in the GP PEIR; therefore, the Proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified impacts. With regards to the issue of Geology and Soils, the following findings can be made:

1. No peculiar impacts to the Project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed by the GP PEIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the GP PEIR.
4. Feasible Mitigation Measures and uniformly applied development policies and standards contained within the GP PEIR apply to the Proposed Project. With implementation of MM GEO-1, Project-specific impacts would be less than significant.

## 4.8 Greenhouse Gas Emissions

### *Impact Analysis*

| CEQA THRESHOLDS | Project Peculiar Impact that is not Substantially Mitigated by Uniform Applied Policies | Significant Impact not Analyzed as Significant in the GP PEIR | Potentially Significant Offsite or Cumulative Impact not Discussed in the GP PEIR | Adverse Impact More Severe Based on Substantial New Information | No New Impact from GP PEIR |
|---|---|---|---|---|---|
| **VIII. GREENHOUSE GAS EMISSIONS:** Would the project: | | | | | |
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | | | | | X |
| b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | | | | | X |

### *General Plan PEIR Mitigation Measures*

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| **5.15-1** Within 24 months of adoption of the General Plan and certification of the EIR, the City shall establish a global climate change action plan that includes a baseline inventory of all GHG emissions associated with all residences, businesses, industries, agriculture, municipal operations, and other sources within the City limits; establishment of a GHG emissions reduction target; development of enforceable, feasible GHG emissions reduction measures to meet the established target; and performance monitoring of the GHG emissions reduction measures to occur every 3 years to ensure the emissions reductions are being achieved. (**Implementation Program I-35**) | Mitigation Measure is not applicable. |
| **5.15-2** Within 12 months of the effective date of the OGP, City staff shall submit to the City Council an ordinance that requires and/or provides incentives for: (1) specified new residential development to comply with a specified green | Mitigation Measure is not applicable. However, the Proposed Project would comply with the most |

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| building program or show that its development provides comparable effectiveness to such a program; and (2) specified non-residential development of a specified size comply with a specified green building program or show that its development provides comparable effectiveness to such a program. | recent Building Code and Energy Code. |

***Discussion***

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

***Narrative Summary: Impacts Analyzed in the GP PEIR (a)***

**Significant and Unavoidable.** The City certified the GP PEIR before the above checklist items were added to State CEQA Guidelines. However, the topic of greenhouse gas is addressed in GP PEIR Section 5.15 – Climate Change. The GP PEIR states that the mass of GHG emissions generated by an individual development project under a general plan, such as the OGP, would be so minute that the concentration of GHGs in the atmosphere would essentially stay the same in comparison to GHG emissions produced by activities elsewhere in the world (GP PEIR, page 5.15-19 & 20). Implementation of the OGP would generate GHG emissions, including CO2, CH4, and N2O primarily associated with VMT, electricity and natural gas consumption of buildings, energy embodied in water consumption (i.e. the electricity required to extract, convey, treat, and distribute treated water to the Project Site), and construction activities associated with future development activities under the OGP. Furthermore, increased GHG emissions associated with the OGP could potentially impede implementation of the state's mandatory requirement under AB 32 to reduce statewide GHG emissions to 1990 level by 2020 (GP PEIR, page 5.15-20). Therefore, buildout of the OGP could potentially conflict with the state mandatory requirement. Buildout of the OGP would increase overall GHG emissions by 52 percent from 2004 to 2030. Increased solid waste generation and the associated management and disposal in landfills under the OGP are also anticipated to result in increased GHG emissions associated with the release of landfill gas; GHG emissions would also result from the collection of solid waste and transport to the landfill. Because implementation of the OGP would result in an approximately 52 percent increase in GHG emissions from approximately 2,072,493 MTCO2e in 2004 to approximately 3,159,568 MTCO2e under buildout of the OGP in 2030, and also exceed the City's threshold of the emission of 10,000 metric tons per year CO2e equivalent for an individual project's contribution to the global GHG emissions environment, this is a potentially significant impact.

Adherence to and implementation of regulations, General Plan policies, and implementation of Mitigation Measures 5.15-1 through 5.15-2, would reduce GHG emissions, but not to a less than significant level. This impact would remain significant and unavoidable. Individual development projects would be required to undergo project-specific environmental review. If project-level significant impacts are identified, specific Mitigation Measures would be required under CEQA.

### *Impacts Associated with the Proposed Project (a)*

**No New Impacts.** An Air Quality, Global Climate Change, and Energy Impact Analysis by Ganddini, dated March 31, 2023 (**Appendix A**), was prepared for the Proposed Project and analyzes GHG emissions associated with the Proposed Project. SCAQMD published the *Interim CEQA Greenhouse Gas (GHG) Significance Thresholds, December 2008,* to assist local agencies with determining the impact of a project's GHG emissions. SCAQMD's objective in providing the GHG guidelines is to establish a performance standard that would ultimately contribute to reducing GHG emissions below 1990 levels, and thus achieve the requirements of the California Global Warming Solutions Act (AB 32).

In the absence of a formal threshold established by the State, SCAQMD's interim GHG threshold has been established for use by lead agencies in determining significance of GHG emissions in CEQA. SCAQMD guidance describes a five-tiered approach for determining significance. Tier 3 is the primary method used for development projects of the Proposed Project's size. The Tier 3 approach limits the amount of GHG emissions from residential and commercial development projects to 3,000 metric tons of CO2 equivalents per year (MTCO2e/yr). If the project exceeds 3,000 MTCO2e/yr, then the impact is considered significant, and Mitigation Measures would be required to reduce emissions below the threshold.

The Proposed Project is anticipated to generate GHG emissions from area sources, energy usage, mobile sources, waste disposal, water usage, and construction equipment. Greenhouse gas emissions were calculated for on-site and off-site construction and operations activity using CalEEMod 2022.1.1.6 (**Appendix A**). **Table 7** – *Project-Related Greenhouse Gas Emissions* shows the construction greenhouse gas emissions, including equipment and worker vehicle emissions for all phases of construction. Construction emissions are averaged over 30 years and added to the long-term operational emissions, pursuant to SCAQMD recommendations. Because impacts from construction activities occur over a relatively short period of time, they contribute a relatively small portion of the overall lifetime project GHG emissions. However, SCAQMD recommends that construction emissions be amortized over a 30-year project lifetime and added to the overall project operational emissions. Table 7 shows that the total for the Proposed Project's emissions (without credit for any reductions from sustainable design and/or regulatory requirements) would be 149.53 MTCO2e per year.

According to the SCAQMD threshold of significance, a cumulative global climate change impact would occur if the GHG emissions created from ongoing operations of the Proposed Project would exceed the SCAQMD threshold of 3,000 MTCO2e per year for all land uses. Therefore, operation of the Proposed Project would not create a significant cumulative impact to global change. Therefore, potential impacts associated with the generation of greenhouse gas emissions would be less than significant.

**Table 7 – Project-Related Greenhouse Gas Emissions**

| Category | Greenhouse Gas Emissions (Metric Tons/Year) | | | | | |
|---|---|---|---|---|---|---|
| | **Bio-CO2** | **NonBio-CO2** | **CO2** | **CH4** | **N2O** | **C2Oe** |
| Maximum Annual Operations | 1.08 | 137.00 | 138.00 | 0.12 | 0.01 | 142.00 |
| Construction[1] | 0.00 | 7.50 | 7.50 | 0.00 | 0.00 | 7.53 |
| **Total Emissions** | **1.08** | **144.50** | **145.50** | **0.12** | **0.01** | **149.54** |
| SCAQMD Draft Screening Threshold | | | | | | 3,000 |
| **Exceeds Threshold?** | | | | | | **No** |

Source: CalEEMod Version 2022.1.1.6

Notes:

1. Construction GHG Emissions CO2e based on a 30 year amortization rate.

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

***Narrative Summary: Impacts Analyzed in GP PEIR (b)***

**Significant and Unavoidable.** Increased GHG emissions associated with the General Plan could potentially impede implementation of the state's mandatory requirement under Assembly Bill 32 to reduce statewide GHG emissions to 1990 levels by the same year. Therefore, the incremental GHG emissions associated with development under the General Plan would cause a cumulatively considerable incremental contribution to significant cumulative impacts when viewed in connection with worldwide GHG emissions.

***Impacts Associated with the Proposed Project (b)***

**No New Impacts.** As shown in **Table 8** – *Project Consistency with CARB Scoping Plan Policies and Measures*, the Proposed Project is consistent with the applicable strategies within the AB 32 Scoping Plan. The principal overall State plan and policy is AB 32, which focuses on reducing GHG emissions in California to 1990 levels by 2020. This goal is further supplemented by SB 32 and Executive Order B-

30-15, which established a reduction target of at least 40 percent below 1990 emissions by 2030, and Executive Order S-3-05, which established a reduction target of at least 80 percent below 1990 emissions by 2050.

A specific requirement of AB 32 was to prepare a Climate Change Scoping Plan for achieving the maximum technologically feasible and cost-effective GHG emission reduction by 2020. The CARB Board approved a Climate Change Scoping Plan in December 2008 and updated the plan in 2014, approved a new Climate Change Scoping Plan in 2017, and the most recent Climate Change Scoping Plan in 2022. As the 2022 Scoping Plan builds upon previous versions, project consistency with applicable strategies of the 2008, 2017, and 2022 Plan are assessed in Table 8.

**Table 8 – Project Consistency with CARB Scoping Plan Policies and Measures**

| 2008 Scoping Plan Measures to Reduce Greenhouse Gas Emissions | Project Compliance with Measure |
|---|---|
| California Light-Duty Vehicle Greenhouse Gas Standards – Implement adopted standards and planned second phase of the program. Align zero- emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals. | No Conflict. These are CARB enforced standards; vehicles that access the Project Site (that are required to comply with the standards) would comply with the strategy. |
| Energy Efficiency – Maximize energy efficiency building and appliance standards; pursue additional efficiency including new technologies, policy, and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California. | No Conflict. The Proposed Project would be compliant with the current Title 24 standards. |
| Low Carbon Fuel Standard – Develop and adopt the Low Carbon Fuel Standard. | No Conflict. These are CARB enforced standards; vehicles that access the Project Site (that are required to comply with the standards) would comply with the strategy. |
| Vehicle Efficiency Measures – Implement light-duty vehicle efficiency measures. | No Conflict. These are CARB enforced standards; vehicles that access the Project Site (that are required to comply with the standards) would comply with the strategy. |

| | |
|---|---|
| Medium/Heavy-Duty Vehicles – Adopt medium and heavy-duty vehicle efficiency measures. | No Conflict. These are CARB enforced standards; vehicles that access the Project Site (that are required to comply with the standards) would comply with the strategy. |
| Green Building Strategy – Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. | No Conflict. The California Green Building Standards Code (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code in the CCR. Part 11 establishes voluntary standards, which are mandatory in the 2019 edition of the Code, on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. In addition, the 2022 edition of the Code took effect January 1, 2023. The Proposed Project would be subject to these mandatory standards. |
| High Global Warming Potential Gases – Adopt measures to reduce high global warming potential gases. | No Conflict. CARB identified five measures that reduce HFC emissions from vehicular and commercial refrigeration systems; vehicles that access the Project Site that are required to comply with the measures would comply with the strategy. |
| Recycling and Waste – Reduce methane emissions at landfills. Increase waste diversion, composting, and commercial recycling. Move toward zero waste. | No Conflict. The Proposed Project would participate in the City's existing waste, organics, and recycling program. |
| Water – Continue efficiency programs and use cleaner energy sources to move and treat water. | No Conflict. The Proposed Project would comply with all applicable City ordinances and CAL Green requirements. |
| **2017 Scoping Plan Recommended Actions to Reduce Greenhouse Gas Emissions** | **Project Compliance with Recommended Action** |
| Implement Mobile Source Strategy: Further increase GHG stringency on all | No Conflict. These are CARB enforced standards; vehicles that access the Project Site (that are required to comply |

| | |
|---|---|
| light-duty vehicles beyond existing Advanced Clean Car regulations. | with the standards) would comply with the strategy. |
| Implement Mobile Source Strategy: At least 1.5 million zero emission and plug-in hybrid light-duty electric vehicles by 2025 and at least 4.2 million zero emission and plug-in hybrid light-duty electric vehicles by 2030. | No Conflict. These are CARB enforced standards; vehicles that access the Project Site (that are required to comply with the standards) would comply with the strategy. |
| Implement Mobile Source Strategy: Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options. Assumed 20 percent of new urban buses purchased beginning in 2018 will be zero emission buses with the penetration of zero-emission technology ramped up to 100 percent 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-NOX standard. | No Conflict. These are CARB enforced standards; vehicles that access the Project Site (that are required to comply with the standards) would comply with the strategy. |
| Implement Mobile Source Strategy: Last Mile Delivery: New regulation that would result in the use of low NOX 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 percent of new Class 3–7 truck sales in local fleets starting in 2020, increasing to 10 percent in 2025 and remaining flat through 2030. | No Conflict. These are CARB enforced standards; vehicles that access the Project Site (that are required to comply with the standards) would comply with the strategy. |
| Implement SB 350 by 2030: 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. | No Conflict. These are CARB enforced standards; vehicles that access the Project Site (that are required to comply with the standards) would comply with the strategy. |
| By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLCP and SB 1383. | No Conflict. The Proposed Project would be required to comply with City programs |

| | |
|---|---|
| | which comply with the 75 percent reduction required by 2020 per AB 341. |
| **2022 Scoping Plan Priority Key Actions and Recommendations** | **Project Compliance with Recommended Actions** |
| 100 percent of light-duty vehicle sales are ZEVs by 2035. | Not Applicable. This action is in regard to vehicle sales, with an aim to have 100 percent of light-duty vehicle sales be ZEVs by 2035. The Proposed Project is a multi-family residential development and would not interfere with such policymaking. |
| VMT per capita reduced 25 percent below 2019 levels by 2030 and 30 percent below 2019 levels by 2045. | No Conflict. The Proposed Project would not result in an unmitigated impact to VMT. The Project is a 93-unit residential development located in close proximity to existing roadways and residential and commercial uses. Therefore, the Proposed Project would be anticipated to contribute to a reduction in VMT per capita. |
| All electric appliances in new construction beginning 2026 (residential) and 2029 (commercial). | No Conflict. The California Green Building Standards Code (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code in the CCR. Part 11 establishes voluntary standards, which are mandatory in the 2019 edition of the Code, on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. In addition, the 2022 edition of the Code took effect January 1, 2023. The Proposed Project would be subject to these mandatory standards. |
| For existing residential buildings, 80 percent of appliance sales are electric by 2030 and 100 percent of appliance sales are electric by 2035 (appliances replaced at end of life). For existing commercial buildings, 80 percent of appliance sales are electric by 2030 and 100 percent of | Not Applicable. This action is in regard to appliance sales and the Proposed Project would not interfere with such policymaking. Furthermore, although this action is not necessarily applicable on a project-specific basis, the Proposed Project is subject to the California Green |

| | |
|---|---|
| appliance sales are electric by 2045 (appliances replaced at end of life) | Building Standards Code (proposed Part 11, Title 24) which was adopted as part of the California Building Standards Code in the CCR. Part 11 establishes voluntary standards, which are mandatory in the 2019 edition of the Code, on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. In addition, the 2022 edition of the Code took effect January 1, 2023. The Proposed Project would be subject to these mandatory standards. |

The Proposed Project would not conflict with the goals of AB-32, SB-32, or the CARB Scoping Plan as shown above; therefore, the Proposed Project would not conflict with an applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases and impacts are considered to be less than significant, and no mitigation would be required.

### *Conclusion*

The Proposed Project is consistent with the goals and objectives of AB 32, SB-32, the CARB Scoping Plan and the SCAQMD's 3,000 $MTCO_2e$ per year threshold for all land uses. Therefore, the Proposed Project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs. The Greenhouse Gas Emissions impacts of the Proposed Project would be less than significant, and no Project-specific mitigation would be required. With regards to the issue of Greenhouse Gas, the following findings can be made:

1. No peculiar impacts to the Project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed by the GP PEIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the GP PEIR.
4. No new Mitigation Measures would be required because Project-specific impacts would be less than significant. GP PEIR Mitigation Measures have been implemented.

## 4.9 Hazards and Hazardous Materials

### *Impact Analysis*

| CEQA THRESHOLDS | Project Peculiar Impact that is not Substantially Mitigated by Uniform Applied Policies | Significant Impact not Analyzed as Significant in the GP PEIR | Potentially Significant Offsite or Cumulative Impact not Discussed in the GP PEIR | Adverse Impact More Severe Based on Substantial New Information | No New Impact from GP PEIR |
|---|---|---|---|---|---|
| **IX. HAZARDS AND HAZARDOUS MATERIALS:** Would the project: | | | | | |
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | | | | | X |
| 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? | | | | | X |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | | | | | X |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard or excessive noise to the public or the environment? | | | | | X |
| 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 for people residing or working in the project area? | | | | | X |

| CEQA THRESHOLDS | Project Peculiar Impact that is not Substantially Mitigated by Uniform Applied Policies | Significant Impact not Analyzed as Significant in the GP PEIR | Potentially Significant Offsite or Cumulative Impact not Discussed in the GP PEIR | Adverse Impact More Severe Based on Substantial New Information | No New Impact from GP PEIR |
|---|---|---|---|---|---|
| f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | | | | | X |
| g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires? | | | | | X |

## *General Plan PEIR Mitigation Measures*

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| **5.7-1** Continue to assess risks associated with hazardous materials and develop Mitigation Measures accordingly. Identify hazardous material release sites and responsible parties and ensure that the sites are appropriately remediated. (**Implementation Program I-29**) | Mitigation Measure is applicable. The Project conducted a Phase I ESA to assess risks with hazardous materials. |
| **5.7-2** Continue to work with the Orange County Airport Land Use Commission to increase safety and reduce noise associated with aircraft overflights and helicopter operations within the City by achieving the following objectives:<br>• Work with the FAA and local airports (John Wayne Airport, Long Beach Airport, Los Alamitos Army Air Base) to determine appropriate aircraft altitude standards for aircraft flying over the City, taking into account public health and safety.<br>• Continue to regulate the siting and operation of heliport/helistops through the Conditional Use Permit Process in conjunction with the Orange County | Mitigation Measure is not applicable. |

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| Airport Land Use Commission and Caltrans Division of Aeronautics.<br>• Work with the heliport/helistop operators (police, fire, hospital, and private) to implement flight profiles, and operating parameters for noise control.<br>(**Implementation Program V-17)** | |
| **5.7-3** The City shall maintain, equip, and update the Emergency Operations Center on an ongoing basis to improve public safety and agencies response. (**Implementation Program II-5**) | Mitigation Measure is not applicable. |
| **5.7-4** The City shall continually update building and fire codes to:<br>Ensure that new development and retrofitted development reduce potential damage from earthquakes, floods, fire, wind, liquefaction, and other natural hazards. (**Implementation Program I-9**) | Mitigation Measure is applicable. The Proposed Project would comply with all applicable standards set forth in the latest versions of the Building Code and Fire Code. |
| **5.7-5** The City shall continue to evaluate and update information available to the City regarding potential fire hazards and hazard areas. Provide public information regarding defensible space surrounding residences and businesses. Use Wildland Fuel Modification guidelines for controlling vegetation in undeveloped areas, and Wildland Urban Interface Code and week abatement standards (**Implementation Program I-27**) | Mitigation Measure is not applicable. |
| **5.7-6** Use public education activities to accomplish the following objectives:<br>• Raise public awareness of public safety issues including fire safety, flood hazards, homeland security, and other programs; and<br>• Educate the public regarding the benefits of recycling and waste reduction. | Mitigation Measure is not applicable. |

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| Coordinate education activities and make materials available to residents. Utilize all available media, including forums, flyers, brochures, email, videos, interpretive displays, workshops, and the City's website to accomplish these objectives. Fully utilize the resources of the Orange Public Library to disseminate this information. Explore partnerships with local schools and educators to develop an educational program in historic preservation, personal and community safety, and environmental awareness. (**Implementation Program IV-3**) | |
| **5.7-7** Adopt, review, implement, and update as necessary the following master plans, standards, and guidelines:<br>• Multi-Hazard Functional Plan, including<br>• Emergency Operations Plan and evacuation routes.<br>(**Implementation Program I-4**) | Mitigation Measure is not applicable. |

***Discussion***

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

***Narrative Summary*: *Impacts Analyzed in the GP PEIR (a)***

**Less than Significant Impact.** The PEIR examined potential impacts of the General Plan relative to Hazards and Hazardous Materials to the public and environment. Commercial uses such as dry cleaners and vehicle maintenance facilities, industrial uses and hospitals throughout the planning area may use, dispose of, or transport hazardous materials. Future development associated with the implementation of the General Plan that is in proximity to these uses could be exposed to hazardous materials related to the use, disposal, and transport of hazardous materials. New residential and mixed use development in areas previously zoned for commercial and industrial uses could lead to increased potential for residential exposure to hazardous materials. Some of the OGP land use focus areas are located adjacent to and on previously zoned commercial and industrial land. To minimize impacts related to hazardous materials, the GP PEIR implements Mitigation Measures 5.7-1, 5.7-6, and 5.7-7 would reduce impacts to a less than significant level by continuing to assess risks associated with

hazardous materials, educating the public on potential hazards and proper practices, and updating the Emergency Operations Plan and evacuation routes.

Under the General Plan, the City would continue to maintain permitting requirements that parallel County requirements for businesses within Orange that handle, store, or generate hazardous waste. The General Plan is in accordance with federal, state, and local requirements and regulations and new developments would be in conformance with the OCFA, State Department of Toxic Substances Control, the Regional Water Quality Control Board (RWQCB) and/or other responsible agencies. Therefore, there would be a less than significant impact with implemented Mitigation Measures.

***Impacts Associated with the Proposed Project (a)***

**No New Impacts.** The Proposed Project involves subdividing the Project Site into 11 individual parcels and developing each with a single-family dwelling, ranging from approximately 2,425 sq. ft. to approximately 2,724 sq. ft. During the construction phases of the Proposed Project, the transport of construction waste for disposal could result in accidental release of hazardous materials. The Property Owner/Developer would be required to comply with all applicable federal, state, and local laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste to reduce the likelihood and severity of accidents during transit. The disposal of all construction waste would be conducted in accordance with current regulations and in conformance with emission thresholds. Ganddini Group, Inc. conducted an Air Quality, Greenhouse Gas, and Energy Impact Study for the Proposed Project. The Impact Study discusses design features to implement during the construction phase as well as operation phase to limit hazards and the release of hazardous materials and emissions.

Operation of the Proposed Project would not involve the transport, use, or disposal of copious quantities of hazardous materials. The use of hazardous materials on the Project Site post-construction would consist of those commonly used in a residential setting for routine maintenance and cleaning. Proper handling of the use and disposal of hazardous materials would reduce the potential for exposure. Therefore, with incorporation of the recommendations, consistency with General Plan policies and programs, and with application of local, state, and federal regulations related to hazardous materials, no new impacts associated with significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials would occur.

*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?*

***Narrative Summary*: *Impacts Analyzed in the GP PEIR (b)***

**Less Than Significant Impacts.** The GP PEIR examined potential impacts of the General Plan relative to Hazardous Materials to the public and environment. Commercial uses such as dry cleaners and vehicle maintenance facilities, industrial uses and hospitals throughout the planning area may use, dispose of, or transport hazardous materials. Future development associated with the implementation of the General Plan that is in proximity to these uses could be exposed to hazardous materials related to the use, disposal, and transport of hazardous materials. Mitigation Measure 5.7-7 requires the City to adopt, review and implement the EOP according to requirements and provisions of the State Emergency Management System and National Incident Management System. The EOP would be reviewed and updated responding to the changing conditions within the planning area over the course of the General Plan implementation. With adherence to existing regulations and plans, impacts associated with emergency plans would be reduced to a level less than significant.

***Impacts Associated with the Proposed Project (b)***

**No New Impacts.** The Property Owner/Developer would be required to comply with all applicable federal, state, and local laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste during the construction phase to reduce the likelihood and severity of accidents during transit. Additionally, removal of any unknown USTs from the Project Site would be subject to all applicable federal, state, and local laws and regulations pertaining to their removal.

Proper handling of the use and disposal of hazardous materials associated with residential uses would reduce the potential for exposure. Operation of the Proposed Project would not involve the transport, use, or disposal of copious quantities of hazardous materials. The use of hazardous materials on the Project Site post-construction would consist of those commonly used in a residential setting for routine maintenance and cleaning. Proper handling of the use and disposal of hazardous materials would reduce the potential for exposure. Therefore, no new impacts to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would occur, and no new mitigation is required.

*c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

***Narrative Summary*: *Impacts Analyzed in the GP PEIR (c)***

**Less than Significant Impacts.** The GP PEIR discusses how new development mentioned in the General Plan would involve infill and/or redevelopment of existing land uses. The implementation of the General Plan and its policies and

programs is not expected to result in the accidental release of hazardous materials or substances into the environment or within one-quarter mile of a school; however, future development could emit hazardous materials into the environment and may also subject existing development, including schools, to hazardous emissions and waste. Mitigation Measure 5.7-6 and 5.7-7 would reduce these impacts to existing or proposed schools to a less than significant level.

***Impacts Associated with the Proposed Project (c)***

**No New Impacts.** The Proposed Project involves site preparation and the development of 11 dwelling units, ranging from 2,425 sq. ft. to 2,724 sq. ft.. During the construction phases of the Proposed Project, the transport of construction waste for disposal could result in accidental release of hazardous materials.

The nearest school to the Project Site is Santiago Charter Middle School, located less than 0.1-mile from the Project Site. The Property Owner/Developer would be required to comply with all applicable federal, state, and local laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste during the construction phase to reduce the likelihood and severity of accidents during transit. Required standards would be subject to review and regulation by each applicable jurisdiction. Proper handling of the use and disposal of hazardous materials associated with residential uses would reduce the potential for exposure of any school in proximity to the Project Site to hazardous materials. Therefore, no new impacts associated with the emission of hazardous or handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school would occur, and no new mitigation is required.

*d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

***Narrative Summary*: *Impacts Analyzed in the GP PEIR (d)***

**No Impacts.** The GP PEIR determined that any future development project that occurs be pursuant to Government Code § 65962.5 on a project-by-project basis. New Development would mostly occur as infill development and/or redevelopment on existing land uses, however, new residential and mixed-use development in areas previously zoned for commercial and industrial uses could lead to increased potential for residential exposure to hazardous materials. Mitigation Measure 5.7-1 requires the city to continue to assess risks associated with hazardous materials and future development, where individual projects would develop Mitigation Measures accordingly, as well as at a City level. For projects associated with the General Plan implementation, any significant hazard

to the public or environment related to Project Site location and Government Code § 65962.5 would be reduced to a less than significant level.

### *Impacts Associated with the Proposed Project (d)*

**No New Impacts.** A site-specific Phase I Environmental Site Assessment (ESA) was completed to determine potential impacts associated with hazards and hazardous materials (**Appendix E** – *Phase I Environmental Site Assessment – 647 North Rancho Santiago Boulevard,* Partner Engineering and Science, March 5, 2021). No evidence of the use of reportable quantities of hazardous substances was observed on the subject property. Small quantities of general maintenance/cleaning supplies and pool equipment were found to be properly labeled and stored at the time of the assessment with no signs of leaks, stains, or spills. The storage and use of these supplies do not appear to pose a significant threat to the environmental integrity of the subject property at the time of the Phase I ESA.

Partner Engineering and Science obtained historical aerial photographs of the Project Site form Environmental Data Resources on February 22, 2021, that indicate the site was used for agricultural uses with a single-family residence from as early as 1938 through 1952. All surrounding properties are shown to be developed with what appears to be agricultural land. In 1963 and 1966, the Project Site was developed with an additional residential structure. The property directly south was developed with what appears to be the current single-family residence. Photographs from 1972 show no significant changes on the Project Site, whereas the site directly north was developed with the current church building and the property to the west was developed with the current single-family residences across Rancho Santiago Blvd. In 1977, what appears to be additional small buildings and shade coverings were developed on the eastern portion of the Project Site. The site directly north was developed with a commercial or industrial building adjacent to the church, which appears to be the current greenhouse as of 1985. The property to the east of the subject site began construction of what appears to be the current single-family residences. In images from 1989 through 2016, the Project Site developed additional small buildings and horse stalls dispersed east of the single-family residences up to the eastern property line. In 2002, a pool was developed near the single-family residences. The latest image provided in the Phase I Assessment is from 2016, where the site is developed with two single-family residences on the western portion of the Project Site, a private pool adjacent to the single-family residences, and small buildings and horse stalls dispersed throughout the rest of the site. Google Earth imagery, accessed November 7th, 2024, shows all development demolished and the pool removed and filled with dirt as of 2022. 2023 Google Earth imagery shows the site was overgrown with what appears to be native shrubs and the building footprint in the northwest corner. In 2024, the shrubs

appear to have been removed, with little regrowth, and the remainder of the site covered with dirt and the building footprint in the northwest corner of the Property Site.

Based on information obtained by Partner from the USDA Natural Resources Conservation Service Web Soil Survey online database, the Project Site is mapped as Cropley clay (82%) and Myford sandy foam, thick surface (18%). The Cropley clay consists of deep, well-drained soils that formed in alluvial fans and terraces from alluvium derived from calcareous shale. The Myford sandy loam, thick surface consists of deep, well-drained soils that formed in terraces from alluvium derived from mixes. Albus Associates completed a Geotechnical Report (Preliminary Geotechnical Investigation, Proposed Residential; Development, 647 North Rancho Santiago Boulevard, August 9th, 2022). The study reported that the Project Site is underlain by terrace deposits, with artificial fills encountered within to an approximate depth of 6 feet, which is associated with the backfilled pool. Additional fill materials were not encountered but are anticipated onsite within the footprints of previous structures. Therefore, no new impacts associated with the Proposed Project associated with hazardous materials would occur, and no new mitigation is 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?*

***Narrative Summary*: *Impacts Analyzed in the GP PEIR (e)***

**No Impacts.** The GP PEIR did not discuss potential impacts associated with an airport land use plan, as the City area is not within or adjacent to an airport land use plan. The nearest airport to the City of Orange is John Wayne International Airport, approximately 6.5 miles west of the City's southwestern city boundary. Therefore, there would be no safety hazard impacts associated with airports or airstrips for people residing or working in the project limits, and no mitigation is required.

***Impacts Associated with the Proposed Project (e)***

**No New Impacts.** The Project Site is not located within an airport land use plan. The John Wayne International Airport is located approximately 8.6 miles from the Project Site. The Fullerton Municipal Airport is approximately 11.2 miles from the Project Site. Therefore, no new impacts associated with a safety hazard or excessive noise for people residing or working in the project area would occur, and no mitigation is required.

*f) Would the project impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?*

***Narrative Summary*: *Impacts Analyzed in the GP PEIR (f)***

**Less than Significant Impact:** The GP PEIR examined this issue and determined that new development associated with the OGP has the potential to impede existing emergency access to some portions of the planning area in the event of a disaster. Mitigation Measure 5.7-3 would require the City to continually maintain, equip and update the Emergency Operations Center to improve public safety and agencies responsible, as well as mitigate potential impacts to the interference of an adopted emergency response plan or emergency evacuation plan. The City implements the EOP according to requirements and provisions of the State Emergency Management System and National Incident Management System. The EOP would be reviewed and updated responding to the changing conditions within the planning area over the course of the General Plam implementation. With adherence to existing regulations, plans as well as Mitigation Measures 5.7-1, 5.7-3, and 5.7-7, impacts associated with emergency plans would be reduced to a level less than significant. Implementation of these Mitigation Measures would reduce the impacts of airport noise to a less than significant level.

***Impacts Associated with the Proposed Project (f)***

**No New Impacts.** The Proposed Project would allow emergency access to the Project Site through the western driveway. The closest fire station to the Project Site is Orange County Fire Authority Station 23, located approximately 0.82 miles north. The proposed on-site accessways and interior roadways meet the turning radii and driveway width requirements of the Orange County Fire Authority. In addition, as part of the plan check process, the Project Site plan would undergo a fire, life, and safety review to ensure adequate infrastructure for emergency response and access. Therefore, no impacts associated with an adopted emergency response plan or emergency evacuation plan would occur and no new mitigation would be required.

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

***Narrative Summary*: *Impacts Analyzed in the GP PEIR (g)***

**Less than Significant Impact.** The GP PEIR discusses that development associated with the OGP implementation may occur within or adjacent to fire hazard severity zones. No General Plan land use focus areas are located within wildland areas. New development in undeveloped areas, especially in the hillsides and canyons of the eastern portion of the planning area, could increase risk of exposure to wildfires. Mitigation Measure 5.7-6 and 5.7-7 would mitigate these impacts through education and updating master plans, standards and guidelines. Mitigation Measure 5.7-4 requires the City to update building and fire code to reduce natural disaster event impacts and Mitigation Measure 5.7-5 requires the City to continue

to evaluate and regulate information available to the City regarding potential fire hazards and hazard areas. With adherence to existing policies and regulations, and implementation of Mitigation Measures 5.7-4, 5.7-5, 5.7-6, and 5.7-7, impacts associated with wildland fire hazards would be reduced to a level less than significant.

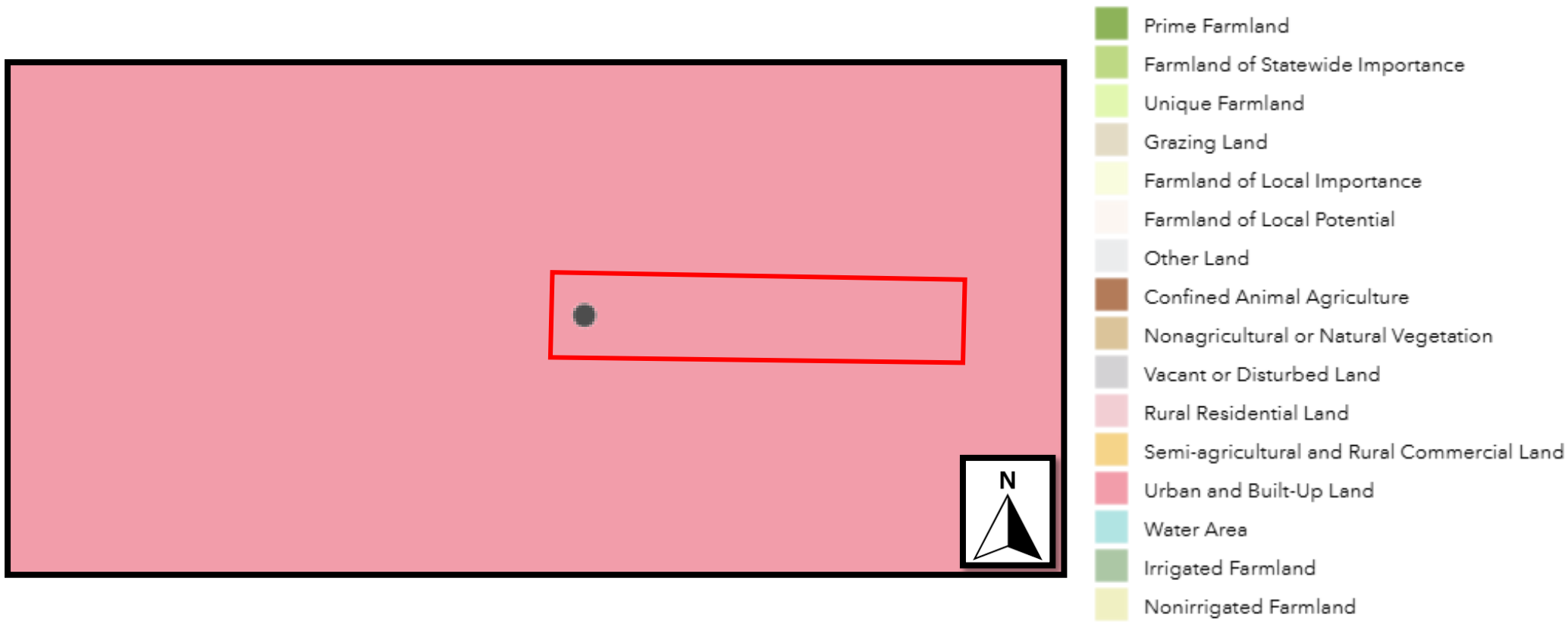
### *Impacts Associated with the Proposed Project (g)*

**Less than Significant Impact.** According to the 2025 CAL FIRE Fire Hazard Severity Zones (FHSZ) Map Viewer, the Project Site is located in a Very High Fire Hazard Severity Zone (VHFHSZ) in a Local Responsibility Area (LRA) (**Figure 7** – Fire Hazard Severity Zones). This means that the Proposed Project is required to comply with Chapter 7A of the CBC/the Wildland-Urban Interface (WUI) Code as well as the City's local fire procedures and regulations. As part of the plan check process, the Project Site plan would undergo a fire, life, and safety review and would be required to comply with all fire regulations applicable to the project area. Therefore, no new impacts associated with wildland fires would occur, and no new mitigation is required.

### *Conclusion*

No new impacts associated with hazards and hazardous materials would occur. The Proposed Project would not result in any impacts beyond those identified in the GP PEIR. The Proposed Project contains no substantial changes to the implementation of the General Plan, there have been no substantial changes in circumstances, and no new information has become available, not known and could not have been known, at the time of certification, which would require major revisions to the PEIR. The Hazards and Hazardous Materials impacts of the Proposed Project would be less than significant, and no Project-specific mitigation would be required. With regards to the issue of Hazards and Hazardous, the following findings can be made:

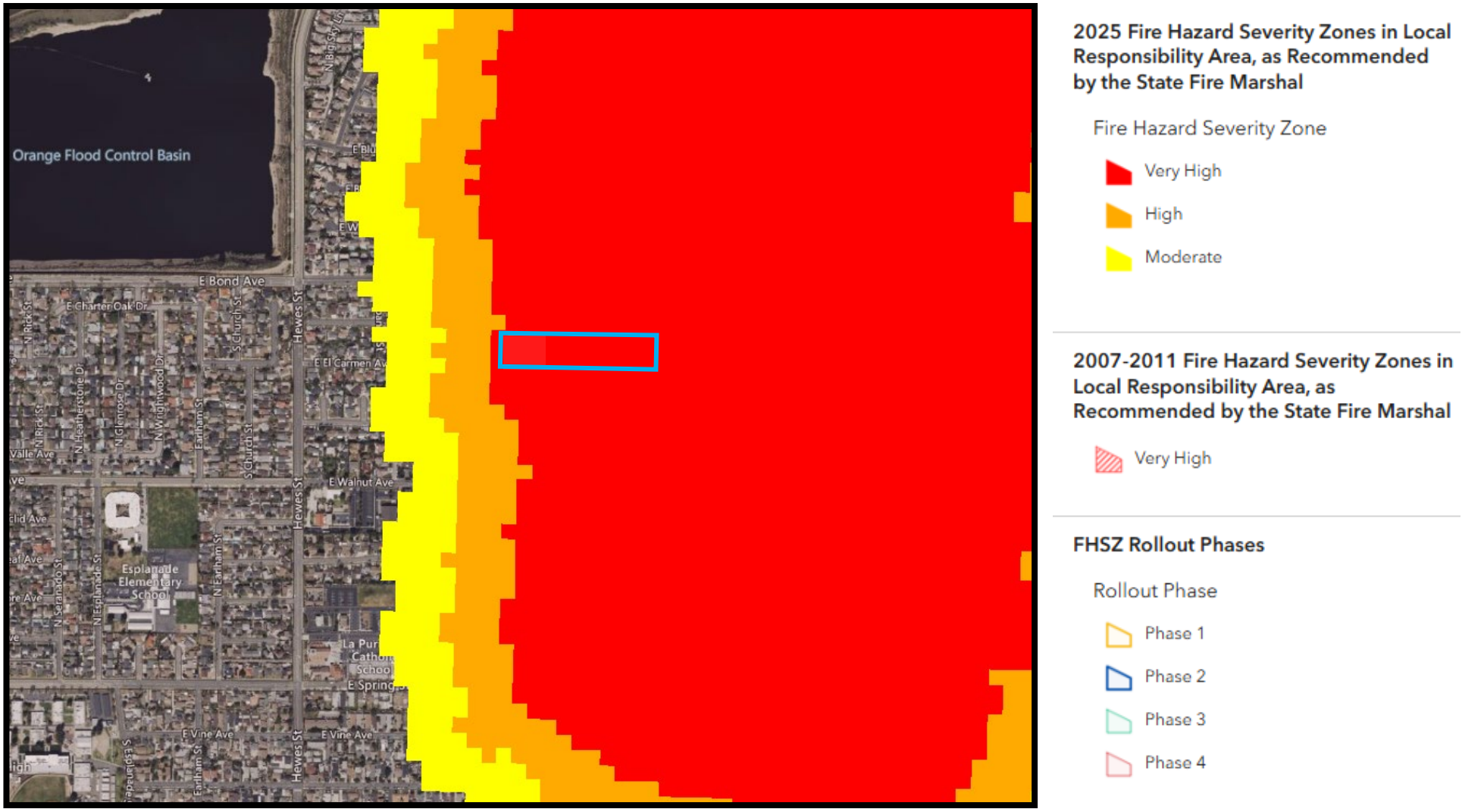
1. No peculiar impacts to the Project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed by the GP PEIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the GP PEIR.
4. No new Mitigation Measures would be required because Project-specific impacts would be less than significant. GP PEIR Mitigation Measures and uniformly applied development policies and standards have been implemented through the Proposed Project.




Project Location
-Not to Scale

Figure 6: Agricultural Designation Map

*Source: CA Department of Conservation*




N

Project Location
- Not to Scale

Figure 7: 2025 Fire Hazard Severity Map
*Source: California Department of Forestry and Fire Protection*

## 4.10 Hydrology and Water Quality

### *Impact Analysis*

| CEQA THRESHOLDS | Project Peculiar Impact that is not Substantially Mitigated by Uniform Applied Policies | Significant Impact not Analyzed as Significant in the GP PEIR | Potentially Significant Offsite or Cumulative Impact not Discussed in the GP PEIR | Adverse Impact More Severe Based on Substantial New Information | No New Impact from GP PEIR |
|---|---|---|---|---|---|
| **X. HYDROLOGY AND WATER QUALITY:** Would the project: | | | | | |
| a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | | | | | X |
| b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | | | | | X |
| 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: | | | | | X |
| • result in substantial erosion or siltation onsite or offsite; | | | | | X |
| • substantially increase the rate or amount of surface water runoff in a manner which would result in flooding on or offsite; | | | | | X |

| CEQA THRESHOLDS | Project Peculiar Impact that is not Substantially Mitigated by Uniform Applied Policies | Significant Impact not Analyzed as Significant in the GP PEIR | Potentially Significant Offsite or Cumulative Impact not Discussed in the GP PEIR | Adverse Impact More Severe Based on Substantial New Information | No New Impact from GP PEIR |
|---|---|---|---|---|---|
| • create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or | | | | | X |
| • impede or redirect flood flows? | | | | | X |
| d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | | | | | X |
| e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | | | | | X |

## *General Plan PEIR Mitigation Measures*

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| **5.8-1** Support efforts by the Orange County Flood Control District (OCFCD) to regularly maintain flood control channels and structures owned by the OCFCD, and to complete necessary repairs in a timely manner. Work with the OCFCD and USACE to identify new flood control improvements and establish installation programs for improvements as needed. Work with the OCFCD to identify opportunities to enhance the natural qualities of Santiago Creek to protect habitat and reintroduce | Mitigation Measure is not applicable. |

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| native plants, animals, and fish. (**Implementation Program V-11**) | |
| **5.8-2** Continue to inspect storm drains, remove debris from catch basins as needed, and evaluate and monitor water storage facilities to determine if they pose a water inundation hazard. (**Implementation Program I-32**) | Mitigation Measure is not applicable. |
| **5.8-3** Before making land use decisions, the City will utilize available methods to estimate increases in pollutant loads and flows resulting from projected future development.<br><br>The City will follow the most current NPDES Permit and County of Orange DAMP to ensure that the City complies with applicable federal and state regulations. Applicants for new development and redevelopment projects shall demonstrate accomplishment of the following:<br>• Use structural and nonstructural BMPs to mitigate projected increases in pollutant loads and flows;<br>• Control the velocity of pollutant loading flows during and after construction;<br>• Limit areas of impervious surface and preserve natural areas;<br>• Limit directly connected areas of impervious surfaces;<br>• Use natural treatment systems such as wetlands and bioswales to treat storm runoff where technically and economically feasible;<br>• Provide on-site infiltration and temporary on-site retention areas;<br>• Limit disturbance of natural water bodies, natural drainage systems, and highly erodable areas; and<br>• Use pollution prevention methods, source controls, and treatment with small collection strategies located at or as close as possible to the source. | Mitigation Measure is applicable. The Proposed Project would comply with all applicable federal and state regulations, including compliance with the NPDES permit and preparation of a SWPPP. The Proposed Project's PWQMP lists BMPs to mitigate projected increases in pollutant loads and flows. The Proposed Project's SWPPP would comply with the Construction General Permit, which includes pollution prevention methods, BMPs, and discussion of the Project's impervious surface, pollutant loading flows, applicable stormwater runoff treatment systems, and more. |

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| In addition, applicants for large development projects are required to meet site predevelopment hydrologic conditions and to retain runoff on-site where technically feasible. (**Implementation Program III-8**) | |
| **5.8-4** Comply and implement all provisions of the NPDES permit and support regional efforts by the Santa Ana RWQCB to improve and protect water quality. (**Implementation Program V-9**) | Mitigation Measure is applicable. The Project Site is over one-acre and will prepare a SWPPP and follow the Construction General Permit as part of the NPDES permit. |

### *Discussion*

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

### *Narrative Summary: Impacts Analyzed in the GP PEIR (a)*

**Less than Significant Impact with Mitigation.** The GP PEIR states that construction activities related to the implementation of the OGP could contribute additional pollutants, including sediments from grading activities and contaminants associated with construction materials, construction waste, vehicles, and equipment, among others. Future infill development in the City's existing urban areas is not expected to substantially increase the amount of existing impervious surfaces and, in fact, site redevelopment may provide opportunities to create new pervious surfaces through new landscaping and use of porous pavements, which could reduce the amount of runoff and associated pollutants. However, since storm drains are designed to carry only storm water, these drains typically are not equipped with filters or cleaning systems and, consequently, can deliver polluted urban runoff directly into local flood control channels and the receiving water bodies affecting their beneficial use. Many of the pollutants found in this runoff are toxic to marine and aquatic life. Thus, implementation of the OGP has the potential to violate water quality standards and waste discharge requirements and the impacts would be potentially significant.

Impacts related to pollutants associated with impervious surfaces are reduced primarily by City implementation of Regional Water Quality Control Board (RWQCB) waste discharge permits and through preparation and implementation of a SWPPP, including identification of required BMPs. A WQMP would be required to identify permanent BMPS that would control discharges to MS4s postconstruction. Additionally, because much of the new development with implementation of the OGP would be infill and redevelopment, site conditions and runoff filtration measures would improve through retrofitting and the

development review process. With adherence to and implementation of these permits, proposed regulations, and policies, and implementation of Mitigation Measures 5.8-3 and 5.8-4, program-level water quality impacts would be less than significant. Individual development projects would be required to undergo project-specific environmental review. If project-level significant impacts are identified, specific Mitigation Measures would be required under CEQA.

***Impacts Associated with the Proposed Project (a)***

**No New Impacts.** A Preliminary Hydrology Analysis (**Appendix F –** *Preliminary Hydrology Analysis for Rancho Ridge Tentative Tract Map No. 19279,* Hunsaker & Associates, Inc., May 15, 2024) and a Preliminary Priority Water Quality Management Plan (PWQMP) (**Appendix G –** *Preliminary Water Quality Management Plan – Rancho Ridge – Tentative Parcel Map No. 19279,* Hunsaker & Associates, Inc., March 23, 2023) were prepared for the Proposed Project. The Proposed Project would be subject to local, state, and federal water quality requirements. The Proposed Project would comply with the City's local procedures (Orange Municipal Code), as well as requirements of the National Pollutant Discharge Elimination System (NPDES) permit program of the Federal Clean Water Act to control storm water runoff and prevent violations of regional water quality standards. The Proposed Project's Geotechnical Report studied the geologic and geotechnical conditions to provide recommendations for site grading, construction, foundation design, and other relevant aspects of the proposed development. Groundwater was not encountered during the geotechnical investigation's subsurface investigation. Groundwater is not expected to have a significant impact on the proposed development and vice versa. Additionally, the PWQMP states that the Proposed Project would use infiltration BMPs that would capture and treat runoff. Runoff and stormwater would not have an impact of the water quality standards and waste discharge requirements, or substantially degrade surface and/or groundwater quality.

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

***Narrative Summary*: *Impacts Analyzed in the GP PEIR (b)***

**Less Than Significant Impacts.** The GP PEIR states that development associated with the OGP has the potential to develop in areas where groundwater recharge would naturally occur, such as the eastern portion of the City's planning area. The GP PEIR discusses that the Orange County Groundwater Basin has been identified as overdrafted because production was exceeding natural replenishment of the basin. However, Orange County Water District (OCWD) has studied the basin and replenishment needs and potential projects to address growth in demand. Additionally, a completed Ground Water Replenishment System was designed to provide sufficient additional drinking supplies to accommodate an estimated

300,000 to 500,000 residents in north and central Orange County, which includes the City's projected population increase. Based on this availability of increased water supply and the OGP's designation of land within the Santa Ana River and Santiago Creek floodways as open space in order to preserve these areas for groundwater recharge, impacts related to groundwater resources would be less than significant (GP PEIR, page 5.8-22). Additionally, the proposed OGP buildout population, at a point in time after 2030, is estimated to be 194,543. Based on historical water use, approximately 46,800 AFY would be needed at buildout while the City's estimated available water supply in 2030 would have increased to approximately 85,062 AFY (49,079 AFY from groundwater and 35,983 AFY from imported water). Therefore, impacts to water supply availability to serve the OGP buildout would be less than significant. Therefore, the GP PEIR concludes impacts related to groundwater supplies would be less than significant.

***Impacts Associated with the Proposed Project (b)***

**No New Impacts**. According to the Geotechnical Investigation, groundwater was not encountered during the geotechnical subsurface exploration to a maximum depth of 51.5 feet. Review of the CDMG Special 011 indicates that historic groundwater for the Project Site has not been mapped. However, projecting the historic groundwater contours available and given geologic conditions of the Project Site, groundwater for the Project Site is anticipated to be below a depth of 50 feet. Furthermore, the Geotechnical Investigation reviewed the Department of Water Resources groundwater level data for nearby wells and found that no relevant wells exist near the Project Site. Additionally, the Proposed Project would coordinate with the City of Orange Public Works to obtain the applicable connections for domestic water, sanitary sewer, and recycled water services. Groundwater is not expected to have a significant impact on the proposed development and vice versa. Therefore, no new impacts associated with the depletion of groundwater supplies or interference with groundwater recharge would occur.

*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:*

- *result in substantial erosion or siltation onsite or offsite;*
- *substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*
- *create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or*
- *impede or redirect flood flows?*

***Narrative Summary*: *Impacts Analyzed in the GP PEIR (c)***

**Less Than Significant Impacts**. The GP PEIR states that implementation of the OGP would not involve the alteration of existing streams or rivers. Future infill development in the City's existing urban areas is not expected to substantially increase the amount of existing impervious surfaces or substantially change the flow velocity or volume of storm water runoff. In fact, site redevelopment may provide opportunities to create new pervious surfaces to facilitate groundwater infiltration through new landscaping and use of porous pavements. Development in the eastern portion of the planning area on currently undeveloped land would convert existing natural areas into impervious surfaces such as buildings, roads, sidewalks, and parking lots. This planned development could potentially increase the volume and velocity of runoff flowing into Santiago Creek and drainage channels leading into the Santiago Creek Recharge Basin. Construction in existing and new development areas would be required to comply with the City's LIP to ensure that this runoff is properly mitigated and conveyed to the Santa Ana River or to the Santiago Creek. Therefore, impacts to surface hydrology/water bodies are expected to be less than significant.

***Impacts Associated with the Proposed Project (c)***

**No New Impacts.** According to the Hydrology Analysis, the Project Site's existing stormwater conditions flow on surface toward Rancho Santiago Boulevard, and then flow southerly on the west side of the street, and discharged into an existing catch basin, which is about 300 feet southerly from the Project Site. The Proposed Project's stormwater condition does not substantially alter the existing drainage pattern of the Project Site. Peak storm runoffs produced from the Project Site under proposed conditions shall also slow on surface toward Rancho Santiago Boulevard, and then flow southerly on the west side of the street, and discharged into the existing catch basin (200 feet southerly from the Project Site). Low flows up to 2-year storm event produced from the Project Site are collected in two proposed inlets, then are detained in a proposed storage, 48" reinforced concrete pipe (RCP), before discharging into a proposed Maxwell Plus System, with a pre-treatment chamber, to be treated. Per the Proposed Project's Hydrology Analysis for the 2-year storm, the post development runoff volume for the 2-yr, 24-hr storm exceeds the pre-development runoff volume for the 2-yr, 24-hr storm by more than five percent. However, the PWQMP includes hydromodification control BMPs to address any hydrologic conditions of concerns (HCOC) impacts. Therefore, the impacts would be less than significant.

Therefore, no new impacts associated with the alteration of an existing drainage pattern of or area of site in a manner that would cause the alteration of the course of a stream or river or through the addition of impervious surface would occur.

*d) Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

***Narrative Summary*: *Impacts Analyzed in the GP PEIR (d)***

**Less Than Significant Impact with Mitigation.** The GP PEIR discusses that the OGP would not involve the alteration of existing streams or rivers. The OGP designated land along floodway corridors of the Santa Ana River, Santiago Creek, and Handy Creek as open space. Stream drainage areas along the Santa Ana River and Santiago Creek are located with the FEMA 100-year floodplain. The western portion of the planning area bounded by the Santa Ana River and the City boundary are also located within 100-year flood areas. Additionally, backwater into Santiago Creek, Limestone Creek, and immediately adjacent to Santiago Reservoir tributary drainage are classified as 100-year storm event areas due to their water surface elevations. Development associated with the OGP implementation in the hillside and basin areas would contribute to the potential for flood hazards by altering existing runoff and absorption rates. This is a potentially significant impact.

Additionally, the GP PEIR states that portions of Orange, such as the Villa Park Dam, Santiago Dam, and Peters Canyon Dam, are susceptible to flood events related to dam failure resulting from a significant earthquake. The OGP land use focus areas are not located in the vicinity of the dams. However, areas below the dams have a high potential for inundation. This is a potentially significant impact.

The OGP requires that appropriate flood control measures be implemented to reduce the risks from localized flooding. Additional flood prevention methods such as provision of detention basins and on-site storm water drainage would be required of developers to reduce runoff into the City's drainage facilities and to provide adequate drainage for new developments. In addition to water quality benefits, Mitigation Measure 5.8-3 also provides an opportunity for the City to promote development that incorporates permeable surfaces within site design. To mitigate flood hazards to existing structures within flood zones, the City would host educational programs for the public and its staff regarding flood hazards.

Due to the City's location being approximately 12 miles inland from the Pacific Ocean, the City would not be affected by tsunamis. Although seiches have not historically occurred within the planning area, it is possible that a seiche could occur within the Santiago Creek Recharge Basin or Irvine Lake. Due to the absence of historical data, no local mapping is available for areas adjacent to these water bodies that might be affected by a seiche. There would be a potential for mudflows and associated erosion during land development activities in and adjacent to hillsides in the eastern portion of the planning area due to removal of natural vegetation and creation of steep graded slopes. However, standard erosion-prevention practices during grading and avoidance of over

steepened slopes near existing development would reduce the potential for mudflow impacts to a less than significant level.

With adherence to and implementation of the proposed regulations and policies and implementation of Mitigation Measures 5.8-1 and 5.8-2, program-level flooding impacts would be less than significant. Individual development projects would be required to undergo project specific environmental review. If project-level significant impacts are identified, specific Mitigation Measures would be required under CEQA.

***Impacts Associated with the Proposed Project (d)***

**No New Impacts.** As indicated in the General Plan PEIR, inundation hazards in the City are less than significant due to policies and Mitigation Measures proposed in the OGP and GP PEIR. The Proposed Project does not include any development that would increase the risk of exposure of people or structures to dam inundation hazards beyond those identified in the GP PEIR. The Project Site is not immediately adjacent to any body of water. However, the Santiago Creek Recharge Basin is located approximately 0.-34-mile northwest of the Project Site. The area surrounding Santiago Creek is analyzed in the GP PEIR as one of the areas that are susceptible to inundation. The GP PEIR analyzed that implementation of the policies, regulations, and Mitigation Measures listed in the OGP and GP PEIR as well as implementation of existing federal, state, and local regulations would reduce the impacts to less than significant for areas in the City that are at risk of inundation. Therefore, the Project Site does not propose any new impacts beyond what is already analyzed in the GP PEIR. No new impacts associated with the release of pollutants due to flood, hazard, tsunami, or seiche zones would occur.

*e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

***Narrative Summary: Impacts Analyzed in the GP PEIR (e)***

**Less Than Significant Impact with Mitigation.** The GP PEIR states that implementation of the OGP could contribute to additional pollutants, including sediments from grading activities and contaminants associated with construction materials, construction waste, vehicles, and equipment, among others. Future infill development in the City's existing urban areas is not expected to substantially increase the amount of existing impervious surfaces and, in fact, site redevelopment may provide opportunities to create new pervious surfaces through new landscaping and use of porous pavements, which could reduce the amount of runoff and associated pollutants. However, since storm drains are designed to carry only storm water, these drains typically are not equipped with filters or cleaning systems and, consequently, can deliver polluted urban runoff directly into local flood control channels and the receiving water bodies affecting their beneficial use. Many of the pollutants found in this runoff are toxic to marine

and aquatic life. Thus, implementation of the OGP has the potential to violate water quality standards and waste discharge requirements, and the impacts would be potentially significant. As discussed above, the City has a GWR System that is designed to provide sufficient additional drinking supplies to accommodate the overdraft of the Orange County Groundwater Basin. Based on this availability of increased water supply and the OGP's designation of land within the Santa Ana River and Santiago Creek floodways as open space in order to preserve these areas for groundwater recharge, impacts related to groundwater resources would be less than significant. Therefore, implementation of the OGP would have a less than significant effect on a water quality control plan and sustainable groundwater management plan with implementation of Mitigation Measures.

### *Impacts Associated with the Proposed Project (e)*

**No New Impacts.** The Proposed Project includes a Water Quality Management Plan, a Geotechnical Report, and a Hydrology Report, which all comply with NPDES. The Proposed Project would be consistent with the GP PEIR development standards and design guidelines, as well as the City's Municipal Code. The Proposed Project would be subject to local, state, and federal water quality requirements. Therefore, no new impacts associated with the conflict or obstruction of a water quality control plan or sustainable groundwater management plan would occur.

### *Conclusion*

No new impacts associated with hydrology and water quality would occur. The Proposed Project would not result in any impacts beyond those identified in the GP PEIR. The Proposed Project contains no substantial changes to the implementation of the General Plan, there have been no substantial changes in circumstances, and no new information has become available, not known and could not have been known, at the time of certification, which would require major revisions to the GP PEIR. With regards to the issue of Hydrology and Water Quality, the following findings can be made:

1. No peculiar impacts to the Project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed by the GP PEIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the GP PEIR.
4. No new Mitigation Measures would be required because Project-specific impacts would be less than significant. GP PEIR Mitigation Measures and uniformly applied development policies and standards have been implemented through the Proposed Project.

## 4.11 Land Use Planning

### *Impact Analysis*

| CEQA THRESHOLDS | Project Peculiar Impact that is not Substantially Mitigated by Uniform Applied Policies | Significant Impact not Analyzed as Significant in the GP PEIR | Potentially Significant Offsite or Cumulative Impact not Discussed in the GP PEIR | Adverse Impact More Severe Based on Substantial New Information | No New Impact from GP PEIR |
|---|---|---|---|---|---|
| **XI. LAND USE AND PLANNING:** Would the project: | | | | | |
| a) Physically divide an established community? | | | | | X |
| b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | | | | | X |

### *General Plan PEIR Mitigation Measures*

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| No GP PEIR Mitigation Measures were required. | - |

### *Discussion*

*a) Physically divide an established community?*

#### *Narrative Summary: Impacts Analyzed in the GP PEIR (a)*

**Less Than Significant:** The GP PEIR evaluated the potential for the implementation of the General Plan to physically divide an established community. The GP PEIR states that most new development in the City would occur through infill development and adaptive reuse in the OGP land use focus areas. Those parcels anticipated to accommodate development are generally surrounded by existing development and are not large enough to physically divide areas within the City. The OGP identified Metropolitan Drive as a roadway that may need to be

extended as well as the addition of an interchange at Meats Avenue and SR-55. Roadway widening and intersection improvements may also occur throughout the City to accommodate the additional growth allowed under the General Plan. However, division of established communities would not occur with the extension of Metropolitan Drive because the primary use of the area is commercial activities and public facilities. Roadway widening would not divide established communities because roadway widening would occur to existing facilities. The addition of the Meats Avenue/SR 55 interchange would impact some single-family residences and mobile homes but would not create barriers to or divide the surrounding area. The OGP contains policies that emphasize increasing connectivity between land uses via a multimodal mobility network and do not support incompatible development or infrastructure that could divide established communities.

New growth in the eastern portion of the planning area would occur on undeveloped land and would not result in the division of established communities. Therefore, implementation of the OGP would have a less than significant impact in relation to the division of an established community.

***Impacts Associated with the Proposed Project (a)***

**No New Impacts.** The Proposed Project would occur on a site that is currently vacant, but historically, has appeared to have been used for residential and agricultural uses. The Proposed Project proposes to construct 11 two-story single-family homes that range from 2,425 sq. ft. to 2,724 sq. ft. and include attached private garages and driveways, interior street, surface parking spaces, and common open space. The Proposed Project is consistent with the surrounding residential development. The Proposed Project would not physically divide an established community. Therefore, the Proposed Project would not result in any physical division of an established community and no impacts would occur and no mitigation is required

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

***Narrative Summary: Impacts Analyzed in the GP PEIR (b)***

**Less Than Significant with Mitigation Measures:** Implementation of the General Plan may impact the existing land use plans, policies, and regulations that have been adopted to avoid or mitigate an environmental effect. The General Plan is consistent with the Southern California Association of Governments' (SCAG) Regional Comprehensive Plan and Guide (RCPG) and the included Regional Transportation Plan (RTP). SCAG's goals are considered for consistency, resulting in a less than significant impact on land use plan consistency. The PEIR discusses General Plan consistency with SCAG Regional Policies in relation to consistency,

improving the regional standard of living, improving the regional quality of life, providing social, political and cultural equity and more. As shown on Table 5.9-2 of the GP PEIR (GP PEIR page 5.9-9), the OGP is consistent with SCAG's RCPG and RTP The Orange County General Plan identifies certain spaces in the eastern portion of the City's planning area to be open space, where the City of Orange knows these areas as Santiago Hills and East Orange, designated to be Low, Medium Low, and Medium Density Residential space, as well as Recreational Commercial land. Impacts to developing these areas and being consistent with the County General Plan have been assessed in EIRs, where Mitigation Measures were required as part of the East Orange development plan approval. The General Plan Land Use Element contains a number of policies addressing land use and consistency. The Growth Management Element of the OGP contains policies that promote development that integrates with and minimizes impacts to surrounding uses. Implementation of the OGP would be consistent with applicable adopted plans, regulations, and policies; therefore, impacts associated with any potential inconsistencies would be less than significant.

### *Impacts Associated with the Proposed Project (b)*

**No New Impacts.** The Proposed Project would not conflict with any applicable land use plan, policy, or regulation adopted for the purposes of avoiding or mitigating an environmental effect. The general plan land use designation of the subject site is LDR, which provides for typical single-family residential neighborhoods. The Low Density Residential designation permits a density of two to six dwelling units permit acre. The Proposed Project is 5.6 units per acre. Low Density Residential uses make up the majority of land uses in Orange, and are found throughout the City in both older, established areas, such as Old Towne, and newer development areas, including east Orange."

The Proposed Project would also establish a Planned Unit Development (PUD) with approval of a Conditional Use Permit (CUP) and subdivide the lot for single-family residential development. According to the general plan, "Table LU-3 indicates the corresponding zone district that applies to each General Plan land use designation." The Proposed Project would comply with the R-1-10 and PUD standards, as applicable. Therefore, the Proposed Project is consistent with the existing Low Density Residential (LDR) General Plan Designation and Single-Family Residential (R-1-10) Zoning applicable to the Project Site and would have no impact to due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. No mitigation is required.

### *Conclusion*

Following compliance with the General Plan Final PEIR Mitigation Measures and General Plan policies, the Project would not result in new significant impacts or a substantial increase in the severity of previously identified significant impacts due

to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect beyond those identified in the General Plan Final PEIR. With regards to the issue of Land Use Planning, the following findings can be made:

1. No peculiar impacts to the Project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed by the GP PEIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the GP PEIR.
4. No new Mitigation Measures would be required because Project-specific impacts would be less than significant. GP PEIR Mitigation Measures and uniformly applied development policies and standards have been implemented through the Proposed Project.

## 4.12 Mineral Resources

### *Impact Analysis*

| CEQA THRESHOLDS | Project Peculiar Impact that is not Substantially Mitigated by Uniform Applied Policies | Significant Impact not Analyzed as Significant in the GP PEIR | Potentially Significant Offsite or Cumulative Impact not Discussed in the GP PEIR | Adverse Impact More Severe Based on Substantial New Information | No New Impact from GP PEIR |
|---|---|---|---|---|---|
| **XII. MINERAL RESOURCES:** Would the project: | | | | | |
| 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? | | | | | X |
| 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? | | | | | X |

### *General Plan PEIR Mitigation Measures*

| PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| No GP PEIR Mitigation Measures were required. | - |

### *Discussion*

*a) Would the project 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) Would the project 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?*

### *Narrative Summary: Impacts Analyzed in GP PEIR (a-b):*

**No Impacts.** The City distributed a Notice of Preparation (NOP) and an Initial Study (IS) to identify agency and public concerns regarding potential impacts of the

OGP and to focus the preparation of the EIR on effects determined to be significant. The IS determined that the preparation of an EIR was required for the OGP but found that no impacts would occur to mineral resources. Therefore, mineral resources are not discussed in the GP PEIR. Mineral Resources are also discussed in Section 4.9, Hazards and Hazardous Materials, of this document. Therefore, there are no potential impacts on mineral resources from the implementation of the OGP.

### *Impacts Associated with the Proposed Project (a-b)*

**No New Impacts.** The Proposed Project would be to establish a Planned Unit Development (PUD) and subdivide the lot into 11 parcels, each improved with a single-family residence ranging from 2,425 sq. ft to 2,724 sq. ft. The Project Site is located on the east side of Rancho Santiago Blvd, approximately 323 feet south of the Bond Avenue centerline. The Project Site is currently vacant, but historical uses have included agricultural and residential developments. The planning area contains an alluvial plain that underlies the central and western portions of the planning area, and a series of low hills found in the eastern and northern portions of the planning area.

The City of Orange holds planning areas located within Mineral Resource Zone 1 (MRZ-1), Mineral Resource Zone 2 (MRZ-2) and Mineral Resource Zone 3 (MRZ-3). MRZ-1 is defined as areas where adequate information indicates that no significant mineral deposits are present, or where it has been determined that little likelihood exists for their presence. MRZ-2 zones are defined as an area with evidence of significant mineral deposits or a high likelihood of them being present, and development should be controlled. MRZ-3 zones are defined as an area containing mineral deposits of which the significance cannot be evaluated from the available data.

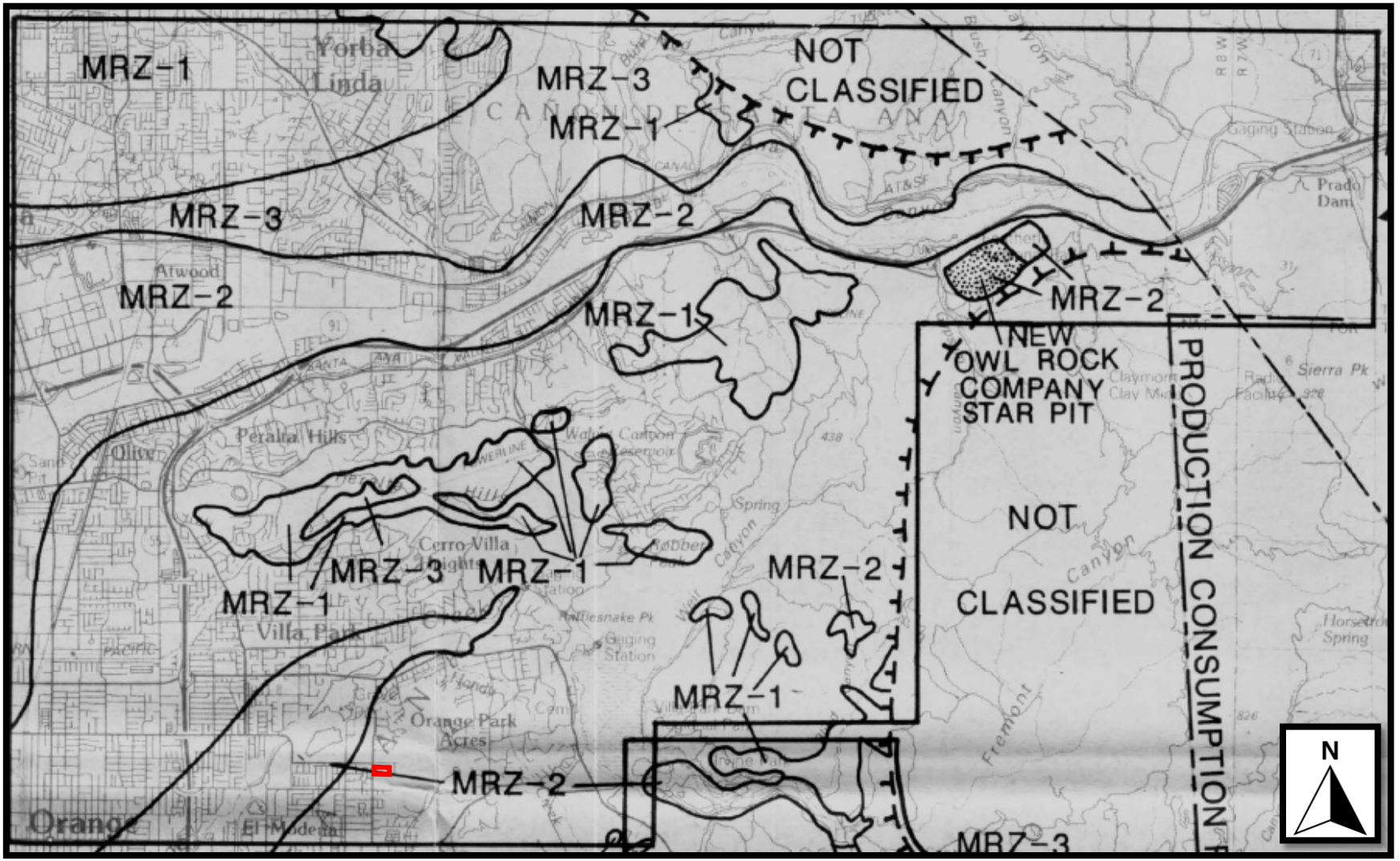
The Project Site is located within an MRZ-3 zone, where mineral deposits of significance cannot be evaluated from the available data (**Figure 8 –** *Mineral Resource Map)*. No mineral resource areas exist in the immediate vicinity. Development pursuant to the Proposed Project would not result in the loss of a known mineral resource. Therefore, no new impacts associated with the loss of availability of a known mineral resource that would be of value to the region and the residents of the state, and no new impacts associated with 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 would occur.

### *Conclusion*

No new impacts associated with mineral resources would occur. The Proposed Project would not result in any impacts beyond those identified in the previous PEIR. The Proposed Project contains no substantial changes to the implementation of the General Plan, there have been no substantial changes in

circumstances, and no new information has become available, not known and could not have been known, at the time of certification, which would require major revisions to the GP PEIR. With regards to the issue of Mineral Resources, the following findings can be made:

1. No peculiar impacts to the Project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed by the GP PEIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the GP PEIR.
4. No new Mitigation Measures would be required because Project-specific impacts would be less than significant. GP PEIR Mitigation Measures and uniformly applied development policies and standards have been implemented through the Proposed Project.




Project Location
-Not to Scale

Figure 8: Mineral Resource Zone
*Source: California Department of Conservation*

## 4.13 Noise

The following best management practices shall be provided on the Project plans and in contract specifications to minimize construction noise and vibration emanating from the Proposed Project.

1. All equipment whether fixed or mobile, would be equipped with properly operating and maintained mufflers, consistent with manufacturer standards.
2. All stationary construction equipment would be placed so that emitted noise is directed away from the noise sensitive receptors nearest the Project Site.
3. As applicable, all equipment shall be shut off and not left to idle when not in use.
4. To the degree possible, equipment staging would be located in areas that create the greatest distance between construction-related noise and vibration sources and existing sensitive receptors.
5. Jackhammers, pneumatic equipment, and all other portable stationary noise sources would be directed away and shielded from existing residences in the vicinity of the Project Site. Either one-inch plywood or sound blankets can be utilized for this purpose. They should reach up from the ground and block the line of sight between equipment and existing residences. The shielding should be without holes and cracks.
6. No amplified music and/or voice would be allowed on the Project Site.
7. Haul truck deliveries would not occur outside of the hours presented as exempt for construction per OMC Section 8.24.050.
8. The use of vibratory rollers, or other similar vibratory equipment, would be prohibited within 20 feet of residential structures surrounding the Project Site.

## *Impact Analysis*

| CEQA THRESHOLDS | Project Peculiar Impact that is not Substantially Mitigated by Uniform Applied Policies | Significant Impact not Analyzed as Significant in the GP PEIR | Potentially Significant Offsite or Cumulative Impact not Discussed in the GP PEIR | Adverse Impact More Severe Based on Substantial New Information | No New Impact from GP PEIR |
|---|---|---|---|---|---|
| **XIII.NOISE:** Would the project result in: | | | | | |
| a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project Site in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | | | | | X |
| b) Generation of excessive groundborne vibration or groundborne noise levels? | | | | | X |
| 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**?** | | | | | X |

## *General Plan PEIR Mitigation Measures*

| GP PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| **5.10-1** Comply with all provisions of CEQA. In addition to thresholds that may be established or adopted by the City in the future, use the following thresholds and procedures for CEQA analysis of proposed projects, consistent with policies adopted within the General Plan: | Mitigation Measure is applicable. The Proposed Project would comply with all provisions of CEQA, |

| GP PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| • The City shall apply the noise standards specified in Table N-3 and N-4 of the Noise Element to proposed projects analyzed under CEQA.<br>• In addition to the foregoing, an increase in ambient noise levels is assumed to be a significant noise impact if a proposed project causes ambient noise levels to exceed the following:<br>o Where the existing ambient noise level is less than 60 dBA, a project related permanent increase in ambient noise levels of 5 dBA CNEL or greater.<br>o Where the existing ambient noise level is greater than 60 dBA, a project-related permanent increase in ambient noise levels of 3 dBA CNEL or greater.<br>(**Implementation Program III-1**) | including preparing this CEQA Section 15183 analysis and associated technical studies to examine the Proposed Project's impacts in regard to CEQA. |
| **5.10-2** Review development proposals to ensure that the noise standards and compatibility criteria set forth in the Noise Element are met. Consult Noise Element guidelines and standards for noise compatible land uses to determine the suitability of proposed developments relative to existing and forecasted noise levels. Enforce the California Noise Insulation Standards to ensure an acceptable interior noise level of 45 dBA CNEL in habitable rooms. Amend the Noise Ordinance to implement the noise standards presented in Tables N-3 and N-4 of the Noise Element. Develop noise impact analysis guidelines that describe the City's desired procedure and format for acoustical studies. Acoustical studies will be required for all discretionary projects where any of the following apply:<br>• The project includes a noise sensitive land use that is located within the existing or future 65 dBA CNEL contour for transportation noise sources.<br>• The project will cause future traffic volumes to increase by 25 percent or more on any roadway that fronts residential, institutional, or open space land uses.<br>• The project will expose a noise sensitive land use to a stationary noise source or vibration source exceeding the standards outlined in Table N-4 of the Noise | Mitigation Measure is applicable. A Noise Impact Analysis by Ganddini Group, dated March 27, 2023, was prepared for the Proposed Project. |

| GP PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| Element. Such stationary sources may include mechanical equipment operations, entertainment venues, industrial facilities, and property maintenance.<br>• The project includes a noise sensitive land use in the vicinity of existing or proposed commercial and industrial areas.<br>• The project is a mixed use development that includes a residential component. The focus of this type of acoustical study is to determine likely interior and exterior noise levels and to recommend appropriate design features to reduce noise.<br><br>An acoustical analysis prepared in accordance with the Noise Element shall:<br><br>• be the financial responsibility of the applicant seeking City approval of a project;<br>• be prepared by a qualified person experienced in the fields of environmental noise assessment and architectural acoustics;<br>• include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions and predominant noise sources;<br>• estimate existing and projected cumulative (20 years) noise in terms of CNEL or Leq, and compare those noise levels to the adopted standards and policies of the Noise Element;<br>• recommend appropriate mitigation to achieve compliance with the adopted policies and standards of the Noise Element. Where the noise source in question consists of intermittent single events, the report must address the effects of maximum noise levels in sleeping rooms in terms of possible sleep disturbance;<br>• estimate noise exposure after the prescribed Mitigation Measures have been implemented; and<br>• describe a post-project assessment program that could be used to evaluate the effectiveness of the proposed Mitigation Measures.<br><br>(**Implementation Program I-34**) | |

| GP PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| **5.10-3** The City shall require construction contractors to implement the following measures during construction activities through contract provisions and/or conditions of approval as appropriate:<br>• Construction equipment shall be properly maintained per manufacturers' specifications and fitted with the best available noise suppression devices (i.e., mufflers, silencers, wraps, etc).<br>• Shroud or shield all impact tools, and muffle or shield all intake and exhaust ports on power equipment.<br>• Construction operations and related activities associated with the proposed project shall comply with the operational hours outlined in the City of Orange Municipal Code Noise Ordinance, or mitigate noise at sensitive land uses to below Orange Municipal Code standards.<br>• Construction equipment should not be idled for extended periods of time in the vicinity of noise sensitive receptors.<br>• Locate fixed and/or stationary equipment as far as possible from noise sensitive receptors (e.g., generators, compressors, rock crushers, cement mixers). Shroud or shield all impact tools, and muffle or shield all intake and exhaust ports on powered construction equipment.<br>• Where feasible, temporary barriers shall be placed as close to the noise source or as close to the receptor as possible and break the line of sight between the source and receptor where modeled levels exceed applicable standards. Acoustical barriers shall be constructed material having a minimum surface weight of 2 pounds per square foot or greater, and a demonstrated Sound Transmission Class (STC) rating of 25 or greater as defined by American Society for Testing and Materials (ASTM) Test Method E90. Placement, orientation, size, and density of acoustical barriers shall be specified by a qualified acoustical consultant. | Mitigation Measures are applicable. The Proposed Project shall implement any conditions of approval that are assigned to the Proposed Project. The Proposed Project would comply with the latest Orange Municipal Code Nosie Ordinance. |
| **5.10-4** Implement the following strategies to reduce vehicular traffic noise throughout the City:<br>• Review and designate local truck routes to reduce | Mitigation Measure is not applicable. |

| GP PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| truck traffic in noise sensitive land uses areas.<br>• Consider the use of traffic calming devices, to reduce traffic speed in residential zones.<br>• Consider the use of alternative paving materials, such as open graded asphalt, to reduce traffic noise where determined feasible and cost efficient. | |
| **5.10-5** Establish train-horn "quiet zones" consistent with the federal Train Horn Rule along the Burlington Northern Santa Fe rail line. Coordinate with rail agencies and operators, OCTA, SCRRA, and the Federal Railroad Administration (FRA) in the planning of noise abatement along rail corridors. (**Implementation Program I-28**) | Mitigation Measure is not applicable. |
| **5.10-6** Update the Noise Ordinance to incorporate the new point-source noise standards presented in Table N-4 in the Noise Element. Revise the City's Noise Ordinance to achieve the following:<br>• Limit the hours of deliveries to commercial, mixed use, and industrial uses adjacent to residential and other noise sensitive land uses.<br>• Limit the hours of operation for commercial/retail/entertainment uses to limit noise intrusion into nearby residential and other noise sensitive land uses.<br>• Limit noise levels generated by commercial and industrial uses.<br>• Limit outdoor industrial activities or operations to control excessive noise at adjacent residential properties.<br>• Limit the hours of operation of high noise-generating industrial equipment.<br>• Limit the hours of operation for refuse vehicles and parking lot sweepers if their activity results in an excessive noise level that adversely affects adjacent residential uses.<br>• Require the placement of loading and unloading areas so that commercial buildings shield nearby residential land uses from noise generated by loading dock and delivery activities. If necessary, additional sound barriers shall be constructed on the commercial sites to protect nearby noise sensitive uses. | Mitigation Measure is not applicable. However, the Proposed Project would follow the City's latest Noise Ordinance. |

| GP PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| • Require the placement of all commercial HVAC machinery to be placed within mechanical equipment rooms wherever possible. (Equipment manufacturer's specifications for venting and access to outside air shall be maintained.)<br>• Require the provision of localized noise barriers or rooftop parapets around HVAC, cooling towers, and mechanical equipment so that line-of-sight to the noise source from the property line of the noise sensitive receptors is blocked. (Equipment manufacturer's specifications for venting and access to outside air shall be maintained). | |
| **5.10-7** Continue to enforce the City's Noise Ordinance limits for industrial uses to limit the effect of noise on adjacent land uses. Update the Noise Ordinance to incorporate the new noise standards presented in Tables N-3 and N-4 in the Noise Element and to ensure effectiveness in controlling noise sources. | Mitigation Measure is not applicable. |
| **5-10-8** When the City exercises discretionary review, provides financial assistance, or otherwise facilitates residential development within a mixed use area, make providing written warnings to potential residents about noise intrusion a condition of that approval, assistance, or facilitation. The following language is provided as an example: "All potential buyers and/or renters of residential property within mixed use districts in the City of Orange are hereby notified that they may be subject to audible noise levels generated by business and entertainment related operations common to such areas, including amplified sound, music, delivery and passenger vehicles, mechanical noise, pedestrians, and other urban noise sources." | Mitigation Measure is not applicable. |
| **5.10-9** Continue to work with the Orange County ALUC to increase safety and reduce noise associated with aircraft overflights and helicopter operations within the City by achieving the following objectives:<br>• Work with the FAA and local airports (John Wayne Airport, Long Beach Airport, Los Alamitos Army Air Base) to determine appropriate aircraft altitude standards for aircraft flying over the City, taking into account public health and safety. | Mitigation Measure is not applicable. |

| GP PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| • Continue to regulate the siting and operation of heliport/helistops through the Conditional Use Permit process in conjunction with the Orange County ALUC and Caltrans Division of Aeronautics.<br>• Work with the heliport/helistop operators (police, fire, hospital, and private) to implement flight profiles, tracks, and operating parameters for noise control.<br>(**Implementation Program V-18**) | |
| **5.10-10** Implement the following measures to reduce the potential for human annoyance and achitectural/structural damage resulting from elevated groundborne noise and vibration levels.<br>• Construction-Induced Vibration. The City shall implement or require implementation of the following measures through contract provisions and/or conditions of approval as appropriate:<br>o Pile driving required within a 50-foot radius of historic structures shall utilize alternative installation methods where possible (e.g., pile cushioning, jetting, pre-drilling, cast-in-place systems, resonance-free vibratory pile drivers). Specifically, geo pier style cast-in-place systems or equivalent shall be used where feasible as an alternative to pile driving to reduce the number and amplitude of impacts required for seating the pile.<br>o The preexisting condition of all buildings within a 50-foot radius and of historic buildings within the immediate vicinity of proposed construction activities shall be recorded in the form of a preconstruction survey. The preconstruction survey shall determine conditions that exist before construction begins for use in evaluating damage caused by construction activities. Fixtures and finishes within a 50-foot radius of construction activities susceptible to damage shall be documented (photographically and in writing) prior to construction. All damage will be repaired back to its preexisting condition.<br>o Vibration monitoring shall be conducted prior to and during pile driving operations occurring | Mitigation Measure is applicable. The Proposed Project shall implement all applicable measures listed. However, there are no historic buildings or railroads immediately adjacent to the Project Site. |

| GP PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| within 100 feet of the historic structures. Every attempt shall be made to limit construction-generated vibration levels in accordance with Caltrans recommendations during pile driving and impact activities in the vicinity of the historic structures.<br>o Provide protective coverings or temporary shoring of on-site or adjacent historic features as necessary, in consultation with the Community Development Director or designee.<br>• Railroad-Induced Vibration:<br>o Vibration sensitive uses shall be located a minimum of 100 feet from the railroad centerline, where feasible. To ensure compliance with FTA and Caltrans recommended guidelines, a site-specific groundborne noise and vibration assessment should be conducted. For sensitive uses located within 100 feet of the railroad centerline, the acoustical noise and vibration assessment shall demonstrate that potential impacts will be below the level of significance. If specific project-level impacts are identified, Mitigation Measures reducing the impacts to below the level of significance will be required.<br>o A groundborne vibration assessment shall be conducted at proposed building pad locations within 200 feet of railroad rights-of-way, prior to project approval. Vibration monitoring and assessment shall be conducted by a qualified acoustical consultant. The assessment will demonstrate that rail-associated groundborne vibration and noise levels comply with recommended FTA and Caltrans guidance of 80 VdB and 0.2 in/sec PPV, respectively, or propose project-specific Mitigation Measures such as site design, building isolation, etc. to achieve that standard. | |

***Discussion***

*a) Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

***Narrative Summary: Impacts Analyzed in the GP PEIR (a)***

**Less Than Significant Impact with Mitigation.** Construction Noise: According to the GP PEIR, implementation of the OGP would result in additional development within the City, which would generate noise during construction activity. Construction activity would have the potential to impact noise sensitive uses. Although construction activities would result in a substantial noise increase, this impact would be short term and would cease upon completion of construction (GP PEIR, page 5.10-40). The City's Municipal Code exempts construction-generated noise that occurs between the areas of 7 a.m. to 8 p.m. Monday through Saturday, from applicable noise standards, provided that all construction equipment is fitted with factory-installed muffling devices and are maintained in good working order. This regulatory exemption reflects the City's acknowledgement that construction noise is a necessary part of development and does not create an unacceptable public nuisance when conducted within the least noise sensitive hours of the day. However, if construction activities were to occur during the more noise sensitive hours (e.g., evening, nighttime, and early morning) or if construction equipment is not properly equipped with noise control devices, project-generated noise levels from construction sources could exceed the applicable standards and result in substantial temporary increase in the ambient noise environment at nearby noise sensitive receptors. As a result, this impact is considered potentially significant. With adherence to and implementation of the OGP policies and regulations, the OMC, and implementation of Mitigation Measures 5.10-1, 5.10-2, 5.10-3, 5.10-6, and 5.10-10, program-level impacts from construction noise would be less than significant. Individual development projects would be required to undergo project-specific environmental review. If project-level significant impacts are identified, specific Mitigation Measures would be required under CEQA.

Traffic Noise: Implementation of the OGP would increase ambient noise levels for existing land uses along roadways. Traffic noise levels associated with the OGP were calculated for roadway segments in the City using FHWA's Highway Noise Prediction Model (FHWA-RD-77-108). Traffic noise levels were modeled under existing and future 2030conditions, with and without implementation of the OGP. The GP PEIR includes a table (Table 5.10-9) that summarizes modeled CNEL noise levels at 100 feet from the roadway centerline for affected roadway segments under future 2030 conditions, with and without implementation of the OGP. The GP PEIR found that implementation of the OGP under future conditions would

result in a change of traffic noise level ranging from -2.9 dB to +5.0 dB CNEL. As a result, long-term noise levels from traffic generated in association with OGP implementation would result in a substantial permanent increase in ambient noise levels exceeding the significance thresholds. However, of over 220 roadway segments analyzed, only two segments exceed the significance thresholds: Meats Avenue between Tustin Street and SR-55 Southbound and Rampart Street between Chapman and Orangewood Avenues. With adherence to and implementation of the OGP policies and regulations, and implementation of Mitigation Measures 5.10-1, 5.10-2, and 5.10-4, program-level traffic noise impacts would be less than significant. Individual development projects would be required to undergo project-specific environmental review. If project-level significant impacts are identified, specific Mitigation Measures would be required under CEQA.

Railroad Noise: According to the GP PEIR, for future rail activities to result in a significance level increase of 3 dB or greater, the OGP would need to directly result in a doubling of rail activities, or otherwise cause exposure of adjacent sensitive land uses to noise levels exceeding OGP standards. Implementation of the OGP does not incorporate specific development projects and is not anticipated to directly result in a significant increase in rail activity within the City. The OGP does not plan for rail services. Rail service planning is conducted by the Southern California Regional Rail Authority, OCTA, Amtrak, and BNSF. The proposed land use designation modifications associated with the OGP would allow changing existing uses that are not noise sensitive to land uses considered to be noise sensitive. In addition, there are existing sensitive land uses, such as residential uses, already located adjacent to the rail line. Therefore, implementation of the OGP has the potential to expose existing and future noise sensitive receivers to noise levels exceeding the City's General Plan noise standards. As a result, this impact is considered potentially significant. However, the City supports the establishment of a "quiet zone" along portions of the BNSF corridor. "Quiet zones" would reduce noise impacts at these crossings and would be supported so long as they do not increase traffic and pedestrian hazards. With adherence to and implementation of the OGP policies and regulations, and implementation of Mitigation Measures 5.10-1, 5.10-2, 5.10-5, 5.10-8, and 5.10-10, program level railroad noise impacts would be less than significant. Individual development projects would be required to undergo project-specific environmental review. If project-level significant impacts are identified, specific Mitigation Measures would be required under CEQA.

***Impacts Associated with the Proposed Project (a)***

**No New Impacts.** A Noise Impact Analysis was completed for the Proposed Project (**Appendix H** – *Noise Impact Analysis Rancho Ridge Infill Project*, Ganddini Group, March 27, 2023). The Proposed Project consists of the construction of 11

single-family residential dwelling units and the associated driveways, open space, and parking spaces. Construction activities are expected to consist of demolition, grading, building construction, paving, and architectural coating. The Proposed Project would comply with the City's Noise Ordinance, GP PEIR, and OGP as well as any applicable federal, state, and local laws and regulations.

The Project Site is surrounded by single-family residential uses to the east, Orange Hill Presbyterian Church and Santiago Greenhouse to the north, North Rancho Santiago Boulevard to the west, and single-family residential plant nursery, and tree maintenance company land uses to the south. The nearest noise-sensitive receptors to the Project Site are existing single-family residential uses located adjacent to the east and south and approximately 60 feet to the west (across North Rancho Santiago Boulevard) of the Project Site. In addition, Orange Hill Presbyterian Church is located adjacent to the north and Enderby Field/Santiago Charter Middle School is located approximately 215 feet south of the Project Site. Accordingly, the Noise Analysis conducted five ambient noise measurements, as shown on **Figure 9** – *Noise Measurement Locations*. Short-term ambient noise levels ranged between 46.4 and 63.2 dBA Leq.

Construction Noise Impacts:

Construction noise is regulated within Section 8.24.050 of OMC. Accordingly, the Project would result in a significant impact if project construction occurs outside the hours of 7:00 a.m. to 8:00 p.m. on any day except for Sunday or a federal holiday or the hours of 9:00 a.m. and 8:00 p.m. on Sunday or a federal holiday and exceeds the standards from 55 dBA Leq from 7:00 a.m. to 10:00 p.m. and 50 dBA Leq from 10:00 p.m. to 7:00 a.m. and 70 dBA Lmax from 7:00 a.m. to 10:00 p.m. and 65 dBA Lmax from 10:00 p.m. to 7:00 a.m. at any residential property.

Project construction noise levels at nearby sensitive receptors were calculated using the FTA methodology. Anticipated noise levels during each construction phase are presented below in **Table 9**. As shown in Table 9, modeled construction noise levels reach up to 93.1 dBA Leq at the nearest church property line to the north, 70 dBA Leq at the nearest residential property line to the east, 78.8 dBA Leq at the nearest residential property line to the south, 70.9 dBA Leq at the nearest recreational use property line to the south, and 75.1 dBA Leq at the nearest residential property line to the west of the Project Site.

**Table 9 – Construction Noise Levels (dBA Leq)**

| Receptor Location | Noise Measurement Location | Existing Ambient Noise Levels (dBA Leq)[2] | Construction Noise Levels (dBA Leq) |
|---|---|---|---|
| ***Phase: Demolition*** | | | |
| Church to North (Orange Hill Presbyterian Church | NM2 | 52.1 | 93.1 |

| | | | |
|---|---|---|---|
| Residential to East (636 N Ranchroad Dr) | NM3 | 50.0 | 65.2 |
| Residential to South (636 N Ranchroad Dr) | NM4 | 46.4 | 78.8 |
| Sports fields to South (Enderby Field) | NM5 | 63.2 | 69.4 |
| Residential to West (648 N Rancho Santiago Blvd) | NM1 | 62.2 | 75.1 |
| ***Phase: Grading*** | | | |
| Church to North (Orange Hill Presbyterian Church | NM2 | 52.1 | 83.1 |
| Residential to East (636 N Ranchroad Dr) | NM3 | 50.0 | 70.0 |
| Residential to South (636 N Ranchroad Dr) | NM4 | 46.4 | 77.8 |
| Sports fields to South (Enderby Field) | NM5 | 63.2 | 70.9 |
| Residential to West (648 N Rancho Santiago Blvd) | NM1 | 62.2 | 68.3 |
| ***Phase: Building Construction*** | | | |
| Church to North (Orange Hill Presbyterian Church | NM2 | 52.1 | 80.5 |
| Residential to East (636 N Ranchroad Dr) | NM3 | 50.0 | 67.4 |
| Residential to South (636 N Ranchroad Dr) | NM4 | 46.4 | 75.2 |
| Sports fields to South (Enderby Field) | NM5 | 63.2 | 68.3 |
| Residential to West (648 N Rancho Santiago Blvd) | NM1 | 62.2 | 65.7 |
| ***Phase: Paving*** | | | |
| Church to North (Orange Hill Presbyterian Church | NM2 | 52.1 | 80.3 |
| Residential to East (636 N Ranchroad Dr) | NM3 | 50.0 | 67.1 |
| Residential to South (636 N Ranchroad Dr) | NM4 | 46.4 | 75.0 |
| Sports fields to South (Enderby Field) | NM5 | 63.2 | 68.0 |
| Residential to West (648 N Rancho Santiago Blvd) | NM1 | 62.2 | 65.5 |
| ***Phase: Architectural Coating*** | | | |
| Church to North (Orange Hill Presbyterian Church | NM2 | 52.1 | 71.2 |
| Residential to East (636 N Ranchroad Dr) | NM3 | 50.0 | 58.1 |
| Residential to South (636 N Ranchroad Dr) | NM4 | 46.4 | 65.9 |

| | | | |
|---|---|---|---|
| Sports fields to South (Enderby Field) | NM5 | 63.2 | 59.0 |
| Residential to West (648 N Rancho Santiago Blvd) | NM1 | 62.2 | 56.5 |

Notes:

1. Construction noise worksheets are provided in Appendix D of the Noise Impact Analysis by Ganddini Group.
2. Per measured existing ambient noise levels, NM2 was chosen to present noise levels at the property line of the church use to the north. NM3 was chosen to represent noise levels at the property lines of the single-family residential uses to the east, NM4 was chosen to represent noise levels at the property line of the single-family residential use to the south, NM5 was chosen to represent noise levels at the property line of the sports field use to the south, and NM1 was chosen to represent noise levels at the property lines of the single-family residential uses to the west of the Project Site.

Proposed Project construction would not occur outside of the hours identified as exempt from noise ordinance standards in Section 8.24.050(A) of the City of Orange Municipal Code. Therefore, the Proposed Project would not exceed City-established standards relating to construction noise. The Proposed Project impact is less than significant; no mitigation is required.

Mobile Source Noise:

The OGP Noise Element states that, in addition to the maximum allowable noise level standards, an increase in ambient noise levels is assumed to be a significant noise impact if a project causes ambient noise levels to exceed the following:

- Where the existing ambient noise level is less than 65 dBA, a project related permanent increase in ambient noise levels of 5 dBA CNEL or greater.
- Where the existing ambient noise level is greater than 65 dBA, a project related permanent increase in ambient noise levels of 3 dBA CNEL or greater.

*Project Operational Mobile Source Noise:* Roadway noise levels were calculated along Rancho Santiago Boulevard utilizing project generated vehicle traffic information obtained from **Appendix C** – *Rancho Ridge Infill Project Transportation Study Screening Assessment (TA) Ganddini Group, Inc. (February 12, 2026)* based on the FHWA Traffic Noise Prediction Model methodology. During operation, the Proposed Project is expected to generate approximately 100 average daily trips with 9 trips during the AM peak-hour and 10 trips during the PM peak-hour.

**Table 10** shows the change in existing roadway noise levels with the addition of Project-generated operational trips. As shown in Table 10, the modeled existing traffic noise along Rancho Santiago Boulevard is 63 dBA CNEL and the modeled existing plus project traffic noise level along Rancho Santiago Boulevard is 63 dBA CNEL at the right-of-way. The addition of project trips is not expected to change noise levels in excess of the applicable threshold at any of the study roadway segments. Therefore, the Proposed Project impact is less than significant and no

mitigation is required.

**Table 10 – Increase in Existing Noise Levels Along Roadways as a Result of Project (dBA CNEL)**

| Roadway | Segment | Distance from roadway centerline to right-of-way (feet)[2] | Modeled Noise Levels (dBA (CNEL)[1] | | | | |
|---|---|---|---|---|---|---|---|
| | | | Existing Without Project at ROW | Existing Plus Project at ROW | Change in Noise Level | Exceeds Standards[3] | Increase of 3 dB or More? |
| Rancho Santiago Blvd | In the vicinity of the Project Site | 33 | 63.17 | 63.30 | 0.13 | No | No |

Source: Rancho Ridge Infill Project Noise Impact Analysis, Ganddini Group, Inc., March 27, 2023

Notes:

1. Exterior noise levels calculated 5 feet above pad elevation, perpendicular to subject roadway.
2. Right of way per City of Orange Circulation and Mobility Element.
3. Per the City of Orange maximum noise exposure from transportation sources for single-family residential, 65 dBA CNEL.

*Construction Mobile Source Noise:* Construction truck trips would occur throughout the construction period. Given the Project Site's proximity to State Route 55, it is anticipated that vendor and/or haul truck traffic would take the most direct route to the appropriate freeway ramps. Rancho Santiago Boulevard currently handles approximately 2,800 to 7,400 average daily vehicle trips in the vicinity of the Project Site.[6] According to the *Rancho Ridge Infill Project Air Quality, Global Climate Change, and Energy Impact Analysis* (Ganddini Group, Inc., 2023), the greatest number of construction-related vehicle trips per day would be during grading at up to 17 vehicle trips per day (10 for worker trips and 7 for hauling trips). Therefore, vehicle traffic generated during Proposed Project construction is nominal relative to existing roadway volumes and would not result in the doubling of traffic volume necessary to increase noise levels by 3 dBA. The Proposed Project impact is less than significant; no mitigation is required.

Therefore, a change in noise level would be less than significant with included recommended BMPs, OGP programs and policies, and GP PEIR Mitigation Measures, and no new impacts would occur.

[6] The existing average daily traffic volume was obtained from the General Plan Update Traffic Analysis for the City of Orange (PB Americas, Inc., Revised June 2009).

*b) Would the project result in the generation of excessive groundborne vibration or groundborne noise levels?*

***Narrative Summary: Impacts Analyzed in the GP PEIR (b)***

**Less Than Significant Impact with Mitigation.** The GP PEIR concluded that implementation of the OGP would result in the generation of excessive groundborne vibration or groundborne noise levels. Short-term intermittent groundborne noise and vibration may be generated by construction activities. Groundborne vibration levels associated with light-rail transit, freight, and roadway traffic rarely exceed criteria established for evaluation of building damage or human annoyance (Caltrans 2004) (GP PEIR, page 5.10-62).

Railroad-Induced Vibration: Railroad operations may generate excessive groundborne vibration levels, depending on trail speed, load, condition of track and wheels, amount of ballast used to support the track, and soil conditions. FTA's generalized ground-surface vibration curves and parametric modeling of locomotive-powered trains indicate that a reference groundborne vibration level of 85 VdB at a distance of 50 feet is the upper range for commuter rail lines (GP PEIR, page 5.10-63). A groundborne vibration level of 85 VdB RMS is approximately equivalent to 0.07 in/sec PPV at a distance of 50 feet, assuming a crest factor of 4. Thus, typical rail operations would not exceed the established criteria for structural damage of normal residential structures; however, it should be noted that this level approaches the recommended upper limit for the protection of old or historically significant structures. The 80 VdB equal level contour, which corresponds to the FTA recommendation for maximum acceptable human exposure, would be approximately 50 to 100 feet from the railroad track centerline. Therefore, any vibration sensitive land use located less than 50 to 100 feet from an active railroad line has the potential to be exposed to groundborne noise and vibration levels that exceed the FTA criteria of 80 VdB (GP PEIR, page 5.10-63). Buildout of the OGP would allow uses, such as mixed use development, within or partially within 100 feet of the railroad centerline. As a result, this impact is considered potentially significant. However, adherence to regulations and implementation of Mitigation Measure 5.10-10 would reduce program-level noise and vibration impacts to less than significant. Individual development projects would be required to undergo project-specific environmental review. If project-level significant impacts are identified, specific Mitigation Measures would be required under CEQA.

Construction-Induced Vibration: Construction activities have the potential to resulting varying degrees of temporary ground vibration, depending on the specific construction equipment used and operations involved. The GP PEIR concluded that sensitive receptors located in proximity to construction operations could be exposed to groundborne vibration levels exceeding the recommended FTA and Caltrans guidelines of VdB and 0.2 in/sec PPV, respectively. As a result,

this impact is considered potentially significant (GP PEIR, page 5.10-64). However, adherence to regulations and implementation of Mitigation Measure 5.10-10 would reduce program-level noise and vibration impacts to less than significant. Individual development projects would be required to undergo project-specific environmental review. If project-level significant impacts are identified, specific Mitigation Measures would be required under CEQA.

Vehicular Traffic-Induced Vibration: The GP PEIR concluded that groundborne vibration levels from automobile traffic are generally overshadowed by vibration generated by heavy trucks that roll over the same uneven roadway surfaces. Implementation of the OGP does not propose the construction or realignment of any roadway projects. Additionally, it is not anticipated that the land use changes associated with the OGP would result in the exposure of persons within the City's planning area to groundborne vibration levels exceeding FTA and Caltrans guidelines. As a result, this impact is considered less than significant.

Light Industrial and Commercial Operations: The GP PEIR concluded that the loading and unloading operations benefit from the resiliency of the flexible suspension systems and pneumatic tires, which substantially limit the effect and transfer of energy to the ground. Heavy truck traffic passing over uneven roadway surfaces can impart energy into the ground and induce groundborne vibration; however, heavy trucks used for delivery and distribution of materials to and from industrial and commercial sites generally operate at very low speeds while on the industrial or commercial site. Therefore, the groundborne vibration induced by heavy truck traffic at industrial or commercial land uses is not anticipated to be perceptible at distances greater than 25 feet (typical distance from roadway centerline to edge of roadway right-of-way for a single-lane road). Based on the operational characteristics of mechanical equipment and distribution methods used for general light industrial and commercial land uses, it is not anticipated that light industrial and commercial operations would result in groundborne vibration levels that approach or exceed the FTA and Caltrans guidelines of 80 VdB and 0.2 in/sec PPV. As a result, this impact is considered less than significant.

***Impacts Associated with the Proposed Project:***

**No New Impacts.** Project-specific impacts are less than significant. The City has not established thresholds of significance concerning groundborne vibration. In the absence of City-established thresholds, groundborne vibration impacts are based on guidance from the *Transportation and Construction Vibration Guidance Manual* (California Department of Transportation, 2020). Accordingly, the Project would result in a significant impact if:

- Groundborne vibration levels generated by the Proposed Project have the potential to cause architectural damage at nearby buildings by exceeding the following PPV:

  - 0.08 in/sec at extremely fragile historic buildings, ruins, ancient monuments
  - 0.10 in/sec at fragile buildings
  - 0.25 in/sec at historic and some old buildings
  - 0.30 in/sec at older residential structures
  - 0.50 in/sec at new residential structures and modern industrial/commercial buildings.
- Groundborne vibration levels generated by the Proposed Project have the potential to cause severe annoyance to people living or working in nearby buildings by exceeding a PPV of 0.4 in/sec.

**Table 11** shows the modeled construction vibration levels at the nearest receptors. Based on the groundborne vibration modeling, use of a vibratory roller is expected to generate a PPV of 0.452 in/sec and use of a bulldozer is expected to generate a PPV of 0.191 in/sec at the closest off-site building, a residential use located approximately 15 feet south of the Project Site. Other equipment anticipated to be used during project construction generate lower PPV. Therefore, as shown in Table 11, the use of vibratory rollers could generate groundborne vibration that would exceed the architectural damage threshold of a PPV of 0.3 in/sec at the residential uses to the south and east. In addition, the threshold of severe annoyance to persons living or working in nearby buildings of a PPV of 0.4 in/sec would be exceeded at the residential use to the south. However, as shown in Table 10, groundborne vibration levels associated with the use of vibratory construction equipment would not exceed the levels necessary to cause architectural damage or severe annoyance to persons living or working in nearby buildings with implementation of the Groundborne Vibration BMP included at the beginning of this section and in the Noise Impact Analysis. In addition, Proposed Project construction would occur within the exempt construction hours as identified in Section 8.24.050 of the OMC. The Proposed Project impact is less than significant; no mitigation is required.

**Table 11 – Construction Vibration Levels at the Nearest Receptors**

| Receptor Location | Distance from Property Line to Nearest Structure (feet) | Equipment | Vibration Level[1] | Threshold Exceeded?[2] | Vibration Level with BMPs[1,3] | Threshold Exceeded with BMPs?[2] |
|---|---|---|---|---|---|---|
| Commercial to North (Santiago Greenhouses, 5050 E Bond Ave) | 25 | Vibratory Roller | 0.210 | No | - | - |
| | 25 | Large Bulldozer | 0.089 | No | - | - |

| | | | | | | |
|---|---|---|---|---|---|---|
| Church to North (Orange Hill presbyterian Church, 681 N Rancho Santiago Blvd) | 72 | Vibratory Roller | 0.043 | No | - | - |
| | 72 | Large Bulldozer | 0.018 | No | - | - |
| Residential to West (634 N Rancho Santiago Blvd) | 90 | Vibratory Roller | 0.031 | No | - | - |
| | 90 | Large Bulldozer | 0.013 | No | - | - |
| Residential to South (623 N Rancho Santiago Blvd) | 15 | Vibratory Roller | 0.452 | Yes | 0.293 | No |
| | 15 | Large Bulldozer | 0.191 | No | - | - |
| Commercial to South (Natural Ambience Exterior Growers, 623 N Rancho Santiago Blvd) | 80 | Vibratory Roller | 0.037 | No | - | - |
| | 80 | Large Bulldozer | 0.016 | No | - | - |
| Residential to East (636 N Ranchoroad Drive) | 18 | Vibratory Roller | 0.344 | Yes | 0.293 | No |
| | 18 | Large Bulldozer | 0.146 | No | - | - |

Source: Rancho Ridge Infill Project Noise Impact Analysis, Ganddini Group, Inc., March 27, 2023

Notes:

1. Vibration levels are provided in PPV in/sec.
2. Caltrans identifies the threshold at which there is a risk to "architectural" damage older residential structures as 0.3 in/sec PPV and 0.5 in/sec PPV at modern industrial/commercial buildings.
3. Best Management Practices (BMPs) for architectural damage include prohibiting the use of vibratory rollers, or other similar vibratory equipment within 20 feet of residential structures to the south and east.

The most substantial sources of groundborne vibration during post-construction project operations would include the movement of passenger vehicles and trucks on paved and generally smooth surfaces. Loaded trucks generally have a PPV of 0.076 at a distance of 25 feet (Caltrans 2020), which is a substantially lower PPV than that of a vibratory roller (0.210 in/sec PPV at 25 feet). Therefore, groundborne vibration levels generated by the Proposed Project's operation would not exceed those modeled for the Proposed Project's construction.

*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?*

***Narrative Summary: Impacts Analyzed in the GP PEIR:***

**Less than Significant Impact.** The GP PEIR identifies areas of aircraft noise that may affect the City's planning area: beneath the landing pattern for aircraft approaching John Wayne Airport in Santa Ana, military aircraft traffic along the Katella Avenue corridor, and helicopter activity from private, police, emergency medical, news, and traffic monitoring. Alterations of land use designation within the vicinity of these overflight areas may result in greater exposure to aircraft noise. The entirety of the City's planning area is located more than 5 miles outside the established noise contours for the nearest airport (55 dB CNEL for John Wayne Airport). Therefore, proposed modifications to land use designations within the City of Orange would not result in the exposure of new or existing noise sensitive land uses to elevated aircraft noise levels. As a result, aircraft generated noise levels are a less than significant impact. This does not preclude aircraft noise from being a notable contributor to the ambient noise environment or a source for potential disturbance that can be addressed from a General Plan policy standpoint. Policies in the OGP include actions aimed at reducing noise from aircraft in the planning area.

***Impacts Associated with the Proposed Project:***

**No New Impacts.** The closest airport to the Project Site is the John Wayne Airport, with airport runways located as close as approximately 8.75 miles southwest of the Project Site. As shown on the John Wayne Airport Orange County 2021 Annual Community Noise Equivalent Level (CNEL) Contours map, the Project Site is well outside the 60 dBA CNEL noise contour for the airport. Therefore, the Proposed Project would not expose people residing or working in the area to excessive noise levels. This impact would be less than significant. No mitigation is required.

***Conclusion***

Impacts associated with noise would be reduced to a less than significant level with the implementation of GP PEIR Mitigation Measures 5.10-1 through 5.10-10. The Proposed Project would not result in any impacts beyond those identified in the GP PEIR. The Proposed Project contains no substantial changes to the implementation of the GP PEIR, there have been no substantial changes in circumstances, and no new information has become available, not known and could not have been known, at the time of certification, which would require major revisions to the PEIR. With regards to the issue area of Noise, the following findings can be made:

1. No peculiar impacts to the Project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed by the GP PEIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the GP PEIR.

4. No new Mitigation Measures would be required because Project-specific impacts would be less than significant. GP PEIR Mitigation Measures have been implemented through the Project's BMPs.




Figure 9: Noise Monitoring Location
*Source: GANDDINI GROUP, INC.*

## 4.14 Population and Housing

### *Impact Analysis*

| CEQA THRESHOLDS | Project Peculiar Impact that is not Substantially Mitigated by Uniform Applied Policies | Significant Impact not Analyzed as Significant in the GP PEIR | Potentially Significant Offsite or Cumulative Impact not Discussed in the GP PEIR | Adverse Impact More Severe Based on Substantial New Information | No New Impact from GP PEIR |
|---|---|---|---|---|---|
| **XIV. POPULATION AND HOUSING:** Would the project: | | | | | |
| a) Induce substantial 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)? | | | | | X |
| b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | | | | | X |

### *General Plan PEIR Mitigation Measures*

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| No GP PEIR Mitigation Measures were required. | - |

### *Discussion*

*a) Would the project 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)?*

#### *Narrative Summary: Impacts Analyzed in the GP PEIR (a):*

**Less Than Significant:** The GP PEIR analyzed the environmental impacts resulting from anticipated growth of residential and non-residential uses anticipated by 2030 using SCAG projections. According to the projections, the population in Orange would increase to 153,522 in 2030. The OGP's population capacity is 27 percent higher than SCAG's 2030 estimate, which is an approximate 12 percent increase over 2004. The OGP population capacity is determined based on expected levels of housing density rather than the maximum density allowed under the land use designation. Under the OGP, housing units are projected to increase by more than 23,000 units, or approximately 54 percent from 2004 to 2030. Development pursuant to the OGP land use policy would result in an increase of approximately 23,478 dwelling units, 35.7 million square feet of nonresidential building floor area over existing conditions, and a net population increase of approximately 57,844 persons. Majority of new housing opportunities would occur through infill development and adaptive reuse, primarily in the land use focus areas established within the OGP Land Use Element. The development capacity allowed by the OGP could result in a substantial increase in population and housing units over 2004 levels; however, the OGP incorporates policies and plans to ensure orderly growth of the City over time within the following elements: Growth Management Element, Housing Element, Land Use Element, and Infrastructure Element.

Although the OGP could result in a substantial increase in population and housing units over 2004 levels, the General Plan anticipates and plans for this growth through numerous policies aimed at reducing the impacts associated with population and housing unit growth in the planning area. Additionally, the OGP policies require infrastructure and public facility improvements to be made incrementally to support anticipated growth, Therefore, impacts from population growth are considered less than significant with no mitigation required.

#### *Impacts Associated with the Proposed Project (a)*

**No New Impacts.** The Proposed Project involves a Tentative Tract Map Permit to permit the subdivision of the Project Site into 11 individual parcels, each developed with a single-family dwelling ranging from 2,425 sq. ft. to 2,724 sq. ft. The GP PEIR anticipated a population of 153,522 and total housing units to be 66,850 by 2030, using SCAG 2004 Growth Forecast. According to the U.S. Census

Bureau, the City's current (July 2023) population is 138,337[7] and the average persons per household from 2018 through 2022 was 2.98. According to this data, the Proposed Project would increase the population by approximately 33 persons with the addition of 11 single-family dwellings. This increase is well within the overall population increase of 15,771 persons anticipated the OGP using SCAG projections (2004).

The Proposed Project involves the addition of an interior road through the Project Site to provide vehicular and emergency access. An extension of roads or other infrastructure into undeveloped areas is not required under the Proposed Project and is not considered growth-inducing in this regard. Overall, the Proposed Project would not induce substantial unplanned population growth in an area, either directly or indirectly; therefore, no new impacts associated with unplanned population growth would occur, and no mitigation is required.

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

***Narrative Summary: Impacts Analyzed in the GP PEIR (b)***

**No Impacts:** The OGP includes new development to occur where current development has not reached the potential allowed by the existing General Plan designations and for most new housing opportunities in the City to occur through infill development, adaptive reuse, and new mixed-use development through redesignations within the eight land use focus areas established within the Land Use Element of the OGP. The eastern portion of the planning area would also undergo new development on undeveloped land that has already been entitled. The construction of the future Meats Avenue interchange at SR-55 could result in the demolition of some housing units, however, this project would not result in the substantial numbers of housing or people necessitating the construction of replacement housing elsewhere. The proposed land use changes as a result of the OGP accommodate the development of housing that did not accommodate housing development under the existing General Plan. Additionally, the OGP policies and plans facilitate and promote a variety of rental and ownership housing types in the planning area aimed at all income levels. Thus, the GP PEIR concludes that implementation of the General Plan would not displace substantial numbers of existing housing or people and would not result in a significant impact. No mitigation is required.

***Impacts Associated with the Proposed Project (b)***

**No New Impacts.** The Proposed Project involves a Tentative Tract Map Permit to permit the subdivision of the Project Site into 11 individual parcels, each developed with a single-family dwelling ranging from 2,425 sq. ft. to 2,724 sq. ft.. No residential units are located on the Project Site that would be displaced by

[7] U.S. Census Bureau QuickFacts: Orange city, California

the construction of the proposed structures. Conversely, the Proposed Project would result in the development of 11 new residential units. Therefore, no impact would occur regarding the displacement of existing people or housing, and no mitigation is required.

### *Conclusion*

Potential impacts identified for the Proposed Project would not be greater than what were identified in the GP PEIR; therefore, the Proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified impacts. Additionally, no new information of substantial importance that was not known and could not have been known at the time the GP PEIR was certified is available that would change the prior finding of no impact. With regards to the issue of Population and Housing the following findings can be made:

1. No peculiar impacts to the Project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed by the GP PEIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the GP PEIR.
4. No new Mitigation Measures would be required because Project-specific impacts would be less than significant. No GP PEIR Mitigation Measures were proposed and uniformly applied development policies and standards have been implemented through the Proposed Project.

## 4.15 Public Services

### *Impact Analysis*

| CEQA THRESHOLDS | Project Peculiar Impact that is not Substantially Mitigated by Uniform Applied Policies | Significant Impact not Analyzed as Significant in the GP PEIR | Potentially Significant Offsite or Cumulative Impact not Discussed in the GP PEIR | Adverse Impact More Severe Based on Substantial New Information | No New Impact from GP PEIR |
|---|---|---|---|---|---|
| **XV. PUBLIC SERVICES:** | | | | | |
| a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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: | | | | | |
| Fire protection? | | | | | X |
| Police protection? | | | | | X |
| Schools? | | | | | X |
| Recreation/Parks? | | | | | X |
| Other public facilities? | | | | | X |

### *General Plan PEIR Mitigation Measures*

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| **5.12-1** Maintain, equip, and update the Emergency Operations Center on an ongoing basis to improve public safety and response by agencies, and coordinate and incorporate changes with the Multi-Hazard Functional Plan. (**Implementation Program II-5**) | Mitigation Measure is not applicable. |
| **5.12-2** Comply with all City procedures in the review of proposed development projects, and use the site plan review process to ensure that applicable General Plan policies and City standards and regulations are applied to proposals for specific development projects. (**Implementation Program III-2**) | Mitigation Measure is applicable. The Proposed Project would be required to comply with the City's review procedures. |

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| **5.12-3** During the development application process, consult with fire and police departments to evaluate the need for additional fire and police facilities or resources to serve new development projects and infill development areas. During updates to the Capital Improvement Program process, coordinate with service providers to evaluate the level of fire and police service provided to the community. Continue to use state-of-the-art techniques and technology to enhance public safety and assess adequacy and plan for upgrades during updates to the Capital Improvement Program and updates to the City's Operating Budget.<br><br>Adhere to requirements in the Municipal Code for adequate street widths and clearance for emergency access. Integrate Crime Prevention Through Environmental Design (CPTED) techniques into development projects during the development review process and practice active surveillance measures in high-risk areas such as parking lots. (**Implementation Program III-8**) | Mitigation Measure is applicable. The Proposed Project is required to evaluate the potential for increased fire and police services and potential for additional fire and police facilities. To ensure adequate services are provided and to minimize the demands on police services, security and design measures which employ defensible space concepts shall be utilized throughout the formation of development and construction plans. These measures incorporate the concepts of Crime Prevention through Environmental Design (CPTED), which involves the placement, and orientation of structures, access and visibility of common areas, placement of doors, windows, addressing, lighting and landscaping. CPTED promotes public safety, physical security and allows citizens the ability to monitor activity. In addition, the Proposed Project shall comply with the requirements established in Chapter 15.52 of the Orange Municipal Code (Building Security Ordinance #6-22). Conditions related to CPTED and the Orange Building Security Standards will be |

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| | included on the Proposed Project. |
| **5.12-4** Use public education activities to accomplish the following objectives:<br>• Raise public awareness of public safety issues including fire safety, flood hazards, homeland security, and other programs.<br>• Promote the application of CPTED to new development projects.<br>• Support neighborhood meetings and community programs on crime prevention and education.<br>• Continue to support existing "Neighborhood Watch" programs, and support the efforts of the City of Orange Police Department to expand these programs.<br>(**Implementation Program IV-3**) | Mitigation Measure is not applicable. |
| **5.12-5** Continue to evaluate and update information available to the City regarding potential fire hazards and hazard areas. Provide public information on the City's website, at City Hall, and through other means as necessary regarding defensible space surrounding residences and businesses. Use Wildland Fuel Modification guidelines for controlling vegetation in undeveloped areas, and Wildland Urban Interface Code and weed abatement standards. (**Implementation Program I-27**) | Mitigation Measure is not applicable. |
| **5.12-6** Adopt, review, implement, and update as necessary the following master plans, standards, and guidelines:<br>• Public Library Facilities Master Plan<br>(**Implementation Program I-4**) | Mitigation Measure is not applicable. |
| **5.12-7** Continue to implement the City's Public Library Facilities Master Plan (2002-2020). Continue to work to ensure that the California State Library-recommended standard of four volumes and 0.7 square foot per capita is maintained and that the City's library services needs are met as future development occurs. Continue to promote and provide additional resources for the Orange Public Library Local History Collection. Maintain | Mitigation Measure is not applicable. |

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| and enhance the Preservation Resource Center within the Orange Public Library and Local History Center that provides access to information about historic preservation regulations and benefits, technical assistance materials, and information about research methods and collections. (**Implementation Program I-31**) | |
| **5.12-8** Adopt, review, implement, and update as necessary the following master plans, standards, and guidelines:<br>• Water Master Plan<br>• Urban Water Management Plan<br>(**Implementation Program I-4**) | Mitigation Measure is not applicable. |
| **5.12-9** As part of the development application and review process, require studies as needed to determine water infrastructure requirements for future development projects, and require that any recommendations be incorporated into the design of projects. Require the dedication of necessary right-of-way and construction of water infrastructure improvements for development projects as needed. Developers shall also be required to pay the cost of providing new and improved water services to project sites. For projects that satisfy the criteria set forth in Sections 10910-10915 of the California Water Code and Section 66473.7 of the Government Code, a water supply assessment or water supply verification demonstrating available water supplies exist to support development shall also be prepared. (**Implementation Program III-7**) | Mitigation Measure is applicable. The Proposed Project would conduct studies to determine the water infrastructure as well as pay any water service fee's required by the City. |
| **5.12-10** Coordinate with the Irvine Ranch Water District, Santiago County Water District, Serrano Water District, MWDOC, MWD, Golden State Water Company, Orange County Sanitation District, and East Orange County Water District to achieve the following water supply, distribution, and conservation objectives:<br>• Maintain groundwater recharge areas to protect water quality and ensure continued recharge of local groundwater basins. | Mitigation Measure is applicable. The Proposed Project would be required to confirm the appropriate water district has capacity for the development. |

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| • Reduce the amount of water used for landscaping and increase use of native and drought-tolerant plants.<br>• Encourage the production, distribution, and use of recycled and reclaimed water for landscaping projects.<br>• Maintain water quality objectives for urban runoff.<br>(**Implementation Program V-8**) | |
| **5.12-11** Adopt, review, implement, and update as necessary the following master plans, standards, and guidelines:<br>• Sewer Master Plan<br>(**Implementation Program I-4**) | Mitigation Measure is not applicable. |
| **5.12-12** The City shall repair and improve all areas that were identified in the 2003 Sewer Master Plan Update as having system deficiencies based on available resources and will also continue to identify anticipated deficiencies in the system. The City shall make improvements to areas with frequent blockages or "hot-spots." Developers shall also be required to pay the cost of providing new and improved wastewater services to project sites. | Mitigation Measure is not applicable. |
| **5.12-13** As part of the development application and review process, coordinate with SCE, Time Warner Cable, Cox Communications Orange County, The Gas Company, AT&T, cellular telephone service providers, and other local utilities to assess capacity and infrastructure needs to support new development or redevelopment activities. Require that utilities be moved underground consistent with the City's Master Utility Undergrounding Plan. (**Implementation Program V-1**) | Mitigation Measure is applicable. The Proposed Project would require "Will Serve Letters" for services including electrical, gas, telecommunication, and other utility services. |
| **5.12-14** The City strongly encourages new development and major renovation projects to employ green building techniques and materials. Encourage proposed development projects throughout the City to incorporate Leadership in Energy and Environmental Design (LEED®) Standards developed by the U.S. Green Building Council or an equivalent program. Encourage | Mitigation Measure is applicable. The Proposed Project would adhere to State Title 24 building construction standards and Energy Star conservation standards as well as |

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| building orientations and landscaping that enhance natural lighting and sun exposure. Prepare guidelines for sustainable development to encourage incorporation of these practices in new development. These guidelines will include measures to maximize soil permeability to address related stormwater and surface-water runoff issues. Require compliance with State Title 24 building construction standards and Energy Star conservation standards for all development projects. Climate change Mitigation Measures identified in the General Plan EIR shall be incorporated as implementation programs and applied to new development projects upon adoption of the General Plan. (**Implementation Program III-11**) | incorporate applicable climate change Mitigation Measures. |
| **5.12-15** Continue to contract for provision of solid waste and recycling services. Expand community outreach and education regarding residential recycling opportunities and household hazardous wastes by providing information on the City's website, at City Hall, and through other means as necessary. (**Implementation Program I-33**) | Mitigation Measure is not applicable. |
| **5.12-16** Continue to implement waste diversion programs as well as public education programs as outlined in the City's Source Reduction and Recycling Element required by AB 939 (1989). Work to expand recycling pickup to all residential addresses in the City. Conduct a waste characterization study to identify the major constituents in the City's solid waste stream. The results of the study will be used to guide development of the recycling and outreach program, and possible revisions to waste handler contracts. The City will also consider anticipated waste associated with the land use types of future development. (**Implementation Program IV-5**) | Mitigation Measure is not applicable. |

### *Discussion*

*a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:*

***Narrative Summary: Impacts Analyzed in the GP PEIR (a)***

**Less Than Significant:** The OGP's implementation would result in a net population increase of approximately 57,844 persons.

Fire Protection and Emergency Services: The City of Orange is served by the Orange City Fire Department (OCFD), providing services for fire prevention, fire administration, fire and arson investigation, disaster and emergency preparedness, terrorist prevention and response, as well as community emergency response. The City is served the eight existing fire stations dispersed around the city, located on Chapman Ave., E. Collins Ave., N Shaffer St., S Esplanade St., W Maple Ave., City Dr. South, E Ford Rd., and E Carver Lane. Intensification of development and additional population in the land use focus areas would lead to increased demand for fire protection services in these areas. Additionally, new development in the eastern portion of the planning area (primarily from the entitled East Orange development) may require additional fire protection services and facilities. It should be noted that mitigation for increased demand for fire services due to the East Orange development (including a new fire station to serve the area) was required at the time of the project approval. Adequacy of fire personnel and facilities is monitored on a consistent basis by the Fire Chief and management staff and service needs are budgeted for on an annual basis. The Operating Budget is updated to maintain current levels of public facilities and infrastructure, and to coordinate development of community facilities and amenities and capital projects. The City uses a 7-year Capital Improvement Program process to prioritize, finance and complete various infrastructure and other projects identified in the Capital Improvement Program, which may include fire protection facilities and services.

Mitigation Measures 5.12-1 through 5.12-5 would require the City to continue to update and maintain the Emergency Operations Center, procedures for review of proposed development projects, fire facilities and resources to serve new development, education opportunities, and information regarding potential fire hazards and hazard areas. Therefore, impacts associated with the provision of new or physically altered fire protection and emergency service facilities would be reduced to a less than significant level with Mitigation Measures.

Pursuant to Section 15145 of CEQA, analysis of the physical changes in the planning area that may occur from future construction of fire station facilities would be speculative and no further analysis of the impact is required at this time. However, construction of fire protection facilities would be subject to CEQA. Environmental documentation prepared pursuant to CEQA would identify potentially significant impacts and appropriate Mitigation Measures.

Police Protection: The City of Orange is served by the Orange Police Department (OPD), providing field services, investigative services, and support services. The Orange Police Department is served by approximately 160 sworn officers and 120

support staff employees. The Orange Police Department headquarters is located at 1107 N. Batavia Street. The implementation of the General Plan would increase the population and new development in the Planning Area, raising the demand for police protection and services. Despite this, the overall level of police protection would not decline. Even though the City does not use an officer-to-population ratio standard to measure the adequacy of policing levels in the City, the planning area would need over 80 new officers based on the FBI's average ratio for western cities of 1.3 police officers per 1,000 residents. This figure is based on the net population increase of approximately 57,844 persons anticipated at buildout pursuant to the OGP. The City updates its Operating Budget to maintain current levels of public facilities and infrastructure, and to coordinate development of community facilities and amenities and capital projects. The City uses the 7-year Capital Improvement Program process to prioritize, finance, and complete various infrastructure and other projects identified in the Capital Improvement Program, which may include police facilities and services.

The GP PEIR includes Mitigation Measures 5.12-1 through 5.12-4 that require the city to update and maintain the Emergency Operations Center, procedures for review of proposed development projects, police facilities and resources to serve new development and educational opportunities to raise public awareness and safety. Therefore, impacts associated with the provision of new or physically altered police protection service facilities would be reduced to a less than significant level with Mitigation Measures.

Pursuant to Section 15145 of CEQA, analysis of the physical changes in the planning area, which may occur from future construction or expansion of police stations and/or police facilities would be speculative and no further analysis of the impact is required at this time. However, construction of the police facilities would be subject to CEQA. Environmental documentation prepared pursuant to CEQA would identify potentially significant impacts and appropriate Mitigation Measures.

School: Schools serving students in the Orange planning area operate within the Orange Unified School District (OUSD). According to OUSD^1 , the district has 3 early learning schools and preschools, 29 elementary schools, 7 intermediate schools, and 6 high schools. Additionally, the district has 4 alternative school locations and two colleges located in the planning area. Based on the OUSD student generation rates, the implementation of the OGP is expected to generate approximately 7,395 new students in the planning area.

With adoption of Senate Bill (SB) 50 and Proposition 1A in 1998, school districts that meet certain requirements now have the option of adopting alternative school fees, also known as Level 2 Fees and Level 3 Fees (Public Resources Code Sections 65995.5, 65995.6, and 65995.7). In general, alternative school fees, which are calculated for each school district, apply solely to residential construction within

a school district. Therefore, OUSD and the City would require developers to provide for adequate educational facilities, to the extent allowed by law.

The environmental effects of expansion, construction, and operation of additional school facilities would be evaluated under CEQA by OUSD in its efforts to plan for construction of new schools or expansion of existing facilities. The OUSD updates its Facilities Master Plan over time to evaluate demand, capacity, and plans for facility needs. SB 50 states that for CEQA purposes, payment of fees to the affected school district reduces school facility impacts of the OGP to a less than significant level but does not relieve the affected district of completing its own analysis of environmental impacts under CEQA.

Libraries: Library services in the City of Orange are provided by the Orange Public Library and Historic Center (Main Library) located at 407 E. Chapman Avenue. The library closed in 2005 for a major construction and expansion, and reopened in 2007, adding 28,000 square feet of space and provides twice as many books as it did prior to expansion, a homework center, a Teen Zone, a Children's Library, a literacy center, a local history room, a Friends' of Orange Public Library bookstore, community meeting space, study room space and 100 public-use computers. Additionally, the El Modena Branch Library, located at 380 S. Hewes Street, and the Taft Branch Library, located at 740 E. Taft Avenue, also serve the planning area and operate as a community resource and gathering space to provide library materials, computer access, meeting room space, and family programs serving their respective parts of the planning area. The OGP's new development would increase the net population, potentially increasing the level of demand for library services. Mitigation Measure 5.12-6 would require the City to continually update and the Public Library Facilities Master Plan. Mitigation Measure 5.12-7 would require the City to implement the City's Public Library Facilities Plan to ensure that the California State Library standard of four volumes and 0.7 square feet per capita is maintained and that library services needs are met as future development occurs.

The Orange Public Library Facilities Master Plan recommends future expansions to the El Modena and Taft branch libraries, as well as the construction of a fourth branch library in the Santiago Hills area of Orange. Pursuant to development already approved for East Orange, a new library site has been reserved in the eastern portion of the planning area. With adherence to the proposed Mitigation Measures and implementation of proposed policies pertaining to library services, program-level impacts associated with the provision of library services would be reduced to a less than significant level.

Pursuant to Section 15145 of CEQA, analysis of the physical changes in the planning area that may occur from future construction of library facilities would be speculative and no further analysis of the impact is required at this time. However, construction of libraries would be subject to CEQA. Environmental

documentation prepared pursuant to CEQA would identify potentially significant impacts and appropriate Mitigation Measures.

Parks and Recreation: For more detail, refer to Section 4.16 – Recreation of this document. Park and Recreation service impacts can be referred to within Section 4.16, Recreation, of this document.

Other Public Facilities: Other public facilities for the City include Water Supply and Infrastructure, Wastewater Infrastructure, Energy and Solid Waste.

Water Supply and Infrastructure: The GP PEIR analyzes existing conditions of water supply and infrastructure and potential impacts due to the OGP. The City's primary source of domestic water is from groundwater resources supplied by City-owned wells, which provide approximately 55 percent of the City's water supply. The City also purchases approximately 40 percent of its domestic water supply from imported water sources as a member agency of the Municipal Water District of Orange County (MWDOC). The City also receives 3 to 5 percent of its water supply from the Serrano Water district. In addition, the Irvine Ranch Water District serves new development areas in East Orange, and the Golden State Water Company and East Orange County Water District serve small portions of the southeast area of the City.

Delivery of domestic water service in the City is provided by the Public Works Department's Water Division. The City's service area includes approximately 23.6 square miles and includes 16 wells, 8 imported water service connections, 18 storage tanks, 18 pump stations, 449 miles of pipelines, and 34,000 service connections. According to the City Urban Water Management Plan Update (UWMP) (City of Orange 2005), the City's 2005 estimated groundwater production capacity was 40,371 acre-feet per year (AFY). The UWMP also noted that three additional wells were included in the City's Capital Improvement Program. With these additional wells, the City's estimated production capacity would be increased to 49,079 AFY. The GP PEIR determined that impacts to water supply availability to serve the General Plan's buildout population are less than significant; however, increased population and development resulting from the OGP would create a demand for additional water infrastructure and water facilities. The City would continue to use the 7-year Capital Improvement Program to prioritize, finance, and complete various infrastructure and other projects identified in the Capital Improvement Program, which may include water infrastructure and services. Mitigation Measures 5.12-8 through 5.12-10 require the City to implement and update applicable master plans, require future development projects to contain studies and incorporated recommendations, and coordinate with applicable water districts to achieve water supply, distribution and conservation objectives. With adherence to and implementation of the OGP policies and programs and the GP PEIR Mitigation Measures, program

level impacts associated with water infrastructure would be reduced to a less than significant level.

Pursuant to Section 15145 of CEQA, analysis of the physical changes in the planning area that may occur from the provision of additional water infrastructure would be speculative and no further analysis of the impact is required at this time. However, water infrastructure projects would be subject to CEQA. Environmental documentation prepared pursuant to CEQA would identify potentially significant impacts and appropriate Mitigation Measures.

Wastewater: The GP PEIR analyzes existing wastewater infrastructure and potential impacts due to the OGP implementation. The City of Orange Public Works Department is responsible for installation and maintenance of local wastewater collection facilities, which convey wastewater to Orange County Sanitation District (OCSD) trunk sewers.

The City's Public Works Department is in charge of the daily operation and maintenance of the sewer collection system in the City. Approximately 352 miles of basic sewer collection pipeline is located within the City. Of these pipes, approximately 71 percent are 8 inches in diameter, 9 percent are 6 inches in diameter, and approximately 7 percent are 12 inches in diameter. In addition, the City operates and maintains three small sewage lift stations. The City's 2003 Sewer Master Plan Update identified several areas that have deficient wastewater collection capabilities due to age and limited line capacity. Additionally, areas of frequent blockages or "hot-spots" were identified. In these areas, 20 to 30 overflows may occur per year. The primary causes of these overflows are lack of hydraulic capacity, root intrusion, and accumulated grease. Chronic maintenance problems occur primarily where older pipes exist and are related to root intrusion and grease buildup in pipes with a diameter of 6 inches. OCSD is proposing to upgrade the level of wastewater treatment at both of its treatment plants to meet secondary treatment standards for the projected 2030 effluent flow of 261 mgd. OCSD successfully collects, conveys, and treats 221 million gallons of wastewater generated daily in its service area before discharging the treated water into the Pacific Ocean. Average flows for Reclamation Plant No. 1 and Treatment Plant No. 2 are 92 mgd and 129 mgd, respectively. The combined average flow is 221 mgd. Reclamation Plant No.1 has a design capacity of 108 mgd with average daily flow of 92 mgd. Treatment Plant No. 2 has an average daily flow of 129 mgd with a design capacity of 168 mgd.

To respond to the increased need for sewage treatment, OCSD has launched plans to expand treatment capacity. Reclamation Plant No. 1 is expected to increase capacity to 204 mgd. A portion of the sewage fee charged to developers in the City of Orange would be paid to the County for regional facilities improvements. In addition, OCSD's Capital Facilities Capacity Charge is applied to cities and developers for new or expanded residential, commercial,

and industrial development and is used for improving the efficiency and effectiveness of OCSD operations. Implementation of Mitigation Measure 5.12-11 requires the City to adopt and update the Sewer Master Plan, and Mitigation Measure 5.12-12 requires the City to repair and improve identified areas in the 2003 Sewer Master Plan Update and require developers to pay the cost of new and improved wastewater services to project sites. With adherence to and implementation of proposed policies and Mitigation Measures, program level impacts associated with the provision of wastewater services would be reduced to a less than significant level.

Pursuant to Section 15145 of CEQA, analysis of the physical changes in the planning area that may occur from the provision of additional wastewater collection and treatment facilities would be speculative and no further analysis of the impact is required at this time. However, wastewater infrastructure projects would be subject to CEQA. Environmental documentation prepared pursuant to CEQA would identify potentially significant impacts and appropriate Mitigation Measures.

Energy: The GP PEIR analyzes the impact from OGP implementation on energy facilities and services. The increased population from the OGP would create a demand for additional electricity and natural gas as well as transmission infrastructure, which may exceed the capacity of these existing facilities and result in the need for new, upgraded, or expanded facilities. In 2004, the annual electricity demand in the planning area was approximately 635.9 million kilowatt hours(kWh). With the OGP buildout in 2030, annual electricity demand is estimated to increase approximately 91 percent to approximately 1,218 million kWh annually. All new development pursuant the OGP would be required to pay applicable fees assessed by SCE to extend electricity lines to serve the specific Project Site. SCE would not provide service to new developments if there are not adequate electricity supplies and infrastructure to maintain existing service levels and meet the anticipated electricity demands of the specific development requesting service. Mitigation Measure 5.12-13 and 5.12-14 require new development to coordinate with utility service providers to ensure adequate capacity and to encourage green building techniques and materials. With adherence to General Plan policies and programs and implementation of applicable Mitigation Measures, program-level impacts associated with the provision of energy in the form of electricity and natural gas would be reduced to a less than significant level.

Pursuant to Section 15145 of CEQA, analysis of the physical changes in the planning area that may occur from the construction of new electrical and gas infrastructure would be speculative and no further analysis of the impact is required at this time. However, infrastructure projects related to the provision of electricity and natural gas would be subject to CEQA. Environmental

documentation prepared pursuant to CEQA would identify potentially significant impacts and appropriate Mitigation Measures.

Solid Waste and Waste Diversion: The GP PEIR analyzes existing conditions of the City's solid waste facilities and services. The increased population from the OGP would create a demand for additional solid waste collection and disposal capacity. The City of Orange contracts with Waste Management of Orange County for the collection of solid waste, green waste, and items for recycling.

Most waste collected by Waste Management is taken to any of the three landfills in Orange County: Olinda Alpha Landfill in Brea, Frank R. Bowerman Landfill in Irvine, and Prima Deshecha Landfill in San Juan Capistrano. Since solid waste from Orange is not restricted to any specific landfill, trash from the City may be disposed of at any of these landfills. Orange County Waste & Recycling, a division of the County of Orange, owns and operates these three active landfills and administers solid waste collection, recycling, and planning within the City's planning area.

Mitigation Measure 5.12-15 requires the City to continue to contract for provision of solid waste and recycling services and Mitigation Measure 5.12-16 requires the City to continue to implement waste diversion programs and waste education programs. With adherence to and implementation of the proposed policies pertaining to solid waste described above, and implementation of Mitigation Measures 5.12-15 and 5.12-16, program-level impacts associated with solid waste services would be reduced to a less than significant level.

***Impacts Associated with the Proposed Project (a)***

**No New Impacts.** The Proposed Project involves a Tentative Tract Map Permit to permit the subdivision of the Project Site into 11 individual parcels, each developed with a single-family dwelling ranging from 2,425 sq. ft. to 2,724 sq. ft.. According to the U.S. Census Bureau, the City's average persons per household from 2018 through 2022 was 2.98[8]. According to this data, the Proposed Project would increase the population by approximately 33 persons with the addition of 11 single-family dwellings.

Fire Protection: Fire protection services are provided by the Orange City Fire Department. The nearest fire station to the Project Site is Fire Station No. 4, located 0.9 miles southwest of the Project Site at 210 S. Esplanade Street. The construction of a single-family residential development could incrementally increase demands for fire protection services and medical assistance provided by the fire department. However, this increased demand for fire protection services would be met with existing fire resources. Potential impacts to fire services would be adequately funded by an increase in property tax revenue, over an extended

[8] U.S. Census Bureau QuickFacts: Orange city, California

period, relative to the increase in development intensity, as well as through development impact fees in accordance with City of Orange Development Fees. Additional purchasing of equipment, apparatus, and vehicles for Fire Department services would be provided through the Fire Facilities Impact Fee. Department needs are assessed annually, and budget allocations revised accordingly to ensure that adequate levels of service are maintained throughout the City. Building plans submitted for new development on the Project Site would be required to comply with fire safety requirements. As shown in **Figure 5**, the Proposed Project would include a fire hammerhead lane. Additionally, development of the Project Site would not result in the need for new or physically altered fire protection facilities as population increase from the Proposed Project is accounted for in the General Plan update population growth. Therefore, no impact is anticipated, and no new mitigation would be required.

Police Protection: Police Protection to the Project Site would be provided by the Orange Police Department. The police headquarters are located 3.4 miles to the west of the Project Site at 1107 N. Batavia Street. The construction of a single-family residential development could incrementally increase demand for police services. However, the increased demand for police protection services would be adequately funded by an increase in property tax revenue, over an extended period of time, as well as through development impact fees in accordance with Orange Municipal Code Chapter 3.13: Police Facility Development Fee. Additionally, development of the Project Site would not result in the need for new or physically altered police protection facilities as population increase from the Proposed Project is accounted for in the General Plan update population growth. Therefore, no impact is anticipated, and no new mitigation is required.

Schools: The City is served by Orange Unified School District. The school district is projecting a net decline in student enrollment over the next seven years[9]. The Proposed Project is the construction of 11 single-family residential dwelling units. The construction of a single-family residential development could provide additional enrollment; however, the increased demand would be met with existing school facilities. Potential impacts to school would be adequately funded by development impact fees in accordance with City of Orange Development Fees. According to the U.S. Census, the average household size is 2.98 and 20.5% of Orange's population are under 18-years old[10]. Extrapolation of this would result in approximately seven of the potential 33 persons the Proposed Project would be under 18 years old. Due to the nominal number of potential students on

[9] https://www.orangeusd.org/uploaded/photos/Davis_Demographics-Orange_USD_Fall_2019_-20_FINAL_Report.pdf

[10] https://www.census.gov/quickfacts/fact/table/orangecitycalifornia,orangecountycalifornia/AGE295221#AGE295221

anticipated decrease in student enrollment, no impacts are anticipated to the schools, and no new mitigation is required.

Parks and Recreation: Park and Recreation service impacts from the Proposed Project can be referred to within Section 4.16, Recreation, of this document.

Other Public Facilities: Other public facilities for the City of Orange include Water Infrastructure, Wastewater Infrastructure, Storm Drain Systems, Energy, and Solid Waste and Waste Diversion.

Water Supply and Infrastructure: The City of Orange Water Division is responsible for providing a clean, safe, potable water supply to the City of Orange. The City receives water from three main sources: groundwater through 15 active wells managed by the Orange County Water District (OCWD), surface water from the Serrano Water District, and imported surface water from the Metropolitan Water District of Southern California (MWD) from the Colorado River and the State Water Project in Northern California. The 2020 Urban Water Management Program concluded that the City would have adequate supply to meet water demand during normal, single dry, and multiple dry years over the next 25 years. The Proposed Project is consistent with the General Plan and Zoning Code and was reflected in the City's demand calculations. Therefore, no impact is anticipated.

Per Title 7, Chapter 7.01, Water Quality and Stormwater Discharges, of the City Code, the Applicant would be required to include specific design Best Management Practices to ensure that no storm water runoff generated on the Project Site would leave it without pre-treatment for urban pollutants. The Applicant has prepared a Preliminary Water Quality Management Plan (WQMP), which includes specific design features during construction and operations to ensure that no storm water runoff generated on the Project Site would leave it without pre-treatment for urban pollutants (Rancho Ridge, Hunsaker & Associates Irvine, Inc., March 23, 2023). Under proposed conditions, the developed site would gently slope to the west, with surface runoff from each lot conveyed as sheet flow to the curb and gutter. Runoff would be conveyed westerly to a catch basin where the 85th percentile storm event volume and the 2-year detention volume for hydromodification control would be detained in a subsurface detention facility prior to discharging to two (2) drywells. Flows exceeding this volume would be conveyed to Rancho Santiago Boulevard and conveyed southerly as gutter flow prior to discharging to an existing catch basin located at the northeast corner of Ranch Santiago Boulevard and East Walnut Avenue. The Property Owner/Developer would be required to comply with Title 7, Chapter 7.01.060 of the City's code and implement all recommendations contained within the WQMP.

The Project Site is more than 1 acre; therefore, the Property Owner/Developer would be required to comply with the requirements of the NPDES MS4 Permit

Construction General Permit Order 2009-0009- DWQ and prepare a SWPPP. The SWPPP would generally contain a site map showing the construction perimeter, existing and proposed buildings, storm water collection and discharge points, general pre- and post-construction topography, drainage patterns across the Project Site, and adjacent roadways. For ongoing operations, in lieu of providing on site treatment, the developer would pay a Low Impact Development Fee that would apply towards the construction of an offsite mitigation project. Therefore, with compliance with Title 7, Chapter 7.01 of the OMC, potential impacts associated with water infrastructure and storm water drainage would be less than significant, and no new mitigation would be required.

Wastewater Infrastructure: The Proposed Project would be served by the City of Orange Public Works Department for wastewater (sanitary sewer) collection service. The Proposed Project is located within a developed area and there is an existing sanitary sewer main in North Rancho Santiago Blvd, adjacent to the Proposed Project. The Proposed Project would be required to connect to this existing sanitary sewer line. Due to the small size of the Proposed Project, existing wastewater infrastructure and facilities would be adequate to serve the wastewater collection requirements of the Proposed Project. Therefore, no impacts to wastewater facilities would be anticipated, and no new mitigation is required.

Energy: The Project Site is in a built-out, urban setting. The Project Site and the surrounding properties are fully served by various utility service providers, including:

- Electric: Southern California Edison (SCE)
- Natural Gas: Southern California Gas (SoCalGas)
- Water: City of Orange Water Division
- Telecommunications: Charter, AT&T, and Comcast

There are no anticipated significant services or system upgrades needed to serve the proposed single-family residential development. Therefore, no impacts are anticipated, and no new mitigation is required.

Solid Waste and Waste Diversion: The Proposed Project is the construction of 11 single-family residential dwelling units. The proposed square footage of the two-story buildings is between 2,425 and 2,724 square feet. The Proposed Project's contribution of solid waste would be minimal and would not significantly impact solid waste collection or landfill operations. Furthermore, as with all residences in the City, the individual units are subject to curbside recycling and green waste separation requirements. No impacts are anticipated, and no new mitigation is required.

### *Conclusion*

Potential impacts identified for the Proposed Project would not be greater than what were identified in the Final PEIR; therefore, the Proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified impacts. Additionally, no new information of substantial importance that was not known and could not have been known at the time the GP PEIR was certified is available that would change the prior finding of no impact. With regards to the issue of Public Services the following findings can be made:

1. No peculiar impacts to the Project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed by the GP PEIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the GP PEIR.
4. No new Mitigation Measures would be required because Project-specific impacts would be less than significant.

## 4.16 Recreation

### *Impact Analysis*

| CEQA THRESHOLDS | Project Peculiar Impact that is not Substantially Mitigated by Uniform Applied Policies | Significant Impact not Analyzed as Significant in the GP PEIR | Potentially Significant Offsite or Cumulative Impact not Discussed in the GP PEIR | Adverse Impact More Severe Based on Substantial New Information | No New Impact from GP PEIR |
|---|---|---|---|---|---|
| **XVI. RECREATION:** | | | | | |
| 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? | | | | | X |
| 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? | | | | | X |

### *General Plan PEIR Mitigation Measures*

| GP PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| **5.13-1** Work actively to acquire, build, and maintain approximately 122 acres of additional parkland, in order to achieve a minimum parkland ratio of 3 acres per 1,000 persons by 2030, working toward a desired ratio of 5 acres per 1,000 persons by 2050. Evaluate progress toward achieving this goal by preparing a status report for the City Council and community every 5 years. As a separate, but compatible objective, support efforts by the County of Orange or private land owners to provide an additional 303 acres of regional | Mitigation Measure is not applicable. |

| GP PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| parkland to support an overall objective of 10 acres of parkland per 1,000 persons, inclusive of County regional parks. Work with the private sector to encourage use of vacant commercial or industrial properties for recreational purposes. (**Implementation Program IV-2**) | |
| **5.13-2** Continue to implement and expand the use of joint-use agreements to increase the parks and open space resources available to Orange residents. Specifically, seek to expand joint-use agreements with OUSD and other local schools, SCE, and the Orange County Flood Control District. Investigate conversion or joint-use of surplus or otherwise underutilized lands, including railroad and public utility rights-of-way, for open space use. (**Implementation Program I-26**) | Mitigation Measure is not applicable. |
| **5.13-3** Continue to implement and update the City's Capital Improvement Program to:<br>• Address phasing and construction and maintenance of roadway, infrastructure, streetscape, signage, and City-owned park improvements throughout the City;<br>• Acquire and expend funds from available transportation financing and other programs to assist in financing new roadways and trails;<br>• Manage construction of new parks and improvements to current parklands and park facilities; and<br>• Facilitate construction of a multi-use trails network that connects the City's parks and open spaces.<br>Use the 7-year Capital Improvement Program process to prioritize, finance, and complete roadway, infrastructure, and parks projects identified in the Capital Improvement Program. Update the Capital Improvement Program on an annual basis to respond to changes in local priorities and available funding sources. | Mitigation Measure is not applicable. |

| GP PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| Require future Capital Improvement Program projects to include a public outreach component. (**Implementation Program II-1**) | |
| **5.13-4** Continue efforts to prepare and adopt a vision plan for Santiago Creek addressing recreational trails, open space, and flood control. Support future development of highly visible access points to the Santa Ana River, particularly at Lincoln Avenue, Katella Avenue, and Chapman Avenue. Partner with the City of Anaheim, resource agencies, and community organizations to complete a Vision Plan for the Santa Ana River, similar to the Plan for Santiago Creek. (**Implementation Program IV-4**) | Mitigation Measure is not applicable. |

### *Discussion*

*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?*

### *Narrative Summary: Impacts Analyzed in the GP PEIR (a)*

**Less Than Significant Impact.** The GP PEIR describes the existing recreation facilities and includes potential environmental impacts resulting from the implementation of the OGP recreation programs and policies. Development pursuant to the OGP land use policy would result in an increase of approximately 23,478 dwelling units, 35.7 million square feet of nonresidential building floor area over existing conditions, and a net population increase of approximately 57,844 persons. Orange has adopted a standard of 3.0 acres per 1,000 residents, per Section 16.60.040 of the OMC. The GP PEIR notes that the City owns and has developed 24 parks, which consist of approximately 251 acres of parkland, including neighborhood parks, community parks, and regional parks (2010). In addition, Orange also maintains Special Use Facilities such as Plaza Park, Pitcher Park, and the City's community gardens. The future estimates would require 584 required park acres (as shown **Table 12 –** Existing and Future Park Acreage Needs). Mitigation Measures 5.13-1 is implemented in the GP PEIR to require the City actively work to acquire, build and maintain an additional 241 acres of parkland in order to achieve a minimum parkland ratio of 3 acres per 1,000 persons by 2030, working toward a desired ratio of 5 acres per 1,000 persons by 2050. Mitigation Measure 5.13-2 requires the City to implement and expand the use of joint-use agreements, specifically with OUSD, SCE, and the OCFCD, to increase the parks and open space resources available to Orange residents. Mitigation Measure

5.13-3 requires the City to continue to implement the Capital Improvement Program, which may include additional park and recreation facilities and services or funding. Mitigation Measure 5.13-4 requires the City to continue to prepare and adopt a vision of Santiago Creek, which could increase parkland for the City. With adherence to existing regulation, as well as implementation of GP PEIR Mitigation Measures and programs and policies, programmatic level impacts to parks and recreation resources would be less than significant.

**Table 12 – Existing and Future Park Acreage Needs**

| | 2007 Population[c] | Park Acreage Required[a] | Available Acreage from Parkland[b] | Additional Acreage per Quimby Act (OMC Sec. 3.40) | Ratio per 1,000 Population | Parkland Surplus/ (Shortfall) |
|---|---|---|---|---|---|---|
| **Existing** | 138,640 | 416 | 251 | -- | 1.81 | (165) |
| **Future** | 194,543[d] | 584 | 43[e] | 168[d] | 2.37 | (122) |

Source: P&D Consultants and Keyser Marston Associates, 2005; California Department of Finance, 2004

Notes:

All acreages are rounded to the nearest acre

[a] Based on standard of 3.0 acres per 1,000 people, as specified in City of Orange Municipal Code Section 3.40.040.

[b] Does not include approximately 16,000 acres of open space areas east of Orange or regional park acreage in proximity to Orange.

[c] Draft Natural Resources Element 2009.

[d] Estimated buildout population of the OGP would add 55,903 new residents between 2007 and General Plan Buildout Post 2030.

[e] Assumes 43 acres undeveloped parks and future development project parks are implemented per Table 5.13-3, plus existing parkland acreage.

### *Impacts Associated with the Proposed Project (a)*

**No New Impacts.** The Proposed Project would provide approximately 38,079 square feet of open space, which includes 18,628 sq. ft. of private and usable space, 5,599 sq. ft. of common open space, and 13,852 sq. ft. of landscaping throughout walkways and front yards. According to the conceptual site plan, the open space plans are subject to change due to the balcony design of the elevation.

The Proposed Project is required to comply with the Implementation Program for the Park Master Plan which adopts the Quimby Act ordinance to require new development to either dedicate and improve parks or pay a fee equivalent to

that necessary to meet the standard of 3 acres per 1,000 residents. Therefore, no new impacts associated with recreational facilities which may have an adverse physical effect on the environment would occur.

*b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

***Narrative Summary: Impacts Analyzed in the GP PEIR (b)***

**Less than Significant Impact.** The increased population from the OGP would create a demand for additional park improvements to increase recreational opportunities within the City, which would likely require expansion or construction of existing or new facilities. The specific environmental impact from the construction of new parkland or expansion of existing park and recreation facilities in the planning area cannot be determined at the programmatic level of analysis because no designs for specific park projects are available at this time.

City programs for project design and approval as well as CEQA environmental review process require that potential impacts be addressed prior to construction or expansion of new or existing facilities. The impacts of new and expanded parks would depend upon the precise type and location of such facilities and would therefore need to be addressed in a project-level environmental review. It is anticipated that OGP programs and policies coupled with regulations and review processes would mitigate any project-level environmental impacts. Therefore, impacts would be less than significant, and no Mitigation Measures would be required at the GP PEIR level.

***Impacts Associated with the Proposed Project (b)***

**No New Impacts.** The Proposed Project would provide approximately 38,079 square feet of open space, which includes 18,628 sq. ft. of private and usable space, 5,599 sq. ft. of common open space, and 13,852 sq. ft. of landscaping throughout walkways and front yards.

The Proposed Project is required to comply with the Implementation Program for the Park Master Plan which adopts the Quimby Act ordinance to require new development to either dedicate and improve parks or pay a fee equivalent to that necessary to meet the standard of 3 acres per 1,000 residents. Therefore, no new impacts associated with construction or expansion of recreation facilities which may have an adverse physical effect on the environment would occur.

***Conclusion***

No new impacts associated with recreation would occur. The Proposed Project would not result in any impacts beyond those identified in the GP PEIR. The Proposed Project contains no substantial changes to the implementation of the GP PEIR, there have been no substantial changes in circumstances, and no new

information has become available, not known and could not have been known, at the time of certification, which would require major revisions to the GP PEIR. With regards to the issue of Recreation the following findings can be made:

1. No peculiar impacts to the Project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed by the GP PEIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the GP PEIR.
4. No new Mitigation Measures would be required because Project-specific impacts would be less than significant. GP PEIR Mitigation Measures 5.13-1 through 5.13-4 and uniformly applied development policies and standards have been implemented through the Project.

## 4.17 Transportation

### *Impact Analysis*

| CEQA THRESHOLDS | Project Peculiar Impact that is not Substantially Mitigated by Uniform Applied Policies | Significant Impact not Analyzed as Significant in the GP PEIR | Potentially Significant Offsite or Cumulative Impact not Discussed in the GP PEIR | Adverse Impact More Severe Based on Substantial New Information | No New Impact from GP PEIR |
|---|---|---|---|---|---|
| **I. TRANSPORTATION:** Would the project: | | | | | |
| a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? | | | | | X |
| b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)? | | | | | X |
| c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | | | | | X |
| d) Result in inadequate emergency access? | | | | | X |

### *General Plan PEIR Mitigation Measures*

| GP PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| **5.14-1** The City shall implement the Mitigation Measures for deficient arterial segments described in Table 5.14-10 shown of the GP PEIR. These improvements will be added to the City's Capital Improvement Program and monitored, prioritized, and funded over time through the City's annual budgeting process. Funds may consist of City funds, grant funds, traffic impact | Mitigation Measure is not applicable. |

| GP PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| fees, and fair-share contributions toward capacity impacts required under CEQA to mitigate project impacts for specific projects. Timing for implementation will be determined by the City's Traffic Engineer based on monitoring of operational conditions and traffic counts demonstrating the need for the improvements. | |
| **5.14-2** The City shall complete intersection capacity improvements and coordinate traffic signals as necessary to improve traffic flow and implement the Mitigation Measures for deficient intersections. Specific improvements are described in Table 5.14-11 shown in the GP PEIR. These improvements will be added to the City's Capital Improvement Program and monitored, prioritized, and funded over time through the City's annual budgeting process. Funds may consist of City funds, grant funds, traffic impact fees, and fair-share contributions toward capacity impacts required under CEQA to mitigate project impacts for specific projects. Timing for implementation will be determined by the City's Traffic Engineer based on monitoring of operational conditions and traffic counts demonstrating the need for the improvements. | Mitigation Measure is not applicable. |
| **5.14-3** Require preparation of Traffic Impact Analyses for new discretionary development projects. For projects that increase V/C by .01 or more on affected roadway segments or intersections experiencing or that are projected to experience LOS E or F conditions without the proposed project, Traffic Impacts Analyses must propose binding mitigation strategies to be incorporated within the project. The City will prepare and publish guidelines for the preparation of Traffic Impact Analyses. | Mitigation Measure is applicable. The Project prepared a Transportation Study Screening Assessment (**Appendix C** – Rancho Ridge Infill Project Transportation Study Screening Assessment, Ganddini Group, December 19, 2022). |
| **5.14-4** Require major employers to institute Transportation Demand Management (TDM) plans (Chapter 10.83 of the City's Municipal Code). Such plans establish incentives to encourage employees to carpool, take public | Mitigation Measure is not applicable. |

| GP PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| transportation, bicycle, or use some means other than private automobiles to get to and from work. | |
| **5.14-5** Participate in regional efforts to implement TDM requirements and support implementation of the employer TDM provisions of the South Coast Air Quality Management District (SCAQMD) Air Quality Management Plan by working with the SCAQMD to identify employers within Orange most suitable for participation in the TDM programs to achieve major reduction of VMT. | |
| **5.14-6** Work closely with OCTA to achieve the following:<br>• Maintain consistency with the County MPAH;<br>• Implement provisions of Measure M;<br>• Implement the OCTA CMP;<br>• Expand and improve the efficiency of bus service within the City;<br>• Encourage the expansion of alternative local transportation options such as a community circulator bus service between transit centers and major commercial, employment, and residential areas;<br>• Improve paratransit or other public transportation systems that enhance the mobility of Orange's senior and youth populations, and the disabled;<br>• Encourage provision of attractive and appropriate transit amenities;<br>• Support and implement the OCTA Commuter Bikeways Strategic Plan and participate in future updates and revisions to the Plan; and<br>• Reduce noise impacts of OCTA operations and facilities. | Mitigation Measure is not applicable. |
| **5.14-7** Work closely and coordinate with Caltrans and TCA on all plans, activities, and projects that may affect state roadway facilities or transportation corridors passing through Orange. Additionally, work with these agencies to achieve the following: | Mitigation Measure is not applicable. |

| GP PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| • Provide appropriate screening to control the visual impacts of transportation facilities;<br>• Provide landscaping within transportation facilities;<br>• Implement the interchange at SR-55 and Meats Avenue;<br>• Determine the feasibility of conversion or joint-use of surplus or otherwise underutilized lands under Caltrans or TCA control for open space;<br>• Plan for noise abatement along freeways and highways;<br>• Install, maintain, and update freeway and highway rights-of way buffers and soundwalls; and<br>• Provide adequate visual buffers such as berms or landscaping between freeways and railways and adjacent land uses. | |

***Discussion***

*a) Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?*

***Narrative Summary: Impacts Analyzed in the GP PEIR (a)***

**Less Than Significant Impact.** The GP PEIR analyzes the OGP with the Congestion Management Plan (CMP). According to the GP PEIR, the City contains one Orange County CMP intersection at SR-55 northbound and southbound ramps at Katella Avenue. Implementation of the OGP would not cause this intersection to degrade to an unacceptable level. The GP PEIR states that this intersection would operate at LOS C and D for the northbound SR-55 ramps in the AM and PM peak hours, respectively. The southbound ramps to SR-55 would operate at LOS E and D in the A.M. and P.M. peak periods, respectively, with implementation of the OGP. Per the CMP, LOS E is the operating standard for roadways on the CMP highway system. Therefore, impacts to CMP designated roads or highways would be less than significant.

***Impacts Associated with the Proposed Project (a)***

**No New Impacts.** The Proposed Project would provide vehicular access via a driveway from Rancho Santiago Boulevard along the western site boundary.

The VMT Analysis was conducted using a proposed 13 dwelling units, creating a

conservative analysis since the Proposed Project proposes development of 11 single-family residential units. The Project's trip generation is based on data obtained from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (12th Edition, 2025) and the North Orange County Collaborative VMT Traffic Study Screening Tool (NOCC+, November 2020 Update). Since the NOCC+ only provides daily trip generation, the project AM and PM peak hour trip generation was calculated based on ITE rates. Based on review of the project and ITE land use definition, ITE Land Use Code 210 – Single-Family Detached Residential was determined to adequately represent the proposed use and was selected for this analysis. The Proposed Project is forecasted to generate 100 daily trips, including 9 trips during the AM peak hour and 10 trips during the PM peak hour.

The criteria for assessing the need to prepare a transportation impact study is specific in the City of Orange Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment (July 2025) (TIA Guidelines).

As specified in the City of Orange TIA Guidelines, the requirement to prepare a transportation impact analysis with LOS analysis should be based on the following criteria:

- When either the AM or PM peak hour project trip generation exceeds 100 vehicle trips.
- Projects that generate 1,600 or more average daily trips (ADT) on the Arterial Highway System.
- Projects that generate 50 or more vehicle trips during either the AM or PM peak hour to any intersection.

The Proposed Project is forecast to generate fewer than 100 peak hour vehicle and would not contribute more than 1,600 daily vehicle trips on the Arterial Highway System nor 50 trips to an intersection during the weekday AM and PM peak hours; therefore, LOS analysis is not warranted based on the criteria established in the City's TIA Guidelines. The Proposed Project complies with the City's TIA Guidelines and does not propose any features that would conflict with the City's TIA Guidelines or Circulation Element.

The City's TIA Guidelines establish screening thresholds for certain types of projects that may be presumed to cause a less than significant VMT impact based on the substantial evidence and technical guidance provided in the Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018) ["OPR Technical Advisory"]. Further VMT analysis is not required for projects that satisfy at least one of the three following screening criteria:

- Transit Priority Areas (TPA) Screening
- Low VMT-Generating Areas Screening

- Project Type Screening

The project VMT screening assessment was performed using the NOCC+ Version 5 tool. As established in 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. Version 5 is the most recent version that implements the OCTAM that has been issued by OCTA. The NOCC+ tool found that the Proposed Project is located within TAZ #460. According to the OCTAM socio-economic data supporting the NOCC+ tool, TAZ #460 contains 419 residential households, most of which are single-family housing of approximately the same density as the Proposed Project. Additionally, the Proposed Project does not involved modifications to the surrounding roadway network. Therefore, the Proposed Project is consistent with existing land use within the TAZ and it is not expected to alter the existing built environment in such a way that would increase the rate or length of trips as estimated by the NOCC+ tool.

As shown in the NOCC+ tool, the Proposed Project is estimated to generate 17.6 VMT per service population, which is better than the General Plan Buildout and the City-established threshold of 31.3 VMT per service population. Therefore, the Proposed Project satisfies the City-established low VMT area screening and can be presumed to result in a less than significant VMT impact. The Proposed Project also does not propose any new transit, roadways, bicycle, or pedestrian facilities that would conflict with the City's Circulation Element or the OMC. The Proposed Project would adhere to all applicable policies and programs listed in the OGP. Therefore, the Proposed Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities and no Mitigation Measures would be required.

*b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

***Narrative Summary: Impacts Analyzed in the GP PEIR:***

**Significant and Unavoidable.** The City adopted the GP PEIR in 2010, several years before the modified Section 15064.3 was required under CEQA. CEQA Guidelines Section 15064.3 provides that transportation impacts of projects are, in general, best measured by evaluating the Proposed Project's VMT. Automobile delay (level of service ((LOS)) is no longer considered an environmental impact under CEQA.

The GP PEIR discusses LOS and ADT but not VMT due to its adoption in 2010. The GP PEIR concluded that implementation of the OGP would generate 1,456,700 daily trips, which is approximately 46 percent greater than 995,000 daily trips generated under existing conditions. Overall, at the OGP level, impacts to roadway segments are considered potentially significant. The OGP includes policies and actions to provide a multimodal transportation system that meets

forecasted demands and sustains quality of life. The OGP also includes an Implementation Plan that identifies specific Implementation Programs to achieve the goals, policies, and plans. Where a potentially significant environmental impact exists, these Implementation Programs also function as programmatic Mitigation Measures. Feasible Mitigation Measures (including physical improvements) for addressing unacceptable level of service on arterial segments have been identified. Even with adherence to and implementation of the proposed policies, and implementation of Mitigation Measures 5.14-1 and 5.14-3 through 5.14-7, program-level increased traffic impacts on arterial segment level of service would be reduced, but not to a level less than significant. Individual development projects would be required to undergo project-specific environmental review. If project-level significant impacts are identified, specific Mitigation Measures would be required under CEQA.

***Impacts Associated with the Proposed Project (b)***

**No New Impact.** The Proposed Project is forecasted to generate 100 daily trips, including 9 trips during the AM peak hour and 10 trips during the PM peak hour. The Proposed Project is forecasted to generate fewer than 100 peak hour vehicle trips and would not contribute more than 1,600 daily vehicle trips on the Arterial Highway System nor 50 trips to an intersection during the weekday AM and PM peak hours; therefore, LOS analysis is not warranted based on the criteria established in the City's TIA Guidelines. Furthermore, the Proposed Project satisfies the City-established low VMT area screening and can be presumed to result in a less than significant VMT impact.

A full traffic impact study is not required, and impacts are less than significant as the project complies with CEQA Guidelines Section 15064.3 subdivision (b).

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

***Narrative Summary: Impacts Analyzed in the GP PEIR (c)***

**No Impacts.** The GP PEIR notes that implementation of the OGP would not increase hazards due to design features or incompatible uses. No new roadways are planned within the planning area and those that may be proposed for expansion or alteration would be subject to existing City design standards for roadways that ensure that no hazards would result. No impacts would result with implementation of the OGP.

***Impacts Associated with the Proposed Project (c)***

**No New Impacts.** Vehicular access to the Project Site would be provided via one ingress and egress driveway connecting to Rancho Santiago Boulevard. Vehicular traffic to and from the Project Site would utilize the existing network of

regional and local roadways that currently serve the Proposed Project area. The Proposed Project would not introduce any new roadways or introduce a land use that would conflict with existing urban land uses in the surrounding area. The Proposed Project includes 25-foot-wide internal driveway that would provide access to each dwelling unit. Design of the Proposed Project, including the internal private roadway, ingress, egress, and other streetscape changes are subject to the City's development standards. As a result, impacts related to vehicular circulation design features would be less than significant, and no new impacts would occur.

*d) Would the project result in inadequate emergency access?*

***Narrative Summary: Impacts Analyzed in the GP PEIR (d)***

**Less Than Significant Impact with Mitigation.** The GP PEIR analyzes roadway and intersection deficiencies and concluded that these deficiencies would generate traffic congestion along intersections and roadways that would also have the potential to impede emergency access. Emergency access could be hindered along the evacuation corridors of Lincoln Avenue, Katella Avenue, Chapman Avenue, and Glassel Street. With adherence to and implementation of the proposed policies described above, and implementation of Mitigation Measures 5.14-1 and 5.14-7, emergency access program-level impacts would be reduced to a less than significant level. Individual development projects would be required to undergo project-specific environmental review. If project-level significant impacts are identified, specific Mitigation Measures would be required under CEQA.

***Impacts Associated with the Proposed Project (d)***

**No New Impacts.** Access to the Proposed Project would be provided via one ingress and egress driveway connecting to Rancho Santiago Boulevard and internal access to each dwelling unit would be provided by 25-foot-wide internal driveway. Access to the Proposed Project is required to comply with all applicable OMC and City design standards. The Proposed Project would be reviewed by the City and OCFA to ensure adequate emergency access. The Proposed Project also includes a fire access roadway that Is 30' at hammerhead at the eastern half of the Project Site. During construction, traffic lanes on Rancho Santiago Boulevard may be temporarily closed or controlled by construction personnel. The Proposed Project would adhere to OMC Chapter 12.64 and obtain an encroachment permit from the City of Orange Public Works Department. Any closures would be temporary and emergency access to the Project Site and surrounding area would be maintained. Additionally, according to Figure 5.7-1 of the GP PEIR, the Project Site is not located in any generalized evacuation corridor. Therefore, the Proposed Project would not result in significant impacts involving emergency access.

### *Conclusion*

The Proposed Project would not result in any impacts beyond those identified in the GP PEIR. Therefore, the Proposed Project's contribution to cumulative impacts related to transportation and circulation is less than significant and impacts associated with future traffic conditions would not be cumulatively considerable. With regards to the issue of Transportation, the following findings can be made:

1. No peculiar impacts to the Project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed by the GP PEIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the GP PEIR.
4. No new Mitigation Measures would be required because Project-specific impacts would be less than significant. GP PEIR Mitigation Measures and uniformly applied development policies and standards have been implemented through the Project.

## 4.18 Tribal Cultural Resources

### *Impact Analysis*

| CEQA THRESHOLDS | Project Peculiar Impact that is not Substantially Mitigated by Uniform Applied Policies | Significant Impact not Analyzed as Significant in the GP PEIR | Potentially Significant Offsite or Cumulative Impact not Discussed in the GP PEIR | Adverse Impact More Severe Based on Substantial New Information | No New Impact from GP PEIR |
|---|---|---|---|---|---|
| **II. 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: | | | | | |
| 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), or | | | | | X |
| 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. | | | | | X |

### *General Plan PEIR Mitigation Measures*

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| No GP PEIR Mitigation Measures were required for Tribal Cultural Resources. | - |

## *Discussion*

*a) 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 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) 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 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?*

### *Narrative Summary: Impacts Associated with the GP PEIR (a-b)*

**Less Than Significant Impact with Mitigation.** The City certified the GP PEIR before the above checklist items were added to the State CEQA Guidelines. However, the topic of tribal cultural resources is addressed in GP PEIR Section 5.5, Cultural Resources. The GP PEIR does not specifically discuss tribal cultural resources but discusses cultural and paleontological resources, as detailed in Section 4.5. Development according to the OGP could result in potentially significant impacts to historic, archaeological, and paleontological resources. In addition, future development could result in disturbance of human remains. By implementing the OGP policies, applying program-level mitigation at the programmatic level of analysis, Old Town Design Standards, Secretary of Interior Standards for Rehabilitation, and utilizing the site development permit and CEQA process for individual projects, the potential impact to these cultural resources would be reduced to a less than significant level.

### *Impacts Associated with the Proposed Project (a):*

**No New Impacts.** Section 21074 of CEQA Guidelines defines "tribal cultural resources" as either of the following:

1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

   a. Included or determined to be eligible for inclusion in the California Register of Historical Resources.
   b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
2. 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.
3. A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.
4. A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

As discussed in Section 4.5 of this document, the Project Site is located within a historical archaeology sensitive area and has the potential to impact archaeological resources. However, the Proposed Project would adhere to all federal, state, and local regulations as well as GP PEIR Mitigation Measures 5.5-1 through 5.5-14 to protect archaeological resources. The Project includes BMPs that further protect any potential cultural resources. The Proposed Project would follow standard unanticipated discovery regulatory measures for archaeological resources. No additional Mitigation Measures are required. With implementation of the required regulatory measures below, impacts to archaeological and historical resources, including tribal cultural resources, would be less than significant.

***Impacts Associated with the Proposed Project (b):***

**No Impact.** According to the PRC Chapter 2.5, Section 2.5, Section 21074, Tribal Cultural Resources are sites, features, places, cultural landscapes, sacred places, and items with cultural value to a California Native American tribe that are either included or determined to be eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources as defined in Section 5020.1.

No resources are listed on or have been identified as eligible for listing on the California Register of Historic Places within or near the Project Site and no known potential impacts to Tribal Cultural Resources would occur. The Proposed Project area was determined to have sensitivity for buried prehistoric archaeological resources; thus, the possibility of tribal cultural resources that are unknown to the

SCCIC may elevate the cultural sensitivity of the area. The Proposed Project shall adhere to the GP PEIR Mitigation Measures as well as the Proposed Project's BMPs for cultural resources. The Proposed Project's BMPs for cultural resources would be implemented if any tribal cultural resources or human remains are discovered. Implementation of these measures would ensure that Project-specific impacts would be less than significant.

### *Conclusion*

Implementation of recommended regulatory measures would reduce the potential impacts of the Project associated with Tribal Cultural Resources to less than significant with mitigation. The Project does not result in any new significant impacts peculiar to the project or property, a substantial increase in the severity of the impacts evaluated in the EIR, or potentially significant off-site or cumulative impacts that would render Section 15183 inapplicable to the project. With regards to the issue area of Tribal Cultural Resources, the following findings can be made:

1. No peculiar impacts to the Project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed by the GP PEIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the GP PEIR.
4. Feasible Mitigation Measures and uniformly applied development policies and standards contained within the GP PEIR apply to the Project. Standard regulatory practices provide protection for tribal cultural resources and reduce potential impacts to less than significant.

## 4.19 Utilities and Service Systems

### *Impact Analysis*

| CEQA THRESHOLDS | Project Peculiar Impact that is not Substantially Mitigated by Uniform Applied Policies | Significant Impact not Analyzed as Significant in the GP PEIR | Potentially Significant Offsite or Cumulative Impact not Discussed in the GP PEIR | Adverse Impact More Severe Based on Substantial New Information | No New Impact from GP PEIR |
|---|---|---|---|---|---|
| **III. UTILITIES AND SERVICE SYSTEMS:** Would the project: | | | | | |
| 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 telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | | | | | X |
| b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | | | | | X |
| 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? | | | | | X |
| 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? | | | | | X |
| e) Comply with federal, state, and local management and reduction | | | | | X |

| CEQA THRESHOLDS | Project Peculiar Impact that is not Substantially Mitigated by Uniform Applied Policies | Significant Impact not Analyzed as Significant in the GP PEIR | Potentially Significant Offsite or Cumulative Impact not Discussed in the GP PEIR | Adverse Impact More Severe Based on Substantial New Information | No New Impact from GP PEIR |
|---|---|---|---|---|---|
| statutes and regulations related to solid waste? | | | | | |

### *General Plan PEIR Mitigation Measures*

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| No GP Mitigation Measures were analyzed. | - |

### *Discussion*

*a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

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

*c) Would the project 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) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

### *Narrative Summary: Impacts Analyzed in the GP PEIR (a-e)*

**Less than Significant Impact with Mitigation.** The GP PEIR analyzed the impacts to utilities and service systems associated with the implementation of the OGP. Mitigation measures are applied where appropriate in the Public Services Section (Section 4.15 of this document) and the Hydrology and Water Quality Section (Section 4.10 of this document) to applicable utilities and service systems.

Additionally, the Public Services and Hydrology and Water Quality sections of this document analyzes the impacts the OGP implementation has on utilities and service systems in the City of Orange and the Mitigation Measures required to reduce impacts to a less than significant level.

*Water:*

Water Supply and Infrastructure: As detailed in Section 4.15, the GP PEIR analyzed existing conditions of water supply and infrastructure and the potential impacts of OGP implementation. The GP PEIR determined that impacts to water supply availability to serve the General Plan's buildout population are less than significant; however, increased population and development resulting from the OGP would create a demand for additional water infrastructure and water facilities. The City would continue to use the 7-year Capital Improvement Program to prioritize, finance, and complete various infrastructure and other projects identified in the Capital Improvement Program, which may include water infrastructure and services. Mitigation Measures 5.12-8 through 5.12-10 require the City to implement and update applicable master plans, require future development projects to contain studies and incorporated recommendations, and coordinate with applicable water districts to achieve water supply, distribution and conservation objectives. With adherence to and implementation of the OGP policies and programs and the GP PEIR Mitigation Measures, program level impacts associated with water infrastructure would be reduced to a less than significant level.

*Wastewater:*

The GP PEIR analyzes existing wastewater infrastructure and potential impacts due to the OGP implementation. As detailed in Section 4.15, buildout of the OGP would result in an increased need for wastewater and sewage treatment facilities. OCSD has launched plans to expand treatment capacity as well as OCSD's Facilities Capacity Charge is applied to cities and developers for new or expanded residential, commercial, and industrial development.

Implementation of Mitigation Measure 5.12-11 requires the City to adopt and update the Sewer Master Plan, and Mitigation Measure 5.12-12 requires the City to repair and improve identified areas in the 2003 Sewer Master Plan Update and require developers to pay the cost of new and improved wastewater services to project sites. With adherence to and implementation of proposed policies and Mitigation Measures, program level impacts associated with the provision of wastewater services would be reduced to a less than significant level. The specific environmental impact of constructing new wastewater collection infrastructure in the planning area cannot be determined at the General Plan level of analysis. Individual development projects would be required to evaluate the potential impacts of the proposed project in accordance with CEQA. The General Plan implements a number of programs and policies to address the potential impacts;

therefore, impacts associated with the construction and/or expansion of wastewater infrastructure are less than significant.

*Solid Waste:*

The GP PEIR analyzes existing conditions of the City's solid waste facilities and services. The increased population from the OGP would create a demand for additional solid waste collection and disposal capacity. The City of Orange contracts with Waste Management of Orange County for the collection of solid waste, green waste, and items for recycling. Mitigation Measure 5.12-15 requires the City to continue to contract for provision of solid waste and recycling services and Mitigation Measure 5.12-16 requires the City to continue to implement waste diversion programs and waste education programs. With adherence to and implementation of the proposed policies pertaining to solid waste described above, and implementation of Mitigation Measures 5.12-15 and 5.12-16, program-level impacts associated with solid waste services would be reduced to a less than significant level

*Stormwater Drainage Facilities:*

The GP PEIR discusses that construction related activities related to the implementation of the OGP could contribute additional pollutants into the City's storm drain system. Impacts related to pollutants associated with impervious surfaces are reduced primarily by City implementation of RWQCB waste discharge permits and through preparation and implementation of a SWPPP, including identification of required BMPs. A WQMP would be required to identify permanent BMPS that would control discharges to MS4s postconstruction. Additionally, because much of the new development with implementation of the OGP would be infill and redevelopment, site conditions and runoff filtration measures would improve through retrofitting and the development review process. With adherence to and implementation of these permits, proposed regulations, and policies, and implementation of Mitigation Measures 5.8-3 and 5.8-4, program-level stormwater drainage facilities would be less than significant.

*Energy:*

Development pursuant to the General Plan land use policy would result in the consumption of energy resources, including nonrenewable resources, through activities such as fuel consumed by construction vehicles and equipment. Fossil fuels are typically used for construction vehicles and other equipment during site clearing, grading, paving, and building. This use would have an irreversible effect on such resources. The buildout of the General Plan represents a long-term commitment to the consumption of energy resources. Mitigation Measure 5.12-13 and 5.12-14 require new development to coordinate with utility service providers to ensure adequate capacity and to encourage green building techniques and materials. With adherence to OGP policies and programs and implementation of

applicable Mitigation Measures, program-level impacts associated with the provision of energy in the form of electricity and natural gas would be reduced to a less than significant level.

### *Impacts Associated with the Proposed Project (a-e)*

**No New Impacts.** The Proposed Project would be serviced by Southern California Edison for electric services, SoCalGas for natural gas services, Waste Management for Orange County for trash services, the Municipal Water District of Orange County and City-owned ground wells for domestic water supply, the Orange County Sanitation District for wastewater services, as well as a number of private telecommunication providers for cable and telecommunication services.

Water Supply and Infrastructure: The City of Orange Water Division is responsible for providing a clean, safe, potable water supply to the City of Orange. The City receives water from three main sources: groundwater through 15 active wells managed by the Orange County Water District (OCWD), surface water from the Serrano Water District, and imported surface water from the Metropolitan Water District of Southern California (MWD) from the Colorado River and the State Water Project in Northern California1. The 2020 Urban Water Management Program concluded that the City would have adequate supply to meet water demand during normal, single dry, and multiple dry years over the next 25 years. The Proposed Project would replace the existing 10-inch CIP on Rancho Santiago Boulevard with a new 12-inch diameter DIP or C900 main and other minor water related improvements. The Proposed Project is consistent with the OGP and OMC and was reflected in the City's demand calculations.

Wastewater: The Proposed Project would be served by the City of Orange Public Works Department for wastewater (sanitary sewer) collection service. The Proposed Project is located within a developed area and there is an existing sanitary sewer main in North Rancho Santiago Blvd, adjacent to the Proposed Project. The Proposed Project would be required to connect to this existing sanitary sewer line. In addition to the Proposed Project's CIP replacement, the wastewater infrastructure and facilities would be adequate to serve the wastewater collection requirements of the Proposed Project. Therefore, no impacts to public facilities would be anticipated.

Solid Waste: The Proposed Project is the construction of 11 single-family residential dwelling units. The proposed square footage of the two-story buildings is between 2,425 and 2,724 square feet. The Proposed Project's contribution of solid waste would be minimal and would not significantly impact solid waste collection or landfill operations. Furthermore, as with all residences in the City, the individual units are subject to curbside recycling and green waste separation requirements. No impacts are anticipated.

Stormwater Drainage Facilities: The Proposed Project is the construction of 11 single-family residential dwelling units. .Per Title 7, Chapter 7.01, Water Quality and Stormwater Discharges, of the OMC, the Applicant would be required to include specific design Best Management Practices to ensure that no storm water runoff generated on the Project Site would leave it without pre-treatment for urban pollutants. The Applicant has prepared a Preliminary Water Quality Management Plan (WQMP), which includes specific design features during construction and operations to ensure that no storm water runoff generated on the Project Site would leave it without pre-treatment for urban pollutants (Rancho Ridge, Hunsaker & Associates Irvine, Inc., March 23, 2023). Under proposed conditions, the developed site would gently slope to the west, with surface runoff from each lot conveyed as sheet flow to the curb and gutter. Runoff would be conveyed westerly to a catch basin where the 85th percentile storm event volume and the 2-year detention volume for hydromodification control would be detained in a subsurface detention facility prior to discharging to two (2) drywells. Flows exceeding this volume would be conveyed to Rancho Santiago Boulevard and conveyed southerly as gutter flow prior to discharging to an existing catch basin located at the northeast corner of Ranch Santiago Boulevard and East Walnut Avenue. The Property Owner/Developer would be required to comply with Title 7, Chapter 7.01.060 of the City's code and implement all recommendations contained within the WQMP.

The Project Site is more than 1 acre; therefore, the Property Owner/Developer would be required to comply with the requirements of the NPDES MS4 Permit Construction General Permit Order 2009-0009- DWQ and prepare a SWPPP. The SWPPP would generally contain a site map showing the construction perimeter, existing and proposed buildings, storm water collection and discharge points, general pre- and post-construction topography, drainage patterns across the site, and adjacent roadways. For ongoing operations, in lieu of providing on site treatment, the developer would pay a Low Impact Development Fee that would apply towards the construction of an offsite mitigation project. Therefore, with compliance with Title 7, Chapter 7.01 of the City's Code, potential impacts associated with storm water drainage would be less than significant.

Energy: The Proposed Project is located within the Southern California Edison (SCE) service territory. SCE would conduct utility services, where applicable, to assess whether modifications to the existing electrical infrastructure are required to serve the project.

Southern California Gas (SoCalGas) has facilities in the area of the proposed project. SoCalGas would provide natural gas services in accordance with SoCalGas policies and extension rules on file with the California Public Utilities Commission (CPUC) at the time contractual arrangements are made. AT&T,

Charter, and Comcast have facilities to serve the project with both cable services and telecommunication services.

### *Conclusion*

Potential impacts of the Proposed Project associated with Utilities and Service Systems would be less than significant, and no mitigation would be required. The Proposed Project would not result in any impacts beyond those identified in the GP PEIR. The Proposed Project contains no substantial changes to the implementation of the General Plan, there have been no substantial changes in circumstances, and no new information has become available, not known and could not have been known, at the time that PEIR was certified, that would require major revisions to PEIR. With regards to the issue area of Utilities and Service Systems, the following findings can be made:

1. No peculiar impacts to the Project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed by the GP PEIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the GP PEIR.
4. No new Mitigation Measures would be required because Project-specific impacts would be less than significant. Feasible Mitigation Measures and uniformly applied development policies and standards contained within the GP PEIR apply to the Project.

## 4.20 Wildfire

### *Impact Analysis*

| CEQA THRESHOLDS | Project Peculiar Impact that is not Substantially Mitigated by Uniform Applied Policies | Significant Impact not Analyzed as Significant in the GP PEIR | Potentially Significant Offsite or Cumulative Impact not Discussed in the GP PEIR | Adverse Impact More Severe Based on Substantial New Information | No New Impact from GP PEIR |
|---|---|---|---|---|---|
| **IV. WILDFIRE:** 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? | | | | | X |
| 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 wildfire? | | | | | X |
| 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? | | | | | X |
| 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? | | | | | X |

### *General Plan PEIR Mitigation Measures*

| General Plan PEIR Mitigation Measure | Applicable/Not Applicable |
|---|---|
| No GP PEIR Mitigation Measures were required. | - |

### *Discussion*

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

### *Narrative Summary: Impacts Analyzed in the GP PEIR (a)*

**Less Than Significant.** The City certified the GP PEIR before the above checklist items were added to the State CEQA Guidelines. However, the topic of wildfire hazards and emergency response is addressed in GP PEIR Section 5.7 – Hazards and Hazardous Materials. Mitigation Measures 5.7-1, 5.7-3, and 5.7-7 address emergency plans in the GP PEIR. According to the GP PEIR, the City has a Multi-Hazard Functional Plan. However, this plan does not indicate evacuation routes for emergency services (GP PEIR, page 5.7-4). Although the City does not have designated emergency evacuation routes, the GP PEIR lists out some of the City's major east-west and north-south arterials as generalized evacuation routes. The City's planning area is almost entirely developed; future development would primarily involve infill and redevelopment. Accordingly, new development is expected to be minimal and is therefore not expected to impair implementation of, or physically interfere with, the City's Local Hazard Mitigation Plan (LHMP) or the City's Emergency Operations Plan (EOP). The City's LHMP was created to be consistent with the Federal Emergency Management Agency (FEMA)'s requirements and works in conjunction with the OGP and EOP. Although new development is anticipated to have minimal impact on the LHMP, the plan would be updated as necessary to reflect changes in the planning area. Adhering to existing regulations and plans ensures that impacts on emergency plans remain insignificant, requiring no mitigation.

### *Impacts Associated with the Proposed Project (a)*

**No New Impacts.** The Proposed Project would allow emergency access to the Project Site through the western driveway off of Rancho Santiago Boulevard. The Proposed Project would be reviewed by the City and OCFA to ensure adequate emergency access. The Proposed Project also includes a fire access roadway that Is 30' at hammerhead at the eastern half of the Project Site. As discussed under Section 4.17 – Transportation, the Project Site would obtain all required permits, including an encroachment permit, and comply with all applicable regulations as listed in the OMC and by OCFA to minimize any obstruction to emergency services or access. Additionally, the Proposed Project would adhere to all GP PEIR Mitigation Measures and follows the City's Public Safety Element's

policies and actions. Therefore, the Proposed Project would not substantially impair an adopted emergency response plan or emergency evacuation plan. Therefore, there are no new impacts beyond what is analyzed in the GP PEIR, and no new mitigation is required.

*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?*

***Narrative Summary: Impacts Analyzed in the GP PEIR:***

**Less than Significant Impact.** The City certified the GP PEIR before the above checklist items were added to the State CEQA Guidelines. However, the topic of wildfire hazards is addressed in GP PEIR Section 5.7 – Hazards and Hazardous Materials. Development associated with the OGP may occur within and adjacent to wildlands, thereby exposing people or structures to a significant risk of loss, injury, or death involving wildland fires. None of the OGP land use focus areas are located within wildland areas. New development in previously undeveloped areas, especially in the hillsides and canyons of the eastern portion of the planning area, could increase risk of exposure to wildfire hazards. This represents a potentially significant impact. To prevent injury and loss due to fire hazards in undeveloped hillside areas, the City would continue to update and provide maps delineating areas that could face fire hazards, and enforce municipal code and development review that ensure minimum road widths, clearance areas, and access to adequate fire protection services. The City would also continue to provide education regarding wildland fire risks as well as fire safety strategies. The OGP also requires the City to review new developments and fire services to ensure adequate emergency services and facilities to residents and businesses. Coordinating with adjacent local cities, and participating in regional, state, and federal programs would better prepare the City for wildfire emergencies and reduce fire-related risks.

***Impacts Associated with the Proposed Project (b)***

**No New Impacts.** According to the 2025 CAL FIRE Fire Hazard Severity Zones (FHSZ) Map Viewer, the Project Site is located in a Very High Fire Hazard Severity Zone (VHFHSZ) in a Local Responsibility Area (LRA) (Figure 7 – Fire Hazard Severity Zones). This means that the Proposed Project is required to comply with Chapter 7A of the CBC/the Wildland-Urban Interface (WUI) Code as well as the City's local fire procedures and regulations. The built environment surrounding the Project Site consists of residential, Church use, and commercial service uses. The Project Site is relatively flat and is not located within or immediately adjacent to any hillside areas. The Proposed Project would be subject to the standards and requirements set forth in the 2022 California Fire and Building Codes, which require structural resilience for all types of fire conditions. Therefore, no new impact would occur.

Furthermore, a fire behavior modeling summary (**Appendix I**) and a conceptual fuel modification plan (**Appendix J**) were prepared for the Proposed Project to analyze fire behavior potential for the Proposed Project. Three fire scenarios were evaluated, including three summer, onshore weather conditions (north, northeast, and east of the Project Site). The Project Site is currently an undeveloped, vacant lot that is situated between existing development, including commercial and residential properties directly to the north and existing residential properties directly to the south, west, and east. The El Modena Open Space area is approximately 600 feet to the east and is separated by an existing residential community. The El Modena Open Space features a west-facing, relatively steep hillside that ranges from approximately 35 percent to 45 percent. Fuels and terrain within the nearby El Modena Open Space areas east of the Project Site could produce flying embers that may affect the Proposed Project; however, the west-facing hillside slopes downwards towards the existing residential community that separates the Proposed Project site from the open space area, which acts as a benefit to the property because a fire burning uphill spreads faster than those burning on flat terrain or downhill as uphill vegetation is pre-heated and dried in advance of the flaming front, resulting in faster ignition rates.

The modeling found that wildfire behavior in the areas surrounding the Project Site during existing conditions (before the Proposed Project is developed) is expected to be primarily of moderate to high intensity through the non-maintained moderate- to high-load surface grass-shrub and chaparral dominated vegetation south of the site. Worst-case fire behavior under peak weather conditions is anticipated to be a wind-driven fire from the east/southeast during the fall. Under such conditions, expected surface flame length are expected to reach approximately 43 feet with wind speeds of 50+ miles per hour. Under this scenario, fireline intensities reach 20,575 BTU/feet/second with moderate spread rates of 6.4 mph and could have a spotting distance up to 2.4 miles away.

For post-project conditions where the Proposed Project is developed, post development fire behavior expected in the irrigated and replanted with plants that are acceptable with the City of Orange Fire Department (OFD) (FMZ Zone A – Gr1) under peak weather conditions experience a significant reduction in flame length and intensity. Fuel modification would result in approximately 4.0 feet by the time the inner portions of the FMZ are reached. During extreme Santa Ana weather conditions, a fire approaching from the east within the development footprint would have very low fire intensity and spotting distances due to the higher live and dead fuel moisture contents. These reduction of flame lengths and intensities are assumed to occur within the fuel modification that is achieved for most of the property. Therefore, fuel modification zones proposed for the Proposed Project are appropriate and would provide approximately two times the flame length of the worst-case fire scenario under peak weather conditions

in the hillsides to the east and would provide adequate defensible space to augment a wildfire approaching the perimeter of the Project Site. Therefore, development of the Proposed Project would improve the Project Site's conditions for fire behavior and would not exacerbate fire risks.

*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?*

***Narrative Summary: Impacts Analyzed in the GP PEIR (c)***

**Less than Significant Impact.** The City certified the GP PEIR before the above checklist items were added to the State CEQA Guidelines. However, the topic of wildfire hazards is addressed in General Plan Final PEIR Section 5.7, Hazards and Hazardous Materials. The urbanized nature of Orange and the adjacent areas significantly reduces the threat of large, catastrophic wildfires within the City. Because the planning area is almost entirely built out, most development anticipated under the OGP would involve infill and/or redevelopment of existing uses. Accordingly, new development is expected to be limited to urban areas and would not involve expansion of urban uses onto lands located within or adjacent to wildland fire hazards areas. Additionally, the City conducts discretionary review and CEQA review of all projects and requires mitigation for any potential wildland fire hazard impacts. With adherence to existing policies and regulations, impacts associated with wildland fire hazards would be reduced to a level less than significant. No mitigation is required.

***Impacts Associated with the Proposed Project (c)***

**No New Impacts.** Because the Project Site is located within a VHFHSZ, the Proposed Project is required to comply with Chapter 7A of the CBC/the WUI Code as well as the City's local fire procedures and regulations. The Proposed Project includes an approved fuel modification plan (see **Appendix J**) and a Fire Behavior Modeling summary (**Appendix I** – Fire Behavior Modeling Summary). The Proposed Project is surrounded by built infrastructure including roads, utilities (electricity and gas), sewer lines, and waterlines and would not necessitate the construction of new infrastructure. Development of the Proposed Project does not include any additional infrastructure improvements that increase capacity beyond what is already planned for within the existing urban area in the GP PEIR. The Proposed Project would be constructed in compliance with applicable building and fire codes. Additionally, OCFA would review all building plans for adequate fire suppression, fire access, and emergency evacuation. Therefore, no impact would occur.

*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?*

***Narrative Summary: Impacts Analyzed in the GP PEIR:***

**Less than Significant Impact with Mitigation.** The City certified the GP PEIR before the above checklist items were added to the State CEQA Guidelines. However, the topic of wildfire hazards is addressed in GP PEIR Section 5.7 – Hazard and Hazardous Materials. Development associated with OGP implementation in the hillside and basin areas would contribute to the potential for flood hazards by altering existing runoff and absorption rates. Portions of Orange are also susceptible to flood events related to dam failure resulting from a significant earthquake. Areas below the dams have high potential for inundation in the unlikely event of a catastrophic dam failure. The GP PEIR includes Mitigation Measure 5.8-1 and 5.8-2 to reduce risks related to flooding. The OGP also includes policies and actions that target flood risks, such as ensuring that new development would follow the latest building and fire codes.

The western portion of the planning area bounded by the Santa Ana River and the City boundary are also located within 100-year flood areas. Additionally, backwater into Santiago Creek, Limestone Creek, and immediately adjacent to Santiago Reservoir tributary drainage are classified as 100-year storm event areas due to their water surface elevations. Development associated with the OGP implementation in the hillside and basin areas would contribute to the potential for flood hazards by altering existing runoff and absorption rates. This is a potentially significant impact. Portions of Orange are also susceptible to flood events related to dam failure resulting from a significant earthquake. The Villa Park Dam and Santiago Dam are located along Santiago Creek in the foothills of East Orange. Peters Canyon Dam is located within Peters Canyon about 2 miles west of Irvine Lake. The land use focus areas, where the majority of growth would occur under the OGP, are not located in the vicinity of the dams. However, areas below (downstream from) the dams, including large areas within the City of Orange and some of the focus areas, have high potential for inundation in the unlikely event of catastrophic dam failure. This is a potentially significant impact.

The OGP requires that appropriate flood control measures be implemented along Santiago Creek and throughout the planning area to reduce the risks from localized flooding. Additional flood prevention methods such as provision of detention basins and on-site storm water drainage would be required of developers to reduce runoff into the City's drainage facilities and to provide adequate drainage for new developments.

With adherence to and implementation of the proposed regulations and policies and implementation of Mitigation Measures 5.8-1 and 5.8-2, exposure of people and structures to significant risks, such as downstream flooding, would be reduced

to less than significant. Individual development projects would be required to undergo project specific environmental review. If project-level significant impacts are identified, specific Mitigation Measures would be required under CEQA.

### *Impacts Associated with the Proposed Project (d)*

**No New Impacts.** The built environment surrounding the Project Site consists of residential, Church use, and commercial service uses. The Project Site is relatively flat and is not located within or immediately adjacent to any hillside areas. The Project Site is also not located within a floodplain. The Proposed Project would be subject to the standards and requirements set forth in the 2022 California Fire Code and 2022 CBC. Therefore, potential impacts associated with the exposure of 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 would be less than significant, and no mitigation would be required.

### *Conclusion*

Potential impacts identified for the Proposed Project would not be greater than what were identified in the GP PEIR; therefore, the Proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified impacts. Additionally, no new information of substantial importance that was not known and could not have been known at the time the GP PEIR was certified is available that would change the prior finding of no impact. With regards to the issue area of Utilities and Service Systems, the following findings can be made:

1. No peculiar impacts to the Project or its site have been identified.
2. There are no potentially significant off-site and/or cumulative impacts which were not discussed by the GP PEIR.
3. No substantial new information has been identified which results in an impact which is more severe than anticipated by the GP PEIR.
4. No new Mitigation Measures would be required because Project-specific impacts would be less than significant. Feasible Mitigation Measures and uniformly applied development policies and standards contained within the GP PEIR apply to the Project.

## 5. LIST OF PREPARERS

**Sagecrest Planning + Environmental**
Lindsay Ortega, AICP, Vice President
David Blumenthal, AICP, Principal
Jackie Tran, Project Manager
Kaden Likins, Assistant Planner
Emily Tragos, Operations Manager

**Subconsultants**
Katherine Wilson, MS, Ganddini Group, Inc.
Catherine Howe, MS, Ganddini Group, Inc.
Bryan Crawford, Ganddini Group, Inc.
Giancarlo Ganddini, PE, PTP, Ganddini Group, Inc.
Roma Stormberg, INCE, MS, Ganddini Group, Inc.
David E. Albus, Albus & Associates, Inc.
Tu Trinh, RCE, Hunsaker & Associates, Inc.

***City Staff***

***Planning Division***
Michael O'Toole, Assistant Planner

***Public Works Engineering***

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***Public Works Traffic***

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## 6. REFERENCES

The following additional reports and/or studies are applicable to development of the Project Site and are hereby incorporated by reference:

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# Appendix A

*Rancho Ridge Infill Project Air Quality, Global Climate Change, and Energy Impact Study*

*Ganddini Group, Inc.*

*March 31, 2023*

# RANCHO RIDGE INFILL PROJECT AIR QUALITY, GLOBAL CLIMATE CHANGE, AND ENERGY IMPACT ANALYSIS

City of Orange

March 31, 2023

Traffic Engineering ● Transportation Planning ● Parking ● Noise & Vibration
Air Quality ● Global Climate Change ● Health Risk Assessment

# RANCHO RIDGE INFILL PROJECT AIR QUALITY, GLOBAL CLIMATE CHANGE, AND ENERGY IMPACT ANALYSIS

City of Orange

March 31, 2023

*prepared by*
Katie Wilson, MS
Catherine Howe, MS

**GANDDINI GROUP INC.**
555 Park Center Drive, Suite 225
Santa Ana, CA 92705
(714) 795-3100 | ganddini.com

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# TABLE OF CONTENTS


**EXECUTIVE SUMMARY ..... IV**

**1. INTRODUCTION ..... 1**

Purpose and Objectives ..... 1
Project Location ..... 1
Project Description ..... 1
Phasing and Timing ..... 1
Sensitive Receptors in Project Vicinity ..... 2

**2. AIR QUALITY ANALYSIS ..... 5**

Existing Air Quality Conditions ..... 5
Local Air Quality ..... 5
Pollutants ..... 8
Other Pollutants of Concern ..... 10
Regulatory Setting ..... 10
Federal – United States Environmental Protection Agency ..... 11
State – California Air Resources Board ..... 11
Regional ..... 12
Air Quality Guidance Documents ..... 16
Local – City of Orange ..... 17
Monitored Air Quality ..... 21
Ozone ..... 21
Carbon Monoxide ..... 21
Nitrogen Dioxide ..... 21
Particulate Matter ..... 21
Air Quality Standards ..... 24
Significance Thresholds ..... 24
Regional Air Quality ..... 25
Local Air Quality ..... 25
Toxic Air Contaminants ..... 25
Odor Impacts ..... 26
Short-Term Construction Emissions ..... 28
Methodology ..... 28
Construction-Related Regional Impacts ..... 29
Construction-Related Local Impacts ..... 29
Construction-Related Health Impacts ..... 30
Construction-Related Toxic Air Contaminant Impacts ..... 30
Construction-Related Odor Impacts ..... 31
Long-Term Operational Emissions ..... 35
Operations-Related Regional Air Quality Impacts ..... 35
Operations-Related Local Air Quality Impacts ..... 36
Operations-Related Health Impacts ..... 37
Operations-Related Odor Impacts ..... 37
Cumulative Air Quality Impacts ..... 39
Project Specific Impacts ..... 39
Air Quality Compliance ..... 39

**3. GLOBAL CLIMATE CHANGE ANALYSIS ..... 42**

Existing Greenhouse Gas Environment ..... 42
Water Vapor ..... 42
Carbon Dioxide ($CO_2$) ..... 42

Methane ($CH_4$) ..... 43
Nitrous Oxide ($N_2O$) ..... 43
Chlorofluorocarbons (CFC) ..... 43
Hydrofluorocarbons (HFC) ..... 43
Perfluorocarbons (PFC) ..... 43
Sulfur Hexafluoride ($SF_6$) ..... 44
Aerosols ..... 44
Global Warming Potential ..... 44
Greenhouse Gas Standards and Regulation ..... 46
International ..... 46
Federal ..... 46
State of California ..... 48
Regional – South Coast Air Quality Management District ..... 60
Local – City of Orange ..... 62
Significance Thresholds ..... 63
Appendix G of State CEQA Guidelines ..... 63
Thresholds of Significance for this Project ..... 63
Methodology ..... 63
Project Greenhouse Gas Emissions ..... 64
Consistency With Applicable Greenhouse Gas Reduction Plans and Policies ..... 66
Cumulative Greenhouse Gas Impacts ..... 70

**4. ENERGY ANALYSIS ..... 71**

Existing Conditions ..... 71
Overview ..... 71
Electricity ..... 72
Natural Gas ..... 72
Transportation Energy Resources ..... 73
Regulatory Background ..... 73
Federal Regulations ..... 73
State Regulations ..... 74
Project Energy Demands and Energy Efficiency Measures ..... 80
Evaluation Criteria ..... 80
Methodology ..... 80
Construction Energy Demands ..... 80
Operational Energy Demands ..... 82
Renewable Energy and Energy Efficiency Plan Consistency ..... 83
Conclusions ..... 84

**5. EMISSIONS REDUCTION MEASURES ..... 94**

Construction Measures ..... 94
Operational Measures ..... 94

**6. REFERENCES ..... 95**

**Appendices**

Appendix A Glossary

Appendix B CalEEMod Model Emissions Printouts and EMFAC Data

## List of Tables


Table 1. Local Monthly Climate Data ..... 7
Table 2. State and Federal Criteria Pollutant Standards ..... 19
Table 3. South Coast Air Basin Attainment Status ..... 20
Table 4. Air Quality Monitoring Summary ..... 23
Table 5. SCAQMD Air Quality Significance Thresholds ..... 27
Table 6. Construction-Related Regional Pollutant Emissions ..... 32
Table 7. Maximum Number of Acres Disturbed Per Day ..... 33
Table 8. Local Construction Emissions at the Nearest Receptors ..... 34
Table 9. Regional Operational Pollutant Emissions ..... 38
Table 10. Global Warming Potentials and Atmospheric Lifetimes ..... 45
Table 11. Project-Related Greenhouse Gas Emissions ..... 65
Table 12. Project Consistency with CARB Scoping Plan Policies and Measures ..... 68
Table 13. Total Electricity System Power (California 2021) ..... 85
Table 14. SCE 2021 Power Content Mix ..... 86
Table 15. Project Construction Power Cost and Electricity Usage ..... 87
Table 16. Construction Equipment Fuel Consumption Estimates ..... 88
Table 17. Construction Worker Fuel Consumption Estimates ..... 89
Table 18. Construction Vendor Fuel Consumption Estimates (MHD & HHD Trucks) ..... 90
Table 19. Construction Hauling Fuel Consumption Estimates (HHD Trucks) ..... 91
Table 20. Estimated Vehicle Operations Fuel Consumption ..... 92
Table 21. Project Annual Operational Energy Demand Summary ..... 93


## List of Figures


Figure 1. Project Location Map ..... 3
Figure 2. Site Plan ..... 4

# EXECUTIVE SUMMARY

The purpose of this air quality, global climate change, and energy impact analysis is to provide an assessment of the impacts resulting from development of the proposed Rancho Ridge Infill project and to identify measures that may be necessary to reduce potentially significant impacts.

*Construction-Source Emissions*

Project construction-source emissions would not exceed applicable regional thresholds of significance established by the South Coast Air Quality Management District (SCAQMD). For localized emissions, the project will not exceed applicable Localized Significance Thresholds (LSTs) established by the SCAQMD.

Project construction-source emissions would not conflict with the Basin Air Quality Management Plan (AQMP). As discussed herein, the project will comply with all applicable SCAQMD construction-source emission reduction rules and guidelines. Project construction source emissions would not cause or substantively contribute to violation of the California Ambient Air Quality Standards (CAAQS) or National Ambient Air Quality Standards (NAAQS).

Established requirements addressing construction equipment operations, and construction material use, storage, and disposal requirements act to minimize odor impacts that may result from construction activities. Moreover, construction-source odor emissions would be temporary, short-term, and intermittent in nature and would not result in persistent impacts that would affect substantial numbers of people. Potential construction-source odor impacts are therefore considered less than significant.

*Operational-Source Emissions*

Project operational-sourced emissions would not exceed applicable regional thresholds of significance established by the SCAQMD. Project operational-source emissions would not result in or cause a significant localized air quality or toxic air contaminant (TAC) impacts as discussed in the Operations-Related Local Air Quality Impacts section of this report. Additionally, project-related trips will not cause or result in CO concentrations exceeding applicable state and/or federal standards (CO "hotspots). Project operational-source emissions would therefore not adversely affect sensitive receptors within the vicinity of the project.

Project operational-source emissions would not conflict with the Basin Air Quality Management Plan (AQMP). The project's emissions meet SCAQMD regional thresholds and will not result in a significant cumulative impact. The project does not propose any such uses or activities that would result in potentially significant operational-source odor impacts. Potential operational-source odor impacts are therefore considered less than significant.

*Greenhouse Gases*

Project-related greenhouse gas (GHG) emissions would not exceed the SCAQMD draft screening threshold of 3,000 $MTCO_2e$ per year for all land uses.

Furthermore, the project would not conflict with the goals of AB-32, SB-32, CARB Scoping Plan; therefore, the project would not conflict with an applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases and impacts are considered to be less than significant.

*Energy*

For new development such as that proposed by the Rancho Ridge Infill project, compliance with California Building Standards Code Title 24 energy efficiency requirements (CALGreen), are considered demonstrable evidence of efficient use of energy. As discussed below, the project would provide for, and promote, energy

efficiencies required under other applicable federal and State of California standards and regulations, and in so doing would meet or exceed all California Building Standards Code Title 24 standards. Moreover, energy consumed by the project's operation is calculated to be comparable to, or less than, energy consumed by other residential 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. Impacts are considered to be less than significant.

# 1. INTRODUCTION

This section describes the purpose of this air quality, global climate change, and energy impact analysis, project location, proposed development, and study area.

Figure 1 shows the project location map and Figure 2 illustrates the project site plan.

### PURPOSE AND OBJECTIVES

This study was performed to address the possibility of regional/local air quality impacts and global climate change impacts, from project related air emissions. The objectives of the study include:

- Documentation of the atmospheric setting
- Discussion of criteria pollutants and greenhouse gases
- Discussion of the air quality and global climate change regulatory framework
- Analysis of the construction related air quality and greenhouse gas emissions
- Analysis of the operations related air quality and greenhouse gas emissions
- Analysis of the conformity of the proposed project with the SCAQMD AQMP
- Analysis of the project's energy use during construction and operation
- Recommendations for mitigation/emissions reduction measures

The City of Orange is the lead agency for this air quality and greenhouse gas analysis, in accordance with the California Environmental Quality Act authorizing legislation. Although this is a technical report, every effort has been made to write the report clearly and concisely. To assist the reader with terms unique to air quality and global climate change, a definition of terms has been provided in Appendix A.

### PROJECT LOCATION

The approximately 1.93-acre project site is located at 647 North Rancho Santiago Boulevard (APN 379-301-05) in the City of Orange, California. The project site is currently vacant. A vicinity map showing the project location is provided on Figure 1.

### PROJECT DESCRIPTION

The proposed project involves construction of 13 single-family residential dwelling units on 6,000 square foot lots. The proposed square footage of the two-story buildings is between 1,900 and 2,400 square feet. Project access is proposed via one full access driveway at Rancho Santiago Boulevard located at the southwest corner of the project site. The project proposes 62 parking spaces (26 garage parking spaces at 2 parking spaces per unit, 26 driveway parking spaces at 2 parking spaces per unit, and 10 guest parking spaces). Figure 2 illustrates the proposed site plan.

### PHASING AND TIMING

The proposed project is anticipated to be operational in 2026. The project is anticipated to be built in one phase with project construction to start no sooner than the beginning of September 2024, and taking approximately two years to complete. Even if construction was to occur any time after the respective dates, the analysis represents "worst-case" since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.[1]

[1] As shown in the California Emissions Estimator Model (CalEEMod) User's Guide Version 2020.4.0, Section 4.3.2 "OFFROAD Equipment" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

## Sensitive Receptors in Project Vicinity

Those who are sensitive to air pollution include children, the elderly, and persons with preexisting respiratory or cardiovascular illness. For purposes of CEQA, the SCAQMD considers a sensitive receptor to be a location where a sensitive individual could remain for 24 hours, such as residences, hospitals, or convalescent facilities (South Coast Air Quality Management District 2008). Commercial and industrial facilities are not included in the definition because employees do not typically remain on-site for 24 hours.

The nearest sensitive receptors to the project site are the single-family residential uses located adjacent to the east and south and approximately 60 feet (~18 meters) to the west (across Rancho Santiago Boulevard) of the project site. In addition, Enderby Field/Santiago Charter Middle School is located approximately 215 feet south of the project site. Other air quality sensitive land uses are located further from the project site and would experience lower impacts.

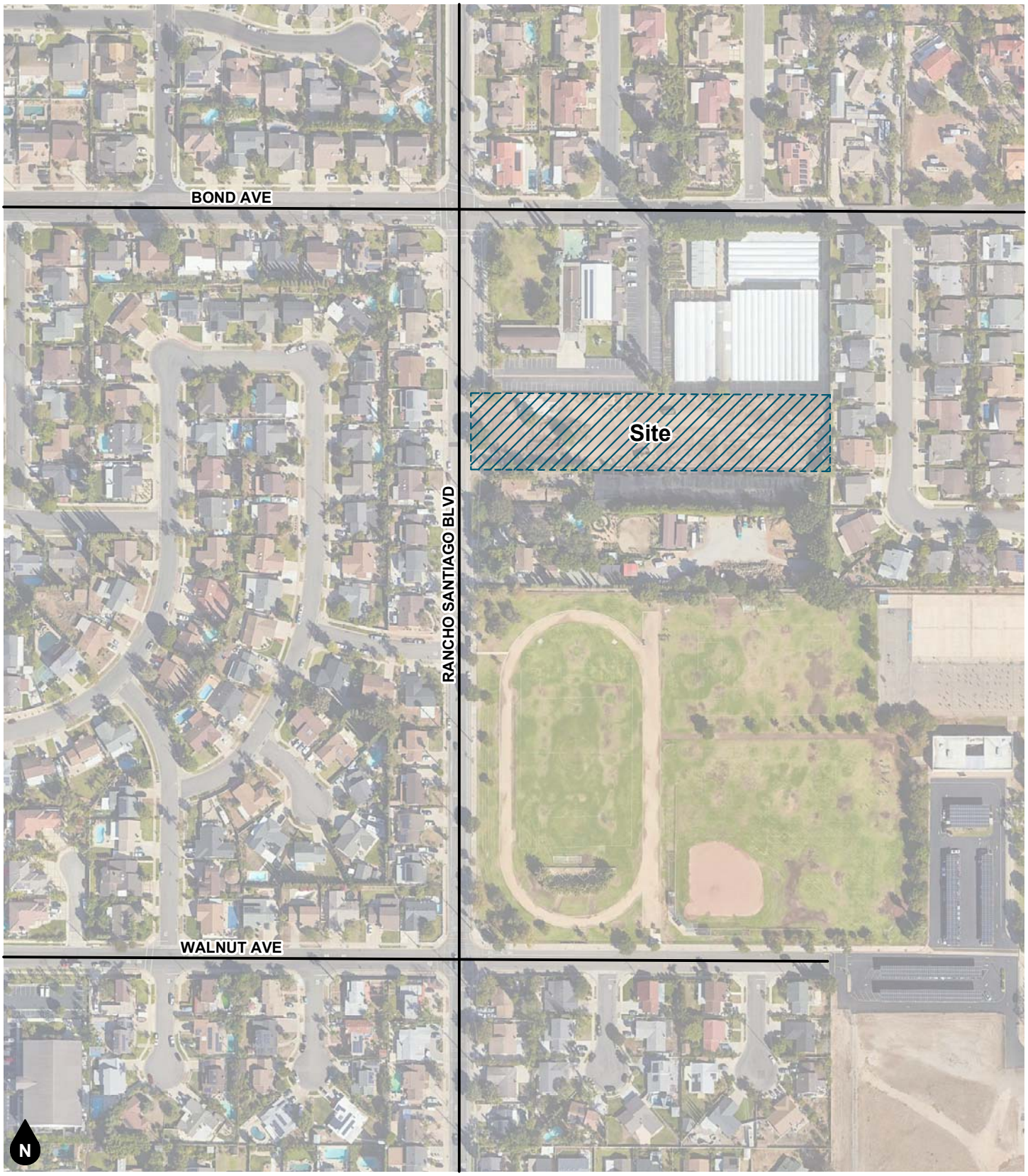



**Figure 1**
**Project Location Map**

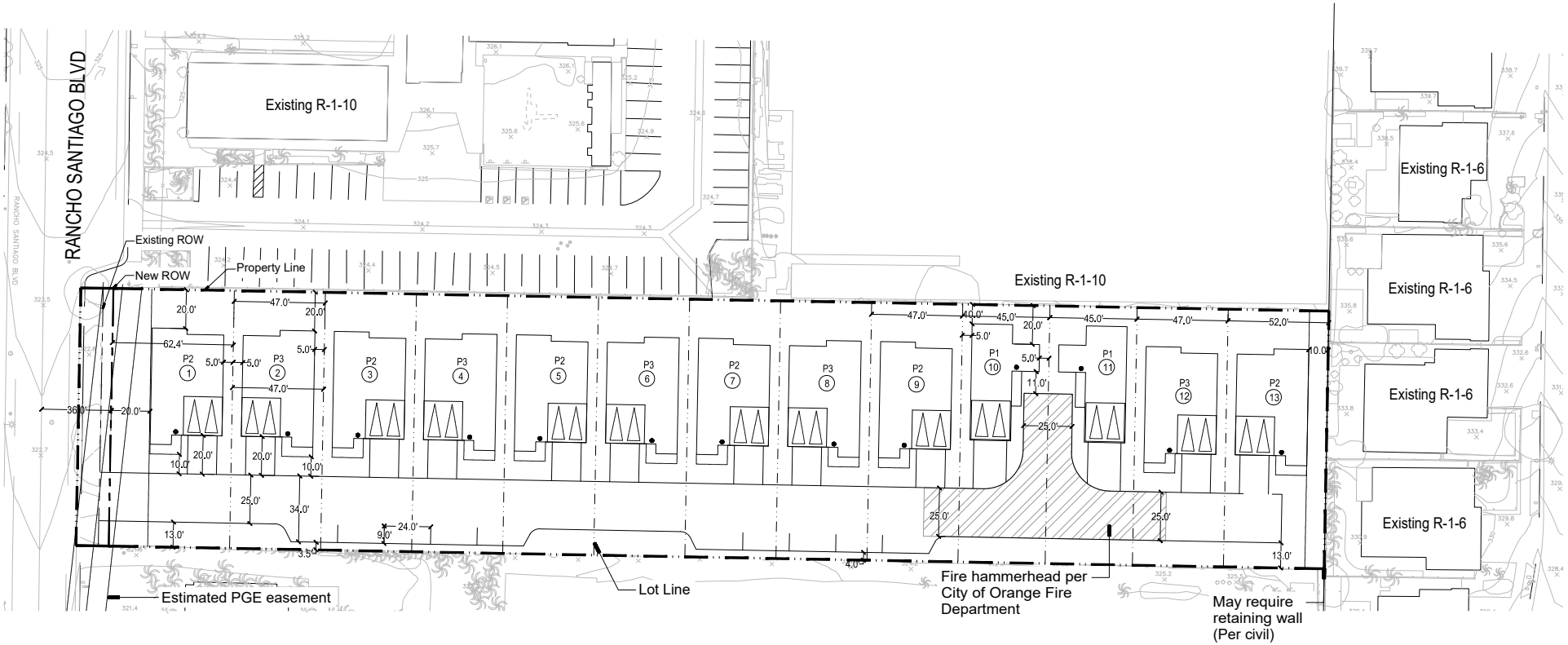



**Figure 2**
**Site Plan**

# 2. AIR QUALITY ANALYSIS

## EXISTING AIR QUALITY CONDITIONS

### Local Air Quality

The proposed project site is located in the northern portion of Orange County, in the City of Orange. The City of Orange is located within the South Coast Air Basin (Basin), which is surrounded by mountains trapping the air and its pollutants in the valleys or basins below. The Basin includes all of Orange County and the non-desert portions of Los Angeles, San Bernardino, and Riverside Counties. Bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east, the Basin is an area of high air pollution potential. The regional climate within the Basin is considered semi-arid and is characterized by warm summers, mild winters, infrequent seasonal rainfall, moderate daytime onshore breezes, and moderate humidity. Air quality within the Basin is influenced by a wide range of emissions sources—such as dense population centers, heavy vehicular traffic, and industry. Climate change within the Basin is influenced by a wide range of emission sources, such as utility usage, heavy vehicular traffic, industry, and meteorology.

The annual average temperature varies throughout the Basin, ranging from the low to mid 60s to over 100 degrees during the summer, measured in Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The City of Orange is located in the Central Orange County portion of the Basin.

The Basin experiences a persistent temperature inversion, which is characterized by increasing temperature with increasing altitude. This inversion limits the vertical dispersion of air contaminants, holding them relatively near the ground. As the sun warms the ground and the lower air layer, the temperature of the lower air layer approaches the temperature of the base of the inversion (upper) layer until the inversion layer finally breaks, allowing vertical mixing with the lower layer.

Aside from a persistent temperature inversion, the vertical dispersion of air contaminants in the Basin is also affected by wind conditions. The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. Conversely, on days of no inversion or high wind speeds, ambient air pollutant concentrations are the lowest. During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas in the Basin are transported eastward, predominantly into Riverside and San Bernardino Counties. Santa Ana winds, which are strong and dry north or northeasterly winds that occur during the fall and winter months, disperse air contaminants differently through the Basin, generally resulting in worse air conditions in the inner basin areas. Santa Ana conditions tend to last for several days at a time. Wind speeds in the City of Orange annual average about 11.48 miles per hour (mph) (USA.com 2023).

The majority of annual rainfall in the Basin occurs between December and March. Summer rainfall is minimal and generally limited to scattered thundershowers in coastal regions. The annual average total of rainfall in the City is approximately 15.92 inches (USA.com 2023).

In the winter, light nocturnal winds result mainly from the drainage of cool air off of the mountains toward the valley floor while the air aloft over the valley remains warm. This forms a type of inversion known as a radiation inversion. Such winds are characterized by stagnation and poor local mixing and trap pollutants such as automobile exhaust near their source. While these inversions may lead to air pollution "hot spots" in heavily developed coastal areas of the basin, there is not enough traffic in inland valleys to cause any winter air pollution problems. Despite light wind conditions, especially at night and in the early morning, winter is generally a period of good air quality in the project vicinity.

The temperature and precipitation levels for the City of Anaheim, the closest monitoring station to the project site, are shown below in Table 1. Table 1 shows that August is typically the warmest month and December is

typically the coolest month. Rainfall in the project area varies considerably in both time and space. Almost all the annual rainfall comes from the fringes of mid-latitude storms from late November to early April, with summers being almost completely dry.

**Table 1**
**Local Monthly Climate Data**

| Descriptor | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Avg. Max. Temperature | 69.7 | 69.9 | 72.2 | 74.6 | 77.1 | 80.2 | 85.2 | 86.9 | 85.8 | 81.3 | 73.0 | 70.2 |
| Avg. Min. Temperature | 47.3 | 48.4 | 50.4 | 52.9 | 57.3 | 60.6 | 64.0 | 64.4 | 62.2 | 57.8 | 50.2 | 47.4 |
| Avg. Total Precipitation (in.) | 3.39 | 3.34 | 2.07 | 0.82 | 0.35 | 0.16 | 0.03 | 0.00 | 0.09 | 0.66 | 1.09 | 2.26 |

Source: https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca0192
Data from the Anaheim, CA station (040192).

## Pollutants

Pollutants are generally classified as either criteria pollutants or non-criteria pollutants. Federal ambient air quality standards have been established for criteria pollutants, whereas no ambient standards have been established for non-criteria pollutants. For some criteria pollutants, separate standards have been set for different periods. Most standards have been set to protect public health. For some pollutants, standards have been based on other values (such as protection of crops, protection of materials, or avoidance of nuisance conditions). A summary of federal and state ambient air quality standards is provided in the Regulatory Framework section.

*Criteria Pollutants*

The criteria pollutants consist of: ozone, nitrogen dioxide, carbon monoxide, sulfur dioxide, lead, and particulate matter. These pollutants can harm your health and the environment, and cause property damage. The Environmental Protection Agency (EPA) calls these pollutants "criteria" air pollutants because it regulates them by developing human health-based and/or environmentally-based criteria for setting permissible levels. The following provides descriptions of each of the criteria pollutants.

*Nitrogen Dioxides*

Nitrogen Oxides (NOx) is the generic term for a group of highly reactive gases which contain nitrogen and oxygen. While most NOx are colorless and odorless, concentrations of nitrogen dioxide ($NO_2$) can often be seen as a reddish-brown layer over many urban areas. NOx form when fuel is burned at high temperatures, as in a combustion process. The primary manmade sources of NOx are motor vehicles, electric utilities, and other industrial, commercial, and residential sources that burn fuel. NOx reacts with other pollutants to form, ground-level ozone, nitrate particles, acid aerosols, as well as $NO_2$, which cause respiratory problems. NOx and the pollutants formed from NOx can be transported over long distances, following the patterns of prevailing winds. Therefore, controlling NOx is often most effective if done from a regional perspective, rather than focusing on the nearest sources.

*Ozone*

Ozone ($O_3$) is not usually emitted directly into the air but at ground-level is created by a chemical reaction between NOx and volatile organic compounds (VOC) in the presence of sunlight. Motor vehicle exhaust, industrial emissions, gasoline vapors, chemical solvents as well as natural sources emit NOx and VOC that help form ozone. Ground-level ozone is the primary constituent of smog. Sunlight and hot weather cause ground-level ozone to form with the greatest concentrations usually occurring downwind from urban areas. Ozone is subsequently considered a regional pollutant. Ground-level ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and can cause substantial damage to vegetation and other materials. Because NOx and VOC are ozone precursors, the health effects associated with ozone are also indirect health effects associated with significant levels of NOx and VOC emissions.

*Carbon Monoxide*

Carbon monoxide (CO) is a colorless, odorless gas that is formed when carbon in fuel is not burned completely. It is a component of motor vehicle exhaust, which contributes about 56 percent of all CO emissions nationwide. In cities, 85 to 95 percent of all CO emissions may come from motor vehicle exhaust. Other sources of CO emissions include industrial processes (such as metals processing and chemical manufacturing), residential wood burning, and natural sources such as forest fires. Woodstoves, gas stoves, cigarette smoke, and unvented gas and kerosene space heaters are indoor sources of CO. The highest levels of CO in the outside air typically occur during the colder months of the year when inversion conditions are more frequent. The air pollution becomes trapped near the ground beneath a layer of warm air. CO is described as having only a local influence because it dissipates quickly. Since CO concentrations are strongly associated with motor vehicle emissions, high CO concentrations generally occur in the immediate vicinity of roadways with high

traffic volumes and traffic congestion, active parking lots, and in automobile tunnels. Areas adjacent to heavily traveled and congested intersections are particularly susceptible to high CO concentrations.

CO is a public health concern because it combines readily with hemoglobin and thus reduces the amount of oxygen transported in the bloodstream. The health threat from lower levels of CO is most serious for those who suffer from heart disease such as angina, clogged arteries, or congestive heart failure. For a person with heart disease, a single exposure to CO at low levels may cause chest pain and reduce that person's ability to exercise; repeated exposures may contribute to other cardiovascular effects. High levels of CO can affect even healthy people. People who breathe high levels of CO can develop vision problems, reduced ability to work or learn, reduced manual dexterity, and difficulty performing complex tasks. At extremely high levels, CO is poisonous and can cause death.

*Sulfur Dioxide*

Sulfur Oxide (SOx) gases (including sulfur dioxide [SO2]) are formed when fuel containing sulfur, such as coal and oil is burned, and from the refining of gasoline. SOx dissolve easily in water vapor to form acid and interacts with other gases and particles in the air to form sulfates and other products that can be harmful to people and the environment.

*Lead*

Lead (Pb) is a metal found naturally in the environment as well as manufactured products. The major sources of lead emissions have historically been motor vehicles and industrial sources. Due to the phase out of leaded gasoline, metal processing is now the primary source of lead emissions to the air. High levels of lead in the air are typically only found near lead smelters, waste incinerators, utilities, and lead-acid battery manufacturers. Exposure of fetuses, infants and children to low levels of lead can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased lead levels are associated with increased blood pressure.

*Particulate Matter*

Particulate matter (PM) is the term for a mixture of solid particles and liquid droplets found in the air. Particulate matter is made up of a number of components including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles. The size of particles is directly linked to their potential for causing health problems. Particles that are less than 10 micrometers in diameter (PM10) are the particles that generally pass through the throat and nose and enter the lungs. Once inhaled, these particles can affect the heart and lungs and cause serious health effects. Particles that are less than 2.5 micrometers in diameter (PM2.5) have been designated as a subset of PM10 due to their increased negative health impacts and its ability to remain suspended in the air longer and travel further.

*Reactive Organic Gases (ROG) and Volatile Organic Compounds (VOC)*

Although not a criteria pollutant, reactive organic gases (ROGs), or volatile organic compounds (VOCs), are defined as any compound of carbon—excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate—that participates in atmospheric photochemical reactions. Although there are slight differences in the definition of ROGs and VOCs, the two terms are often used interchangeably. Indoor sources of VOCs include paints, solvents, aerosol sprays, cleansers, tobacco smoke, etc. Outdoor sources of VOCs are from combustion and fuel evaporation. A reduction in VOC emissions reduces certain chemical reactions that contribute to the formulation of ozone. VOCs are transformed into organic aerosols in the atmosphere, which contribute to higher PM10 and lower visibility.

## Other Pollutants of Concern

*Toxic Air Contaminants*

In addition to the above-listed criteria pollutants, toxic air contaminants (TACs) are another group of pollutants of concern. Sources of toxic air contaminants include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Cars and trucks release at least forty different toxic air contaminants. The most important of these toxic air contaminants, in terms of health risk, are diesel particulates, benzene, formaldehyde, 1,3-butadiene, and acetaldehyde. Public exposure to toxic air contaminants can result from emissions from normal operations as well as from accidental releases. Health effects of toxic air contaminants include cancer, birth defects, neurological damage, and death.

Toxic air contaminants are less pervasive in the urban atmosphere than criteria air pollutants, however they are linked to short-term (acute) or long-term (chronic or carcinogenic) adverse human health effects. There are hundreds of different types of toxic air contaminants with varying degrees of toxicity. Sources of toxic air contaminants include industrial processes, commercial operations (e.g., gasoline stations and dry cleaners), and motor vehicle exhaust.

According to the 2013 California Almanac of Emissions and Air Quality, the majority of the estimated health risk from toxic air contaminants can be attributed to relatively few compounds, the most important of which is diesel particulate matter (DPM). Diesel particulate matter is a subset of PM2.5 because the size of diesel particles are typically 2.5 microns and smaller. The identification of diesel particulate matter as a toxic air contaminant in 1998 led the California Air Resources Board (CARB) to adopt the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-fueled Engines and Vehicles in September 2000. The plan's goals are a 75-percent reduction in diesel particulate matter by 2010 and an 85-percent reduction by 2020 from the 2000 baseline. Diesel engines emit a complex mixture of air pollutants, composed of gaseous and solid material. The visible emissions in diesel exhaust are known as particulate matter or PM, which includes carbon particles or "soot". Diesel exhaust also contains a variety of harmful gases and over 40 other cancer-causing substances. California's identification of diesel particulate matter as a toxic air contaminant was based on its potential to cause cancer, premature deaths, and other health problems. Exposure to diesel particulate matter is a health hazard, particularly to children whose lungs are still developing and the elderly who may have other serious health problems. Overall, diesel engine emissions are responsible for the majority of California's potential airborne cancer risk from combustion sources.

*Asbestos*

Asbestos is listed as a TAC by the ARB and as a Hazardous Air Pollutant by the EPA. Asbestos occurs naturally in mineral formations and crushing or breaking these rocks, through construction or other means, can release asbestiform fibers into the air. Asbestos emissions can result from the sale or use of asbestos-containing materials, road surfacing with such materials, grading activities, and surface mining. The risk of disease is dependent upon the intensity and duration of exposure. When inhaled, asbestos fibers may remain in the lungs and with time may be linked to such diseases as asbestosis, lung cancer, and mesothelioma. Naturally occurring asbestos is not present in Orange County. The nearest likely locations of naturally occurring asbestos, as identified in the General Location Guide for Ultramafic Rocks in California prepared by the California Division of Mines and Geology, is located at Asbestos Mountain in the San Jacinto Mountains, approximately 78 miles southeast of the project site. Due to the distance to the nearest natural occurrences of asbestos, the project site is not likely to contain asbestos.

## Regulatory Setting

The proposed project is addressed through the efforts of various international, federal, state, regional, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through

legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies responsible for improving the air quality are discussed below.

**Federal – United States Environmental Protection Agency**

The United States Environmental Protection Agency (EPA) is responsible for setting and enforcing the National Ambient Air Quality Standards (NAAQS) for atmospheric pollutants. It regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain locomotives. The National Ambient Air Quality Standards (NAAQS) pollutants were identified using medical evidence and are shown below in Table 2.

The EPA and the California Air Resource Board (CARB) designate air basins where ambient air quality standards are exceeded as "nonattainment" areas. If standards are met, the area is designated as an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered "unclassified." National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards. Each standard has a different definition, or 'form' of what constitutes attainment, based on specific air quality statistics. For example, the Federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring values exceeds the threshold per year. In contrast, the Federal annual PM2.5 standard is met if the three-year average of the annual average PM2.5 concentration is less than or equal to the standard. Attainment status is shown in Table 3.

As part of its enforcement responsibilities, the EPA requires each state with federal nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the national standards. The State Implementation Plan (SIP) must integrate federal, state, and local components and regulations to identify specific measures to reduce pollution, using a combination of performance standards and market-based programs within the timeframe identified in the State Implementation Plan (SIP).

As indicated below in Table 3, the Basin has been designated by the EPA as a non-attainment area for ozone ($O_3$) and suspended particulates (PM2.5). Currently, the Basin is in attainment with the ambient air quality standards for carbon monoxide (CO), lead, sulfur dioxide ($SO_2$), suspended particulate matter (PM-10), and nitrogen dioxide ($NO_2$).

**State – California Air Resources Board**

The California Air Resources Board (CARB), which is a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and state air pollution control programs within California. In this capacity, the CARB conducts research, sets the California Ambient Air Quality Standards (CAAQS), compiles emission inventories, develops suggested control measures, provides oversight of local programs, and prepares the State Implementation Plan (SIP). The California Ambient Air Quality Standards (CAAQS) for criteria pollutants are shown in Table 2. In addition, the CARB establishes emission standards for motor vehicles sold in California, consumer products (e.g., hairspray, aerosol paints, and barbeque lighter fluid), and various types of commercial equipment. Furthermore, the motor vehicle emission standards established by CARB include compliance with the Safer Affordable Fuel-Efficient Vehicles (SAFE) Rule, issued by NHTSA and EPA in March 2020 (published on April 30, 2020 and effective after June 29, 2020). The SAFE Rule sets fuel economy and carbon dioxide standards that increase 1.5 percent in stringency each year from model years 2021 through 2026, and apply to both passenger cars and light trucks. CARB. It also sets fuel specifications to further reduce vehicular emissions.

The South Coast Air Basin has been designated by the CARB as a nonattainment area for ozone, PM10 and PM2.5. Currently, the South Coast Air Basin is in attainment with the ambient air quality standards for CO, lead, SO2, NO2, and sulfates and is unclassified for visibility reducing particles and Hydrogen Sulfide.

On June 20, 2002, the CARB revised the PM10 annual average standard to 20 µg/m3 and established an annual average standard for PM2.5 of 12 µg/m3. These standards were approved by the Office of Administrative Law in June 2003 and are now effective. On September 27, 2007 CARB approved the South Coast Air Basin and the Coachella Valley 2007 Air Quality Management Plan for Attaining the Federal 8-hour Ozone and PM2.5 Standards. The plan projected attainment for the 8-hour Ozone standard by 2024 and the PM2.5 standard by 2015.

On December 12, 2008 the CARB adopted Resolution 08-43, which limits NOx, PM10 and PM2.5 emissions from on-road diesel truck fleets that operate in California. On October 12, 2009 Executive Order R-09-010 was adopted that codified Resolution 08-43 into Section 2025, Title 13 of the California Code of Regulations. This regulation requires that by the year 2023 all commercial diesel trucks that operate in California shall meet model year 2010 (Tier 4) or latter emission standards. In the interim period, this regulation provides annual interim targets for fleet owners to meet. This regulation also provides a few exemptions including a onetime per year 3-day pass for trucks registered outside of California.

The CARB is also responsible for regulations pertaining to toxic air contaminants. The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, 1987, Connelly) was enacted in 1987 as a means to establish a formal air toxics emission inventory risk quantification program. AB 2588, as amended, establishes a process that requires stationary sources to report the type and quantities of certain substances their facilities routinely release into the South Coast Air Basin. The data is ranked by high, intermediate, and low categories, which are determined by: the potency, toxicity, quantity, volume, and proximity of the facility to nearby receptors.

*AB 617 Nonvehicular air pollution: criteria air pollutants and toxic air contaminants*

This bill requires the state board to develop a uniform statewide system of annual reporting of emissions of criteria air pollutants and toxic air contaminants for use by certain categories of stationary sources. The bill requires those stationary sources to report their annual emissions of criteria air pollutants and toxic air contaminants, as specified. This bill required the state board, by October 1, 2018, to prepare a monitoring plan regarding technologies for monitoring criteria air pollutants and toxic air contaminants and the need for and benefits of additional community air monitoring systems, as defined. The bill requires the state board to select, based on the monitoring plan, the highest priority locations in the state for the deployment of community air monitoring systems. The bill requires an air district containing a selected location, by July 1, 2019, to deploy a system in the selected location. The bill would authorize the air district to require a stationary source that emits air pollutants in, or that materially affect, the selected location to deploy a fence-line monitoring system, as defined, or other specified real-time, on-site monitoring. The bill authorizes the state board, by January 1, 2020, and annually thereafter, to select additional locations for the deployment of the systems. The bill would require air districts that have deployed a system to provide to the state board air quality data produced by the system. By increasing the duties of air districts, this bill would impose a state-mandated local program. The bill requires the state board to publish the data on its Internet Web site.

**Regional**

The SCAQMD is the agency principally responsible for comprehensive air pollution control in the South Coast Air Basin. To that end, as a regional agency, the SCAQMD works directly with the Southern California Association of Governments (SCAG), county transportation commissions, and local governments and cooperates actively with all federal and state agencies.

South Coast Air Quality Management District

The SCAQMD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emission sources, and enforces such measures through educational programs or fines, when necessary. The SCAQMD is directly responsible for reducing emissions from stationary, mobile, and indirect sources. It has responded to this requirement by preparing a sequence of AQMPs.

*Air Quality Management Plan*

On June 30, 2016, the SCAQMD released its Draft 2016 AQMP. The 2016 AQMP is a regional blueprint for achieving the federal air quality standards and healthful air. The 2016 AQMP includes both stationary and mobile source strategies to ensure that rapidly approaching attainment deadlines are met, that public health is protected to the maximum extent feasible, and that the region is not faced with burdensome sanctions if the Plan is not approved or if the NAAQS are not met on time. As with every AQMP, a comprehensive analysis of emissions, meteorology, atmospheric chemistry, regional growth projections, and the impact of existing control measures is updated with the latest data and methods. The most significant air quality challenge in the Basin is to reduce nitrogen oxide (NOx) emissions sufficiently to meet the upcoming ozone standard deadlines. On March 23, 2017 the CARB approved the 2016 AQMP. The primary goal of this Air Quality Management Plan is to meet clean air standards and protect public health, including ensuring benefits to environmental justice and disadvantaged communities. Now that the Plan has been approved by the CARB, it has been forwarded to the U.S. EPA for its review. The Plan was approved by the EPA on June 15, 2017.

In May 2022, the SCAQMD completed the 2022 Draft AQMP. The 2022 Draft AQMP is focused on attaining the 2015 8-hour ozone standard (70 ppb) for the South Coast Air Basin and Coachella Valley. The Draft 2022 AQMP builds upon measures already in place from previous AQMPs. It also includes a variety of additional strategies such as regulation, accelerated deployment of available cleaner technologies (e.g., zero emission technologies, when cost-effective and feasible, and low NOx technologies in other applications), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other CAA measures to achieve the 2015 8-hour ozone standard. The 2022 AQMP was adopted December 2, 2022, by SCAQMD Governing Board. The 2022 AQMP was approved and adopted by CARB on January 26, 2023. The 2022 AQMP strategy includes the following:[2]

- Wide adoption of zero emissions technologies anywhere available.
- Low NOx technologies where zero emissions aren't feasible.
- Federal Action.
- Zero emissions technologies for residential and industrial sources such as water and space heaters in buildings and homes regionwide.
- Incentive funding in environmental justice areas.
- Prioritize benefits on the most disadvantaged communities.

*SCAQMD Rules and Regulations*

During construction and operation, the project must comply with applicable rules and regulations. The following are rules that the project may be required to comply with, either directly, or indirectly:

*SCAQMD Rule 402*

Prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

[2] SCAQMD 2022 AQMP Infographic. http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/2022-aqmp-infographic

*SCAQMD Rule 403*

Governs emissions of fugitive dust during construction and operation activities. Compliance with this rule is achieved through application of standard Best Management Practices, such as application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph, and establishing a permanent ground cover on finished sites.

Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Applicable dust suppression techniques from Rule 403 are summarized below. Implementation of these dust suppression techniques can reduce the fugitive dust generation (and thus the $PM_{10}$ component). Compliance with these rules would reduce impacts on nearby sensitive receptors. Rule 403 measures may include but are not limited to the following:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Water active sites at least three times daily. (Locations where grading is to occur will be thoroughly watered prior to earthmoving.)
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 0.6 meters (2 feet) of freeboard (vertical space between the top of the load and top of the trailer) in accordance with the requirements of California Vehicle Code section 23114.
- Reduce traffic speeds on all unpaved roads to 15 miles per hour (mph) or less.
- Suspension of all grading activities when wind speeds (including instantaneous wind gusts) exceed 25 mph.
- Bumper strips or similar best management practices shall be provided where vehicles enter and exit the construction site onto paved roads or wash off trucks and any equipment leaving the site each trip.
- Replanting disturbed areas as soon as practical.
- During all construction activities, construction contractors shall sweep on-site and off-site streets if silt is carried to adjacent public thoroughfares, to reduce the amount of particulate matter on public streets. All sweepers shall be compliant with SCAQMD Rule 1186.1, Less Polluting Sweepers.

*SCAQMD Rule 445*

Prohibits permanently installed wood burning devices into any new development. A wood burning device means any fireplace, wood burning heater, or pellet-fueled wood heater, or any similarly enclosed, permanently installed, indoor or outdoor device burning any solid fuel for aesthetic or space-heating purposes, which has a heat input of less than one million British thermal units per hour.

*SCAQMD Rule 481*

Applies to all spray painting and spray coating operations and equipment. The rule states that a person shall not use or operate any spray painting or spray coating equipment unless one of the following conditions is met:

(1) The spray coating equipment is operated inside a control enclosure, which is approved by the Executive Officer. Any control enclosure for which an application for permit for new construction, alteration, or change of ownership or location is submitted after the date of adoption of this rule shall be exhausted

only through filters at a design face velocity not less than 100 feet per minute nor greater than 300 feet per minute, or through a water wash system designed to be equally effective for the purpose of air pollution control.

(2) Coatings are applied with high-volume low-pressure, electrostatic and/or airless spray equipment.

(3) An alternative method of coating application or control is used which has effectiveness equal to or greater than the equipment specified in the rule.

*SCAQMD Rule 1108*

Governs the sale, use, and manufacturing of asphalt and limits the volatile organic compound (VOC) content in asphalt used in the South Coast Air Basin. This rule would regulate the VOC content of asphalt used during construction. Therefore, all asphalt used during construction of the project must comply with SCAQMD Rule 1108.

*SCAQMD Rule 1113*

Governs the sale, use, and manufacturing of architectural coating and limits the VOC content in paints and paint solvents. This rule regulates the VOC content of paints available during construction. Therefore, all paints and solvents used during construction and operation of the project must comply with SCAQMD Rule 1113.

*SCAQMD Rule 1143*

Governs the manufacture, sale, and use of paint thinners and solvents used in thinning of coating materials, cleaning of coating application equipment, and other solvent cleaning operations by limiting their VOC content. This rule regulates the VOC content of solvents used during construction. Solvents used during the construction phase must comply with this rule.

*SCAQMD Rule 1186*

Limits the presence of fugitive dust on paved and unpaved roads and sets certification protocols and requirements for street sweepers that are under contract to provide sweeping services to any federal, state, county, agency or special district such as water, air, sanitation, transit, or school district.

*SCAQMD Rule 1303*

Governs the permitting of re-located or new major emission sources, requiring Best Available Control Measures and setting significance limits for $PM_{10}$ among other pollutants.

*SCAQMD Rule 1401*

New Source Review of Toxic Air Contaminants, specifies limits for maximum individual cancer risk, cancer burden, and non-cancer acute and chronic hazard index from new permit units, relocations, or modifications to existing permit units, which emit toxic air contaminants.

*SCAQMD Rule 1403*

Asbestos Emissions from Demolition/Renovation Activities, specifies work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials (ACM).

*SCAQMD Rule 2202*

On-Road Motor Vehicle Mitigation Options, is to provide employers with a menu of options to reduce mobile source emissions generated from employee commutes, to comply with federal and state Clean Air Act requirements, Health & Safety Code Section 40458, and Section 182(d)(1)(B) of the federal Clean Air Act. It applies to any employer who employs 250 or more employees on a full or part-time basis at a worksite for a consecutive six-month period calculated as a monthly average.

*SCAQMD Rule 2305*

The Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program aims to reduce nitrogen oxide and diesel emissions associated with warehouses, help meet federal standards and improve public health. The WAIRE Program is an indirect source rule that regulates warehouse facilities to reduce emissions from the goods movement industry. Owners and operators of warehouses that have 100,000 square feet or more of indoor floor space in a single building must comply with the WAIRE Program. WAIRE is a menu-based point system in which warehouse operators are required to earn a specific number of points every year. The yearly number of points required is based on the number of trucks trips made to and from the warehouse each year, with larger trucks such as tractors or tractor-trailers multiplied by 2.5. Warehouse operators may be exempt from parts of the rule if they operate less than 50,000 square feet of warehousing activities, if the number of points required is less than 10, or if the WAIRE menu action chosen under performs due to circumstances beyond the operator's control, such as a manufacturer defect. SCAQMD Rule 316 establishes fees to fund Rule 2305 compliance activities.

**Air Quality Guidance Documents**

*SCAQMD CEQA Handbook*

Although the SCAQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate air quality issues associated with plans and new development projects throughout the South Coast Air Basin. Instead, this is controlled through local jurisdictions in accordance with the California Environmental Quality Act (CEQA). In order to assist local jurisdictions with air quality compliance issues the CEQA Air Quality Handbook (SCAQMD CEQA Handbook) prepared by the SCAQMD (1993) with the most current updates found at http://www.aqmd.gov/ceqa/hdbk.html, was developed in accordance with the projections and programs of the AQMP. The purpose of the SCAQMD CEQA Handbook is to assist Lead Agencies, as well as consultants, project proponents, and other interested parties in evaluating a proposed project's potential air quality impacts. Specifically, the SCAQMD CEQA Handbook explains the procedures that the SCAQMD recommends be followed for the environmental review process required by CEQA. The SCAQMD CEQA Handbook provides direction on how to evaluate potential air quality impacts, how to determine whether these impacts are significant, and how to mitigate these impacts. SCAQMD is in the process of developing an "Air Quality Analysis Guidance Handbook" to replace the CEQA Air Quality Handbook approved by the AQMD Governing Board in 1993. The 1993 CEQA Air Quality Handbook is still available but not online. In addition, there are sections of the 1993 Handbook that are obsolete. In order to assist the CEQA practitioner in conducting an air quality analysis while the new Handbook is being prepared, supplemental information regarding: significance thresholds and analysis, emissions factors, cumulative impacts emissions analysis, and other useful subjects, are available at the SCAQMD website[3]. The SCAQMD CEQA Handbook and supplemental information is used in this analysis.

*Southern California Association of Governments*

The SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino and Imperial Counties and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG is the Federally designated MPO for the majority of the southern

[3] http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook.

California region and is the largest MPO in the nation. With respect to air quality planning, SCAG has prepared the Regional Transportation Plan and Regional Transportation Improvement Plan (RTIP), which addresses regional development and growth forecasts. These plans form the basis for the land use and transportation components of the AQMP, which are utilized in the preparation of air quality forecasts and in the consistency analysis included in the AQMP. The Regional Transportation Plan, Regional Transportation Improvement Plan, and AQMP are based on projections originating within the City and County General Plans.

On April 7, 2016, SCAG's Regional Council adopted the 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy (2016 RTP/SCS or Plan). The Plan is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. The Plan charts a course for closely integrating land use and transportation – so that the region can grow smartly and sustainably. It outlines more than $556.5 billion in transportation system investments through 2040. The Plan was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura. In June 2016, SCAG received its conformity determination from the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) indicating that all air quality conformity requirements for the 2016 RTP/SCS and associated 2015 FTIP Consistency Amendment through Amendment 15-12 have been met.

On May 7, 2020, SCAG's Regional Council adopted Connect SoCal (2020 - 2045 Regional Transportation Plan/Sustainable Communities Strategy) for federal transportation conformity purposes only. In light of the COVID-19 pandemic, the Regional Council will consider approval of Connect SoCal in its entirety and for all other purposes within 120 days from May 7, 2020. Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. Connect SoCal outlines more than $638 billion in transportation system investments through 2045. It was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura.

**Local – City of Orange**

Local jurisdictions, such as the City of Orange, have the authority and responsibility to reduce air pollution through its police power and decision-making authority. Specifically, the City is responsible for the assessment and mitigation of air emissions resulting from its land use decisions. The City is also responsible for the implementation of transportation control measures as outlined in the 2022 AQMP. Examples of such measures include bus turnouts, energy-efficient streetlights, and synchronized traffic signals. In accordance with CEQA requirements and the CEQA review process, the City assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation.

In accordance with the CEQA requirements, the City does not, however, have the expertise to develop plans, programs, procedures, and methodologies to ensure that air quality within the City and region will meet federal and state standards. Instead, the City relies on the expertise of the SCAQMD and utilizes the SCAQMD CEQA Handbook as the guidance document for the environmental review of plans and development proposals within its jurisdiction.

The City of Orange General Plan Natural Resources Element contains the following air quality-related goals and policies that are applicable to the proposed project:

**Goal 2** Protect air, water, and energy resources from pollution and overuse.

*Policies*

*Policy 2.1* Cooperate with the South Coast Air Quality Management District (SCAQMD) and other regional agencies to implement and enforce regional air quality management plans.

*Policy 2.2* Support alternative transportation modes, alternative technologies, and bicycle- and pedestrian-friendly neighborhoods to reduce emissions related to vehicular travel.

*Policy 2.3* Reduce the amount of water used for landscaping through the use of native and drought-tolerant plants, proper soil preparation, and efficient irrigation systems as parks and other City facilities are built or renovated.

*Policy 2.4* Encourage the production, distribution, and use of recycled and reclaimed water for landscaping projects, while maintaining urban runoff water quality objectives.

*Policy 2.5* Continue to work toward local and regional waste-reduction and diversion/ recycling goals and promote public education programs.

*Policy 2.6* Encourage sustainable building and site designs for new construction and renovation projects.

*Policy 2.7* Coordinate with energy suppliers to ensure adequate energy supplies to meet community needs, and to promote energy conservation and public education programs for that purpose.

*Policy 2.8* Encourage development that incorporates pedestrian- and transit-oriented design and landscape elements.

*Policy 2.9* Promote City operations as a model for energy efficiency and green building.

*Policy 2.10* Work toward replacing existing City vehicles with ultra-low or zero emission vehicles. At a minimum, new City vehicles shall be low emission vehicles as defined by the California Air Resources Board, except if certain vehicle types are not available in the marketplace. Public safety vehicles are exempted from this requirement.

**Table 2**
**State and Federal Criteria Pollutant Standards**

| Air Pollutant | Concentration / Averaging Time | | Most Relevant Effects |
|---|---|---|---|
| | California Standards | Federal Primary Standards | |
| Ozone ($O_3$) | 0.09 ppm/1-hour<br>0.07 ppm/8-hour | 0.070 ppm/8-hour | (a) Decline in pulmonary function and localized lung edema in humans and animals; (b) Risk to public health implied by alterations in pulmonary morphology and host defense in animals; (c) Increased mortality risk; (d) Risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (e) Vegetation damage; and (f) Property damage. |
| Carbon Monoxide (CO) | 20.0 ppm/1-hour<br>9.0 ppm/8-hour | 35.0 ppm/1-hour<br>9.0 ppm/8-hour | (a) Aggravation of angina pectoris and other aspects of coronary heart disease; (b) Decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (c) Impairment of central nervous system functions; and (d) Possible increased risk to fetuses. |
| Nitrogen Dioxide ($NO_2$) | 0.18 ppm/1-hour<br>0.03 ppm/annual | 100 ppb/1-hour<br>0.053 ppm/annual | (a) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (b) Risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; and (c) Contribution to atmospheric discoloration. |
| Sulfur Dioxide ($SO_2$) | 0.25 ppm/1-hour<br>0.04 ppm/24-hour | 75 ppb/1-hour<br>0.14 ppm/annual | (a) Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma. |
| Suspended Particulate Matter ($PM_{10}$) | 50 µg/$m^3$/24-hour<br>20 µg/$m^3$/annual | 150 µg/$m^3$/24-hour | (a) Exacerbation of symptoms in sensitive patients with respiratory or cardiovascular disease; (b) Declines in pulmonary function growth in children; (c) Increased risk of premature death from heart or lung diseases in elderly. |
| Suspended Particulate Matter ($PM_{2.5}$) | 12 µg/$m^3$ / annual | 35 µg/$m^3$/24-hour<br>12 µg/$m^3$/annual | |
| Sulfates | 25 µg/$m^3$/24-hour | No Federal Standards | (a) Decrease in ventilatory function; (b) Aggravation of asthmatic symptoms; (c ) Aggravation of cardio-pulmonary disease; (d) Vegetation damage; (e) Degradation of visibility; (f) property damage. |
| Lead | 1.5 µg/$m^3$/30-day | 0.15 µg/$m^3$/3-month rolling | (a) Learning disabilities; (b) Impairment of blood formation and nerve conduction. |
| Visibility Reducing Particles | Extinction coefficient of 0.23 per kilometer-visibility of 10 miles or more due to particles when humidity is less than 70 percent. | No Federal Standards | Visibility impairment on days when relative humidity is less than 70 percent. |

Source: https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf

**Table 3**
**South Coast Air Basin Attainment Status**

| Pollutant | State Status | National Status |
|---|---|---|
| Ozone | Nonattainment | Nonattainment (Extreme) |
| Carbon monoxide | Attainment | Attainment (Maintenance) |
| Nitrogen dioxide | Attainment | Unclassifable/Attainment |
| Sulfur dioxide | Attainment | Unclassifiable/Attainment |
| PM10 | Nonattainment | Attainment (Maintenance) |
| PM2.5 | Nonattainment | Nonattainment (Serious) |

Source (Federal and State Status): California Air Resources Board (2022) https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations & SCAQMD 2022 Air Quality Management Plan (December 2022) http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/final-2022-aqmp.pdf?sfvrsn=16.

## MONITORED AIR QUALITY

The air quality at any site is dependent on the regional air quality and local pollutant sources. Regional air quality is determined by the release of pollutants throughout the air basin. Estimates of the existing emissions in the Basin provided in the Final 2022 Air Quality Management Plan prepared by SCAQMD (December 2022) indicate that collectively, mobile sources account for 46 percent of the VOC, 85 percent of the NOx emissions, 89 percent of the CO emissions and 29 percent of directly emitted PM2.5, with another 18 percent of PM2.5 from road dust.

The SCAQMD has divided the South Coast Air Basin into 38 air-monitoring areas with a designated ambient air monitoring station representative of each area. The project site is located in the Central Orange County Air Monitoring Source Receptor Area (SRA 17). Data was taken from the Anaheim-Pampas Lane monitoring station (Anaheim Station). The Anaheim Station is located approximately 8.33 miles northwest of the project site at 1630 W Pampas, Anaheim. Table 4 presents the monitored pollutant levels from the Anaheim Station. However, it should be noted that due to the air monitoring stations distances from the project site, recorded air pollution levels at the air monitoring station reflect with varying degrees of accuracy, local air quality conditions at the project site.

Table 4 summarizes 2019 through 2021 published monitoring data, which is the most recent 3-year period available. The data shows that during the past few years, the project area has exceeded the ozone and particulate matter (PM10 and PM2.5) standards.

### Ozone

During the 2019 to 2021 monitoring period, the State 1-hour concentration standard for ozone was exceeded for one day in 2019 and six days in 2020 at the Anaheim Station. The State 8-hour ozone standard was exceeded for one day in 2019 and 16 days in 2020 over the past three years at the Anaheim Station. The Federal 8-hour ozone standard was exceeded for one day in 2019 and 15 days in 2020 over the past three years at the Anaheim Station.

Ozone is a secondary pollutant as it is not directly emitted. Ozone is the result of chemical reactions between other pollutants, most importantly hydrocarbons and $NO_2$, which occur only in the presence of bright sunlight. Pollutants emitted from upwind cities react during transport downwind to produce the oxidant concentrations experienced in the area. Many areas of the SCAQMD contribute to the ozone levels experienced at the monitoring station, with the more significant areas being those directly upwind.

### Carbon Monoxide

CO is another important pollutant that is due mainly to motor vehicles. The Anaheim Station did not record an exceedance of the state or federal 8-hour CO standard for the last three years.

### Nitrogen Dioxide

The Anaheim Station did not record an exceedance of the State or Federal $NO_2$ standards for the last three years.

### Particulate Matter

The State 24-hour concentration standards for PM10 were exceeded between one and five days each year over the past three years at the Anaheim Station. Over the past three years, the Anaheim Station did not record an exceedance of the Federal 24-hour standards for PM10.

The Federal 24-hour standard for PM2.5 was exceeded between four and 12 days each year over the past three years at the Anaheim Station.

According to the EPA, some people are much more sensitive than others to breathing fine particles (PM10 and PM2.5). People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worsening illness and premature death due to breathing these fine particles. People with bronchitis can expect aggravated symptoms from breathing in fine particles. Children may experience decline in lung function due to breathing in PM10 and PM2.5. Other groups considered sensitive are smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive, because many breathe through their mouths during exercise.

## Table 4
## Air Quality Monitoring Summary

| Pollutant (Standard)[1] | | Year | | |
|---|---|---|---|---|
| | | 2019 | 2020 | 2021 |
| Ozone: | Maximum 1-Hour Concentration (ppm) | 0.096 | 0.014 | 0.089 |
| | Days > CAAQS (0.09 ppm) | **1** | **6** | 0 |
| | Maximum 8-Hour Concentration (ppm) | 0.082 | 0.098 | 0.068 |
| | Days > NAAQS (0.070 ppm) | **1** | **15** | 0 |
| | Days > CAAQS (0.070 ppm) | **1** | **16** | 0 |
| Carbon Monoxide: | Maximum 8-Hour Concentration (ppm) | * | * | * |
| | Days > CAAQS (9 ppm) | 0 | 0 | 0 |
| | Days > NAAQS (9 ppm) | 0 | 0 | 0 |
| Nitrogen Dioxide: | Maximum 1-Hour Concentration (ppm) | 0.059 | 0.071 | 0.067 |
| | Days > CAAQS (0.18 ppm) | 0 | 0 | 0 |
| Inhalable Particulates (PM10): | Maximum 24-Hour Concentration (µg/m$^3$) | 127.6 | 74.8 | 63.6 |
| | Days > NAAQS (150 µg/m3) | 0 | 0 | 0 |
| | Days > CAAQS (50 µg/m3) | **4** | **5** | **1** |
| | Annual Average (µg/m3) | 24.6 | 30.8 | 23.4 |
| Ultra-Fine Particulates (PM2.5): | Maximum 24-Hour Concentration (µg/m3) | 37.1 | 64.8 | 54.4 |
| | Days > NAAQS (35 µg/m3) | **4** | **12** | **10** |
| | Annual Average (µg/m3) | 9.4 | 12.4 | 11.6 |

Notes:

Source: http://www.arb.ca.gov/adam/topfour/topfour1.php. Data from the Anaheim-Pampas Lane Monitoring Station, unless otherwise noted.

(1) CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard; ppm = parts per million

* Means there was insufficient data available to determine value.

## AIR QUALITY STANDARDS

### Significance Thresholds

*Appendix G of the State CEQA Guidelines*

Appendix G of the State CEQA Guidelines states that, where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make a significance determination. Pursuant to Appendix G, the project would result in a significant impact related to air quality if it would:

- Conflict with or obstruct the implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The CEQA Guidelines Section 15064.7 provides the significance criteria established by the applicable air quality management district or air pollution control district, when available, may be relied upon to make determinations of significance. The potential air quality impacts of the project are, therefore, evaluated according to thresholds developed by SCAQMD in their CEQA Air Quality Handbook, Air Quality Analysis Guidance Handbook, and subsequent guidance, which are listed below.[4] Therefore, the project would result in a potentially significant impact to air quality if it would:

AIR-1: Conflict with or obstruct the implementation of the applicable air quality plan;

AIR-2: Violate any air quality standard or contribute substantially to an existing or projected air quality violation as a result of:

- Criteria pollutant emissions during construction (direct and indirect) in excess of the SCAQMD's regional significance thresholds,
- Criteria pollutant emissions during operation (direct and indirect) in excess of the SCAQMD's regional significance thresholds.

AIR-3: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);

AIR-4: Expose sensitive receptors to substantial pollutant concentrations that would:

- Exceed SCAQMD's localized significance thresholds,
- Cause or contribute to the formation of CO hotspots.

[4] While the SCAQMD CEQA Air Quality Handbook contains significance thresholds for lead, Project construction and operation would not include sources of lead emissions and would not exceed the established thresholds for lead. Unleaded fuel and unleaded paints have virtually eliminated lead emissions from industrial land use projects such as the Project. As a result, lead emissions are not further evaluated herein.

AIR-5: Create objectionable odors affecting a substantial number of people.

The SCAQMD is in the process of developing an Air Quality Analysis Guidance Handbook to replace the CEQA Air Quality Handbook. In the interim, supplemental guidance has been adopted by the SCAQMD. The potential air quality impacts of the project are, therefore, evaluated according to numeric indicators developed by the SCAQMD in the CEQA Air Quality Handbook and supplemental guidance from the SCAQMD.[5]

**Regional Air Quality**

Many air quality impacts that derive from dispersed mobile sources, which are the dominate pollution generators in the basin, often occurs hours later and miles away after photochemical processes have converted primary exhaust pollutants into secondary contaminants such as ozone. The incremental regional air quality impact of an individual project is generally very small and difficult to measure. Therefore, the SCAQMD has developed significance thresholds based on the volume of pollution emitted rather than on actual ambient air quality because the direct air quality impact of a project is not quantifiable on a regional scale. The SCAQMD CEQA Handbook states that any project in the South Coast Air Basin with daily emissions that exceed any of the identified significance thresholds should be considered as having an individually and cumulatively significant air quality impact. For the purposes to this air quality impact analysis, a regional air quality impact would be considered significant if emissions exceed the SCAQMD significance thresholds identified in Table 5.

**Local Air Quality**

Project-related construction air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the South Coast Air Basin. In order to assess local air quality impacts the SCAQMD has developed Localized Significance Thresholds (LSTs) to assess the project-related air emissions in the project vicinity. The SCAQMD has also provided Final Localized Significance Threshold Methodology (LST Methodology), June 2003, which details the methodology to analyze local air emission impacts. The Localized Significance Threshold Methodology found that the primary emissions of concern are $NO_2$, CO, PM10, and PM2.5.

The significance thresholds for the local emissions of $NO_2$ and CO are determined by subtracting the highest background concentration from the last three years of these pollutants from Table 4 above, from the most restrictive ambient air quality standards for these pollutants that are outlined in the Localized Significance Thresholds. Table 5 shows the ambient air quality standards for $NO_2$, CO, and PM10 and PM2.5.

**Toxic Air Contaminants**

*Construction*

Temporary TAC emissions associated with DPM emissions from heavy construction equipment would occur during the construction phase of the Project. According to the Office of Environmental Health Hazard Assessment (OEHHA)[6] and the SCAQMD *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis* (August 2003),[7] health effects from TACs are

[5] While the SCAQMD CEQA Air Quality Handbook contains significance thresholds for lead, Project construction and operation would not include sources of lead emissions and would not exceed the established thresholds for lead. Unleaded fuel and unleaded paints have virtually eliminated lead emissions from residential land use projects such as the Project. As a result, lead emissions are not further evaluated herein.

[6] Office of Environmental Health Hazard Assessment, Air Toxic Hot Spots Program Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessment, February 2015, https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf.

[7] South Coast Air Quality Management District, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis, August 2003,http://www.aqmd.gov/docs/default-source/ceqa/handbook/mobile-source-toxics-analysis.doc?sfvrsn=2.

described in terms of individual cancer risk. "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of TACs over a 30-year lifetime will contract cancer based on the use of standard risk-assessment methodology. Additionally, the SCAQMD CEQA guidance does not require a HRA for short-term construction emissions. Construction activities associated with the project would be sporadic, transitory, and short-term in nature (approximately 24 months). Thus, construction of the project would not result in a substantial, long-term (i.e., 30-year) source of TAC emissions. Nonetheless, a qualitative assessment of TAC emissions associated with short-term construction TAC emissions is provided in the analysis section below.

*Operation*

The project proposes to develop the site with residential uses. Therefore, the project is not anticipated be a source of toxic air contaminants and sensitive receptors would not be exposed to toxic sources of air pollution.

**Odor Impacts**

The SCAQMD CEQA Handbook states that an odor impact would occur if the proposed project creates an odor nuisance pursuant to SCAQMD Rule 402, which states:

A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

If the proposed project results in a violation of Rule 402 with regards to odor impacts, then the proposed project would create a significant odor impact.

**Table 5**
**SCAQMD Air Quality Significance Thresholds**

| Mass Daily Thresholds | | |
|---|---|---|
| Pollutant | Construction (lbs/day) | Operation (lbs/day) |
| NOx | 100 | 55 |
| VOC | 75 | 55 |
| PM10 | 150 | 150 |
| PM2.5 | 55 | 55 |
| SOx | 150 | 150 |
| CO | 550 | 550 |
| Lead | 3 | 3 |

| Toxic Air Contaminants, Odor and GHG Thresholds | |
|---|---|
| TACs | Maximum Incremental Cancer Risk ≥ 10 in 1 million<br>Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million)<br>Chronic & Acute Hazard Index > 1.0 (project increment) |
| Odor | Project creates an odor nuisance pursuant to SCAQMD Rule 402 |
| GHG | 10,000 MT/yr CO2e for industrial projects |

| Ambient Air Quality Standards | |
|---|---|
| Pollutant | SCAQMD Standards |
| NO2 -1-hour average | 0.18 ppm (338 µg/m^3) |
| PM10 -24-hour average<br>Construction<br>Operations | <br>10.4 µg/m^3<br>2.5 ug/m^3 |
| PM2.5 -24-hour average<br>Construction<br>Operations | <br>10.4 µg/m^3<br>2.5 µg/m^3 |
| SO2<br>1-hour average<br>24-hour average | <br>0.25 ppm<br>0.04 ppm |
| CO<br>1-hour average<br>8-hour average | <br>20 ppm (23,000 µg/m^3)<br>9 ppm (10,000 µg/m^3) |
| Lead<br>30-day average<br>Rolling 3-month average<br>Quarterly average | <br>1.5 µg/m^3<br>0.15 µg/m^3<br>1.5 µg/m^3 |

Source: http://www.aqmd.gov/ceqa/handbook/signthres.pdf

### SHORT-TERM CONSTRUCTION EMISSIONS

Construction activities associated with the proposed project would have the potential to generate air emissions, toxic air contaminant emissions, and odor impacts. Assumptions for the phasing, duration, and required equipment for the construction of the proposed project were obtained from the project applicant. The construction activities for the proposed project are anticipated to include: demolition of an existing 2,100 square foot concrete foundation; grading of approximately 1.93 acres; construction of 13 single-family residential dwelling units totaling approximately 35,500 square feet[8]; paving of on-site roadways and a parking lot with 10 guest parking spaces totaling to approximately 25 percent of the site or 0.49 acres; and application of architectural coatings. Grading includes approximately 785 cubic yards of import. See Appendix B for more details.

The proposed project is anticipated to start construction no sooner than the beginning of September 2024 taking approximately two years, with completion by early September 2026. The project is anticipated to be operational in 2026.

#### Methodology

The following provides a discussion of the methodology used to calculate regional construction air emissions and an analysis of the proposed project's short-term construction emissions for the criteria pollutants. The construction-related regional air quality impacts have been analyzed for both criteria pollutants and GHGs.

Emissions are estimated using the CalEEMod (Version 2022.1.1.6) software, which is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions from a variety of land use projects. CalEEMod was developed in collaboration with the air districts of California. Regional data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California air districts to account for local requirements and conditions. The model is considered to be an accurate and comprehensive tool for quantifying air quality and GHG impacts from land use projects throughout California and is recommended by the SCAQMD.[9]

Daily regional emissions during construction are forecasted by assuming a conservative estimate of construction activities (i.e., assuming all construction occurs at the earliest feasible date) and applying the mobile source and fugitive dust emissions factors. The input values used in this analysis were adjusted to be project-specific for the construction schedule and the equipment used was based on CalEEMod defaults. The CalEEMod program uses the EMFAC2021 computer program to calculate the emission rates specific for the northern portion of Orange County for construction-related employee vehicle trips and the OFFROAD2017 computer program to calculate emission rates for heavy truck operations. EMFAC2021 and OFFROAD2017 are computer programs generated by CARB that calculates composite emission rates for vehicles. Emission rates are reported by the program in grams per trip and grams per mile or grams per running hour. Daily truck trips and CalEEMod default trip length data were used to assess roadway emissions from truck exhaust. The maximum daily emissions are estimated values for the worst-case day and do not represent the emissions that would occur for every day of project construction. The maximum daily emissions are compared to the SCAQMD daily regional numeric indicators. Detailed construction equipment lists, construction scheduling, and emission calculations are provided in Appendix B.

The project will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures. Compliance with this rule is achieved through application of standard best management practices in construction and operation activities, such as application of water or chemical stabilizers to disturbed soils, managing haul road dust by application of water, covering

[8] Total building square footage estimated based on: two dwelling units at 1,900 square foot, six dwelling units at 2,200 square foot, five dwelling units at 2,500 square foot, and garage square footage of approximately 500 square feet for each dwelling unit.

[9] South Coast Air Quality Management District, California Emissions Estimator Model, http://www.aqmd.gov/caleemod/.

haul vehicles, restricting vehicle speeds on unpaved roads to 15 mph, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph and establishing a permanent, stabilizing ground cover on finished sites. In addition, projects that disturb 50 acres or more of soil or move 5,000 cubic yards of materials per day are required to submit a Fugitive Dust Control Plan or a Large Operation Notification Form to SCAQMD. Based on the size of the Project area (approximately 1.93 acres) a Fugitive Dust Control Plan or Large Operation Notification would not be required.

SCAQMD's Rule 403 minimum requirements require that the application of the best available dust control measures is used for all grading operations and include the application of water or other soil stabilizers in sufficient quantity to prevent the generation of visible dust plumes. Compliance with Rule 403 would require the use of water trucks during all phases where earth moving operations would occur. Compliance with Rule 403 has been included in the CalEEMod modeling for the proposed project.

Per SCAQMD Rule 1113 as amended on June 3, 2011, the architectural coatings that would be applied after January 1, 2014 will be limited to an average of 50 grams per liter or less of VOCs for building coatings and 100 grams per liter or less of VOCs for traffic coatings.

The phases of the construction activities which have been analyzed below for each phase are: (1) demolition, (2) grading, (3) building construction, (4) paving, and (5) application of architectural coatings. Details pertaining to the project's construction timing and the type of equipment modeled for each construction phase are available in the CalEEMod output in Appendix B.

**Construction-Related Regional Impacts**

The maximum construction-related criteria pollutant emissions are shown below in Table 6. Table 6 shows that none of the project's emissions will exceed regional thresholds. Therefore, a less than significant regional air quality impact would occur from construction of the proposed project.

**Construction-Related Local Impacts**

Construction-related air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the South Coast Air Basin. The proposed project has been analyzed for the potential local air quality impacts created from: construction-related fugitive dust and diesel emissions; from toxic air contaminants; and from construction-related odor impacts.

*Local Air Quality Impacts from Construction*

The SCAQMD has published a "Fact Sheet for Applying CalEEMod to Localized Significance Thresholds" (South Coast Air Quality Management District 2011b). CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily disturbance activity possible for each piece of equipment. In order to compare CalEEMod reported emissions against the localized significance threshold lookup tables, the CEQA document should contain the following parameters:

(1) The off-road equipment list (including type of equipment, horsepower, and hours of operation) assumed for the day of construction activity with maximum emissions.
(2) The maximum number of acres disturbed on the peak day.
(3) Any emission control devices added onto off-road equipment.
(4) Specific dust suppression techniques used on the day of construction activity with maximum emissions.

The CalEEMod output in Appendix B show the equipment used for this analysis.

As shown in Table 7, the maximum number of acres disturbed in a day would be 2 acres during grading. The local air quality emissions from construction were analyzed using the SCAQMD's Mass Rate Localized Significant Threshold Look-up Tables and the methodology described in Localized Significance Threshold Methodology prepared by SCAQMD (revised July 2008). The Look-up Tables were developed by the SCAQMD in order to readily determine if the daily emissions of CO, NOx, PM10, and PM2.5 from the proposed project could result in a significant impact to the local air quality. The emission thresholds were calculated based on the Central Orange County source receptor area (SRA) 17 and a disturbance value of two acre per day. According to LST Methodology, any receptor located closer than 25 meters (82 feet) shall be based on the 25-meter thresholds. The nearest sensitive receptors are the single-family residential uses located adjacent to the east and south and approximately 60 feet (~18 meters) to the west of the project site; therefore, the SCAQMD Look-up Tables for 25 meters was used. Table 8 shows the on-site emissions from the CalEEMod model for the different construction phases and the LST emissions thresholds.

The data provided in Table 8 shows that none of the analyzed criteria pollutants would exceed the local emissions thresholds at the nearest sensitive receptors. Therefore, a less than significant local air quality impact would occur from construction of the proposed project.

**Construction-Related Health Impacts**

Regarding health effects related to criteria pollutant emissions, the applicable significance thresholds are established for regional compliance with the state and federal ambient air quality standards, which are intended to protect public health from both acute and long-term health impacts, depending on the potential effects of the pollutant. Because regional and local emissions of criteria pollutants during construction of the project would be below the applicable thresholds, it would not contribute to long-term health impacts related to nonattainment of the ambient air quality standards. Therefore, significant adverse acute health impacts as a result of project construction are not anticipated.

**Construction-Related Toxic Air Contaminant Impacts**

The greatest potential for toxic air contaminant emissions would be related to diesel particulate emissions associated with heavy equipment operations during construction of the proposed project. According to the Office of Environmental Health Hazard Assessment (OEHHA)[10] and the SCAQMD *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis* (August 2003),[11] health effects from TACs are described in terms of individual cancer risk based on a lifetime (i.e., 30-year) resident exposure duration. Given the temporary and short-term construction schedule (approximately 24 months), the project would not result in a long-term (i.e., lifetime or 30-year) exposure as a result of project construction. Furthermore, construction-based particulate matter (PM) emissions (including diesel exhaust emissions) do not exceed any local or regional thresholds.

The project would comply with the CARB Air Toxics Control Measure that limits diesel powered equipment and vehicle idling to no more than 5 minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation; compliance with these would minimize emissions of TACs during construction. The project would also comply with the requirements of SCAQMD Rule 1403 if asbestos is found during the renovation and construction activities. Therefore, impacts from TACs during construction would be less than significant.

[10] Office of Environmental Health Hazard Assessment, Air Toxic Hot Spots Program Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessment, February 2015, https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf.

[11] South Coast Air Quality Management District, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis, August 2003,http://www.aqmd.gov/docs/default-source/ceqa/handbook/mobile-source-toxics-analysis.doc?sfvrsn=2.

**Construction-Related Odor Impacts**

Potential sources that may emit odors during construction activities include the application of materials such as asphalt pavement. The objectionable odors that may be produced during the construction process are of short-term in nature and the odor emissions are expected to cease upon the drying or hardening of the odor producing materials. Due to the short-term nature and limited amounts of odor producing materials being utilized, no significant impact related to odors would occur during construction of the proposed project. Diesel exhaust and VOCs would be emitted during construction of the project, which are objectionable to some; however, emissions would disperse rapidly from the project site and therefore should not reach an objectionable level at the nearest sensitive receptors.

**Table 6**
**Construction-Related Regional Pollutant Emissions**

| Activity | Pollutant Emissions (pounds/day) | | | | | |
|---|---|---|---|---|---|---|
| | ROG | NOx | CO | $SO_2$ | PM10 | PM2.5 |
| Maximum Daily Emissions[1,2] | 9.81 | 16.50 | 17.40 | 0.03 | 3.76 | 2.09 |
| SCAQMD Thresholds | 75 | 100 | 550 | 150 | 150 | 55 |
| Exceeds Thresholds? | No | No | No | No | No | No |

Notes:

Source: CalEEMod Version 2022.1.1.6.

(1) On-site emissions from equipment operated on-site that is not operated on public roads. On-site demolition and grading PM-10 and PM-2.5 emissions show compliance with SCAQMD Rule 403.

(2) Construction, painting and paving phases may overlap.

**Table 7**
**Maximum Number of Acres Disturbed Per Day**

| Activity | Equipment | Number | Acres/8hr-day | Total Acres |
|---|---|---|---|---|
| Demolition | Rubber Tired Dozers | 1 | 0.5 | 0.5 |
| | Crawler Tractors[1] | 1 | 0.5 | 0.5 |
| | **Subtotal for Phase** | **-** | **-** | **1** |
| Grading | Graders | 1 | 0.5 | 0.5 |
| | Rubber Tired Dozers | 1 | 0.5 | 0.5 |
| | Crawler Tractors[1] | 2 | 0.5 | 1 |
| | **Subtotal for Phase** | **-** | **-** | **2** |

Notes:

Source: South Coast AQMD, Fact Sheet for Applying CalEEMod to Localized Significance Thresholds, 2011b.

(1) Tractor/loader/backhoe is a suitable surrogate for a crawler tractor per SCAQMD staff.

**Table 8**
**Local Construction Emissions at the Nearest Receptors**

| Activity | On-Site Pollutant Emissions (pounds/day) | | | |
|---|---|---|---|---|
| | NOx | CO | PM10 | PM2.5 |
| Demolition | 13.20 | 12.20 | 0.58 | 0.53 |
| Grading | 15.90 | 15.40 | 3.50 | 2.02 |
| Building Construction | 9.44 | 10.10 | 0.37 | 0.34 |
| Paving | 4.41 | 6.48 | 0.18 | 0.17 |
| Architectural Coating | 0.86 | 1.13 | 0.02 | 0.02 |
| SCAQMD Thresholds[1] | 115 | 715 | 6 | 4 |
| Exceeds Threshold? | No | No | No | No |

Notes:

Source: Calculated from CalEEMod and SCAQMD's Mass Rate Look-up Tables for 2 acres, to be conservative, at a distance of 25 meters in SRA 17 Central Orange County.

(1) The nearest sensitive receptors to the project include the single-family residential uses located adjacent to the east and south and approximately 60 feet (~18 meters) to the west of the project site; therefore, the 25 meter threshold was used.

Note: The project will disturb up to a maximum of 2 acres a day during grading (see Table 7).

## LONG-TERM OPERATIONAL EMISSIONS

The on-going operation of the proposed project would result in a long-term increase in air quality emissions. This increase would be due to emissions from the project-generated vehicle trips and through operational emissions from the on-going use of the proposed project. The following section provides an analysis of potential long-term air quality impacts due to: regional air quality and local air quality impacts with the on-going operations of the proposed project.

### Operations-Related Regional Air Quality Impacts

The potential operations-related air emissions have been analyzed below for the criteria pollutants and cumulative impacts.

*Operations-Related Criteria Pollutants Analysis*

The operations-related criteria air quality impacts created by the proposed project have been analyzed through the use of the CalEEMod model. The operating emissions were based on the year 2026, which is the anticipated opening year for the project, emissions printouts from the CalEEMod model are provided in Appendix B. The CalEEMod analyzes operational emissions from area sources, energy usage, and mobile sources, which are discussed below.

*Mobile Sources*

Mobile sources include emissions from the additional vehicle miles generated from the proposed project. The vehicle trips associated with the proposed project have been analyzed by inputting the project-generated vehicular trips (trip generation rate) from the *Rancho Ridge Infill Project Transportation Study Screening Assessment* (TA) prepared by Ganddini Group, Inc. (December 19, 2022) into the CalEEMod Model. The TA found that the proposed project will generate approximately 84 daily vehicle trips with a trip generation rate of 6.46 trips per dwelling unit per day The CalEEMod program then applies the emission factors for each trip which is provided by the EMFAC2021 model to determine the vehicular traffic pollutant emissions.

*Area Sources*

Per the CAPCOA Appendix A Calculation Details for CalEEMod, area sources include emissions from consumer products, landscape equipment and architectural coatings. Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers, as well as air compressors, generators, and pumps. As specifics were not known about the landscaping equipment fleet, CalEEMod defaults were used to estimate emissions from landscaping equipment. No changes were made to the default area source parameters.

*Energy Usage*

Energy usage includes emissions from the generation of electricity and natural gas used on-site. No changes were made to the default energy usage parameters.

*Project Impacts*

The worst-case summer or winter criteria pollutant emissions created from the proposed project's long-term operations have been calculated and are shown below in Table 9. The results show that none of the SCAQMD regional thresholds would be exceeded. Therefore, a less than significant regional air quality impact would occur from operation of the proposed project.

**Operations-Related Local Air Quality Impacts**

Project-related air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the South Coast Air Basin. The proposed project has been analyzed for the potential local CO emission impacts from the project-generated vehicular trips and from the potential local air quality impacts from on-site operations. The following analysis analyzes the vehicular CO emissions, local impacts from on-site operations per SCAQMD LST methodology, and odor impacts.

*Local CO Emission Impacts from Project-Generated Vehicular Trips*

CO is the pollutant of major concern along roadways because the most notable source of CO is motor vehicles. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network and are used as an indicator of potential local air quality impacts. Local air quality impacts can be assessed by comparing future without and with project CO levels to the State and Federal CO standards which were presented above.

To determine if the proposed project could cause emission levels in excess of the CO standards discussed above, a sensitivity analysis is typically conducted to determine the potential for CO "hot spots" at a number of intersections in the general project vicinity. Because of reduced speeds and vehicle queuing, "hot spots" potentially can occur at high traffic volume intersections with a Level of Service E or worse.

The analysis prepared for CO attainment in the South Coast Air Basin by the SCAQMD can be used to assist in evaluating the potential for CO exceedances in the South Coast Air Basin. CO attainment was thoroughly analyzed as part of the SCAQMD's 2003 Air Quality Management Plan (2003 AQMP) and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan). As discussed in the 1992 CO Plan, peak carbon monoxide concentrations in the South Coast Air Basin are due to unusual meteorological and topographical conditions, and not due to the impact of particular intersections. Considering the region's unique meteorological conditions and the increasingly stringent CO emissions standards, CO modeling was performed as part of 1992 CO Plan and subsequent plan updates and air quality management plans. In the 1992 CO Plan, a CO hot spot analysis was conducted for four busy intersections in Los Angeles at the peak morning and afternoon time periods. The intersections evaluated included: South Long Beach Boulevard and Imperial Highway (Lynwood); Wilshire Boulevard and Veteran Avenue (Westwood); Sunset Boulevard and Highland Avenue (Hollywood); and La Cienega Boulevard and Century Boulevard (Inglewood). These analyses did not predict a violation of CO standards. The busiest intersection evaluated was that at Wilshire Boulevard and Veteran Avenue, which has a daily traffic volume of approximately 100,000 vehicles per day. The Los Angeles County Metropolitan Transportation Authority evaluated the Level of Service in the vicinity of the Wilshire Boulevard/Veteran Avenue intersection and found it to be Level of Service E during the morning peak hour and Level of Service F during the afternoon peak hour.

The TA showed that the proposed project would only generate approximately 84 daily vehicle trips. The 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan) showed that an intersection which has a daily traffic volume of approximately 100,000 vehicles per day would not violate the CO standard. Therefore, as the project includes only up to 84 vehicle trips per day, the intersection volumes would fall far short of 100,000 vehicles per day, and no CO "hot spot" modeling was performed. No significant long-term impact to local air quality is anticipated with the on-going use of the proposed project.

*Local Air Quality Impacts from On-Site Operations*

Project-related air emissions from on-site sources such as architectural coatings, landscaping equipment, on-site usage of natural gas appliances as well as the operation of vehicles on-site may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Air Basin. The nearest sensitive

receptors that may be impacted by the proposed project are the single-family residential uses located adjacent to the east and south and approximately 60 feet (~18 meters) to the west of the project site.

According to SCAQMD LST methodology, LSTs would apply to the operational phase of a project, if the project includes stationary sources, or attracts mobile sources (such as heavy-duty trucks) that may spend long periods queuing and idling at the site; such as industrial warehouse/transfer facilities. The proposed project involves the development of the site with a residential use and does not include such uses. Therefore, due the lack of stationary source emissions, no long-term localized significance threshold analysis is warranted.

**Operations-Related Health Impacts**

Regarding health effects related to criteria pollutant emissions, the applicable significance thresholds are established for regional compliance with the state and federal ambient air quality standards, which are intended to protect public health from both acute and long-term health impacts, depending on the potential effects of the pollutant. Because regional and local emissions of criteria pollutants during operation of the project would be below the applicable thresholds, it would not contribute to long-term health impacts related to nonattainment of the ambient air quality standards. Therefore, significant adverse acute health impacts as a result of project operation are not anticipated.

**Operations-Related Odor Impacts**

Potential sources that may emit odors during the on-going operations of the proposed project would include odor emissions from the intermittent diesel delivery truck emissions and trash storage areas. Due to the distance of the nearest receptors from the project site and through compliance with SCAQMD's Rule 402 no significant impact related to odors would occur during the on-going operations of the proposed project.

**Table 9**
**Regional Operational Pollutant Emissions**

| Activity | Pollutant Emissions (pounds/day) | | | | | |
|---|---|---|---|---|---|---|
| | ROG | NOx | CO | SO2 | PM10 | PM2.5 |
| Maximum Daily Emissions | 1.17 | 0.51 | 2.90 | 0.01 | 0.22 | 0.06 |
| SCAQMD Thresholds | 55 | 55 | 550 | 150 | 150 | 55 |
| Exceeds Threshold? | No | No | No | No | No | No |

Notes:

Source: CalEEMod Version 2022.1.1.6; the higher of either summer or winter emissions.

## CUMULATIVE AIR QUALITY IMPACTS

There are a number of cumulative projects in the project area that have not yet been built or are currently under construction. Since the timing or sequencing of the cumulative projects is unknown, any quantitative analysis to ascertain daily construction emissions that assumes multiple, concurrent construction projects would be speculative. Further, cumulative projects include local development as well as general growth within the project area. However, as with most development, the greatest source of emissions is from mobile sources, which travel well out of the local area. Therefore, from an air quality standpoint, the cumulative analysis would extend beyond any local projects and when wind patterns are considered would cover an even larger area. The SCAQMD recommends using two different methodologies: (1) that project-specific air quality impacts be used to determine the potential cumulative impacts to regional air quality;[12] and (2) that a project's consistency with the current AQMP be used to determine its potential cumulative impacts.

### Project Specific Impacts

The project area is out of attainment for ozone, PM10, and PM2.5. Construction and operation of cumulative projects will further degrade the local air quality, as well as the air quality of the South Coast Air Basin. The greatest cumulative impact on the quality of regional air cell will be the incremental addition of pollutants mainly from increased traffic volumes from residential, commercial, and industrial development and the use of heavy equipment and trucks associated with the construction of these projects. Air quality will be temporarily degraded during construction activities that occur separately or simultaneously. However, in accordance with the SCAQMD methodology, projects that do not exceed the SCAQMD criteria or can be mitigated to less than criteria levels are not significant and do not add to the overall cumulative impact. This applies to TACs as well, as the SCAQMD does not have any cumulative TAC thresholds; therefore, projects that do not exceed the SCAQMD TAC threshold criteria or can be mitigated to less than criteria levels are not significant and do not add to the overall cumulative impact. A significant impact may occur if a project would add a cumulatively considerable contribution of a federal or state non-attainment pollutant.

Project operations would generate emissions of NOx, ROG, CO, PM10, and PM2.5, which would not exceed the SCAQMD regional or local thresholds and would not be expected to result in ground level concentrations that exceed the NAAQS or CAAQS. The project will not be a source of significant TACs and will not cause and significant cancer or non-cancer-related health risks. Since the project would not introduce any substantial stationary sources of emissions, CO is the benchmark pollutant for assessing local area air quality impacts from post-construction motor vehicle operations. As indicated earlier, no violations of the state and federal CO standards are projected to occur for the project, based on the magnitude of traffic the project is anticipated to create.

Therefore, operation of the project would not result in a cumulatively considerable net increase for non-attainment of criteria pollutants or ozone precursors, or TACs. As a result, the project would result in a less than significant cumulative impact for operational emissions.

### Air Quality Compliance

The California Environmental Quality Act (CEQA) requires a discussion of any inconsistencies between a proposed project and applicable General Plans and Regional Plans (CEQA Guidelines Section 15125). The regional plan that applies to the proposed project includes the SCAQMD Air Quality Management Plan (AQMP). Therefore, this section discusses any potential inconsistencies of the proposed project with the AQMP.

The purpose of this discussion is to set forth the issues regarding consistency with the assumptions and objectives of the AQMP and discuss whether the proposed project would interfere with the region's ability to

[12] South Coast Air Quality Management District, Potential Control Strategies to Address Cumulative Impacts from Air Pollution White Paper, 1993, http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook.

comply with Federal and State air quality standards. If the decision-makers determine that the proposed project is inconsistent, the lead agency may consider project modifications or inclusion of mitigation to eliminate the inconsistency.

The SCAQMD CEQA Handbook states that "New or amended General Plan Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP". Strict consistency with all aspects of the plan is usually not required. A proposed project should be considered to be consistent with the AQMP if it furthers one or more policies and does not obstruct other policies. The SCAQMD CEQA Handbook identifies two key indicators of consistency:

(1) Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
(2) Whether the project will exceed the assumptions in the AQMP in 2022 or increments based on the year of project buildout and phase.

Both of these criteria are evaluated in the following sections.

*Criteria 1 – Increase in the Frequency or Severity of Violations*

Based on the air quality modeling analysis contained in this Air Analysis, short-term construction impacts will not result in significant impacts based on the SCAQMD regional and local thresholds of significance. This Air Analysis also found that, long-term operations impacts will not result in significant impacts based on the SCAQMD local and regional thresholds of significance.

Therefore, the proposed project is not projected to contribute to the exceedance of any air pollutant concentration standards and is found to be consistent with the AQMP for the first criterion.

*Criteria 2 – Exceed Assumptions in the AQMP?*

Consistency with the AQMP assumptions is determined by performing an analysis of the proposed project with the assumptions in the AQMP. The emphasis of this criterion is to ensure that the analyses conducted for the proposed project are based on the same forecasts as the AQMP. The 2020-2045 Regional Transportation/Sustainable Communities Strategy prepared by SCAG (2020) includes chapters on: the challenges in a changing region, creating a plan for our future, and the road to greater mobility and sustainable growth. These chapters currently respond directly to federal and state requirements placed on SCAG. Local governments are required to use these as the basis of their plans for purposes of consistency with applicable regional plans under CEQA. For this project, the City of Orange Land Use Plan defines the assumptions that are represented in the AQMP.

The project site has a current land use designation of Low Density Residential (LDR) on the City of Orange General Plan Land Use Policy Map. The project proposes 13 single-family residential dwelling units on approximately 1.93 acres. The proposed project is consistent with the City's R1-6 zoning designation; however, the site is currently zoned as R1-10. The project is not requesting an amendment to the zoning map to rezone the property as R1-6. In accordance with California Government Code Section 65589.5(j)(4), "*For purposes of this section, a proposed housing development project is not inconsistent with the applicable zoning standards and criteria, and shall not require a rezoning, if the housing development project is consistent with the objective general plan standards and criteria but the zoning for the project site is inconsistent with the general plan. If the local agency has complied with paragraph (2), the local agency may require the proposed housing development project to comply with the objective standards and criteria of the zoning which is consistent with the general plan, however, the standards and criteria shall be applied to facilitate and accommodate development at the density allowed on the site by the general plan and proposed by the proposed housing development project.*" The California Department of Housing and Community Development (HCD) reaffirmed that cities could not require a rezone/reclassification in the Housing Accountability Act Technical Assistance Advisory, issued on September

15, 2020. The project would comply with the R1-6 and PUD standards, as applicable. Furthermore, the SCAQMD acknowledges that strict consistency with all aspects of the AQMP is not required in order to make a finding of no conflict. Rather, a project is considered to be consistent with the AQMP if it furthers one or more policies and does not obstruct other policies. The project would implement contemporary energy-efficient technologies and regulatory/operational programs required per Title 24, CALGreen and City standards. Generally, compliance with SCAQMD emissions reductions and control requirements also act to reduce project air pollutant emissions. In combination, project emissions-reducing design features and regulatory/operational programs are consistent with and support overarching AQMP air pollution reduction strategies. Project support of these strategies promotes timely attainment of AQMP air quality standards and would bring the project into conformance with the AQMP. Therefore, the proposed project is not anticipated to exceed the AQMP assumptions for the project site and is found to be consistent with the AQMP for the second criterion.

Based on the above, the proposed project will not result in an inconsistency with the SCAQMD AQMP. Therefore, a less than significant impact will occur.

# 3. GLOBAL CLIMATE CHANGE ANALYSIS

## EXISTING GREENHOUSE GAS ENVIRONMENT

Constituent gases of the Earth's atmosphere, called atmospheric greenhouse gases (GHG), play a critical role in the Earth's radiation amount by trapping infrared radiation emitted from the Earth's surface, which otherwise would have escaped to space. Prominent greenhouse gases contributing to this process include carbon dioxide ($CO_2$), methane ($CH_4$), ozone, water vapor, nitrous oxide ($N_2O$), and chlorofluorocarbons (CFCs). This phenomenon, known as the Greenhouse Effect, is responsible for maintaining a habitable climate. Anthropogenic (caused or produced by humans) emissions of these greenhouse gases in excess of natural ambient concentrations are responsible for the enhancement of the Greenhouse Effect and have led to a trend of unnatural warming of the Earth's natural climate, known as global warming or climate change. Emissions of gases that induce global warming are attributable to human activities associated with industrial/manufacturing, agriculture, utilities, transportation, and residential land uses. Transportation is responsible for 41 percent of the State's greenhouse gas emissions, followed by electricity generation. Emissions of $CO_2$ and nitrous oxide (NOx) are byproducts of fossil fuel combustion. Methane, a potent greenhouse gas, results from off-gassing associated with agricultural practices and landfills. Sinks of $CO_2$, where $CO_2$ is stored outside of the atmosphere, include uptake by vegetation and dissolution into the ocean. The following provides a description of each of the greenhouse gases and their global warming potential.

### Water Vapor

Water vapor is the most abundant, important, and variable GHG in the atmosphere. Water vapor is not considered a pollutant; in the atmosphere it maintains a climate necessary for life. Changes in its concentration are primarily considered a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization. The feedback loop in which water is involved is critically important to projecting future climate change. As the temperature of the atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher (in essence, the air is able to "hold" more water when it is warmer), leading to more water vapor in the atmosphere. As a GHG, the higher concentration of water vapor is then able to absorb more thermal indirect energy radiated from the Earth, thus further warming the atmosphere. The warmer atmosphere can then hold more water vapor and so on and so on. This is referred to as a "positive feedback loop". The extent to which this positive feedback loop will continue is unknown as there is also dynamics that put the positive feedback loop in check. As an example, when water vapor increases in the atmosphere, more of it will eventually also condense into clouds, which are more able to reflect incoming solar radiation (thus allowing less energy to reach the Earth's surface and heat it up).

### Carbon Dioxide ($CO_2$)

The natural production and absorption of $CO_2$ is achieved through the terrestrial biosphere and the ocean. However, humankind has altered the natural carbon cycle by burning coal, oil, natural gas, and wood. Since the industrial revolution began in the mid-1700s. Each of these activities has increased in scale and distribution. $CO_2$ was the first GHG demonstrated to be increasing in atmospheric concentration with the first conclusive measurements being made in the last half of the 20th century. Prior to the industrial revolution, concentrations were fairly stable at 280 parts per million (ppm). The International Panel on Climate Change (IPCC Fifth Assessment Report, 2014) Emissions of $CO_2$ from fossil fuel combustion and industrial processes contributed about 78% of the total GHG emissions increase from 1970 to 2010, with a similar percentage contribution for the increase during the period 2000 to 2010. Globally, economic and population growth continued to be the most important drivers of increases in $CO_2$ emissions from fossil fuel combustion. The contribution of population growth between 2000 and 2010 remained roughly identical to the previous three decades, while the contribution of economic growth has risen sharply.

**Methane ($CH_4$)**

$CH_4$ is an extremely effective absorber of radiation, although its atmospheric concentration is less than that of $CO_2$. Its lifetime in the atmosphere is brief (10 to 12 years), compared to some other GHGs (such as $CO_2$, $N_2O$, and Chlorofluorocarbons (CFCs). $CH_4$ has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production (at the roots of the plants). Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of methane. Other anthropocentric sources include fossil-fuel combustion and biomass burning.

**Nitrous Oxide ($N_2O$)**

Concentrations of $N_2O$ also began to rise at the beginning of the industrial revolution. In 1998, the global concentration of this GHG was documented at 314 parts per billion (ppb). $N_2O$ is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is also commonly used as an aerosol spray propellant, (i.e., in whipped cream bottles, in potato chip bags to keep chips fresh, and in rocket engines and in race cars).

**Chlorofluorocarbons (CFC)**

CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane ($C_2H_6$) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the Earth's surface). CFCs have no natural source, but were first synthesized in 1928. It was used for refrigerants, aerosol propellants, and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken and in 1989 the European Community agreed to ban CFCs by 2000 and subsequent treaties banned CFCs worldwide by 2010. This effort was extremely successful, and the levels of the major CFCs are now remaining level or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years.

**Hydrofluorocarbons (HFC)**

HFCs are synthetic man-made chemicals that are used as a substitute for CFCs. Out of all the GHGs, they are one of three groups with the highest global warming potential. The HFCs with the largest measured atmospheric abundances are (in order), HFC-23 ($CHF_3$), HFC-134a ($CF_3CH_2F$), and HFC-152a ($CH_3CHF_2$). Prior to 1990, the only significant emissions were HFC-23. HFC-134a use is increasing due to its use as a refrigerant. Concentrations of HFC-23 and HFC-134a in the atmosphere are now about 10 parts per trillion (ppt) each. Concentrations of HFC-152a are about 1 ppt. HFCs are manmade for applications such as automobile air conditioners and refrigerants.

**Perfluorocarbons (PFC)**

PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above Earth's surface are able to destroy the compounds. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane ($CF_4$) and hexafluoroethane ($C_2F_6$). Concentrations of $CF_4$ in the atmosphere are over 70 ppt. The two main sources of PFCs are primary aluminum production and semiconductor manufacturing.

**Sulfur Hexafluoride ($SF_6$)**

$SF_6$ is an inorganic, odorless, colorless, nontoxic, nonflammable gas. $SF_6$ has the highest global warming potential of any gas evaluated; 23,900 times that of $CO_2$. Concentrations in the 1990s were about 4 ppt. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

**Aerosols**

Aerosols are particles emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light. Cloud formation can also be affected by aerosols. Sulfate aerosols are emitted when fuel containing sulfur is burned. Black carbon (or soot) is emitted during biomass burning due to the incomplete combustion of fossil fuels. Particulate matter regulation has been lowering aerosol concentrations in the United States; however, global concentrations are likely increasing.

**Global Warming Potential**

The Global Warming Potential (GWP) was developed to allow comparisons of the global warming impacts of different gases. Specifically, it is a measure of how much energy the emissions of 1 ton of a gas will absorb over a given period of time, relative to the emissions of 1 ton of carbon dioxide ($CO_2$). The larger the GWP, the more that a given gas warms the Earth compared to $CO_2$ over that time period. The time period usually used for GWPs is 100 years. GWPs provide a common unit of measure, which allows analysts to add up emissions estimates of different gases (e.g., to compile a national GHG inventory), and allows policymakers to compare emissions reduction opportunities across sectors and gases. A summary of the atmospheric lifetime and the global warming potential of selected gases are summarized in Table 10. As shown in Table 10, the global warming potential of GHGs ranges from 1 to 22,800.

**Table 10**
**Global Warming Potentials and Atmospheric Lifetimes**

| Gas | Atmospheric Lifetime | (100 Year Horizon) |
|---|---|---|
| Carbon Dioxide ($CO_2$) | -- [2] | 1 |
| Methane ($CH_4$) | 12 | 28-36 |
| Nitrous Oxide (NO) | 114 | 298 |
| Hydrofluorocarbons (HFCs) | 1-270 | 12-14,800 |
| Perfluorocarbons (PFCs) | 2,600-50,000 | 7,390-12,200 |
| Nitrogen trifluoride ($NF_3$) | 740 | 17,200 |
| Sulfur Hexafluoride ($SF_6$) | 3,200 | 22,800 |

Notes:

Source: http://www3.epa.gov/climatechange/ghgemissions/gases.html

(1) Compared to the same quantity of $CO_2$ emissions.

(2) Carbon dioxide's lifetime is poorly defined because the gas is not destroyed over time, but instead moves among different parts of the ocean–atmosphere–land system. Some of the excess carbon dioxide will be absorbed quickly (for example, by the ocean surface), but some will remain in the atmosphere for thousands of years, due in part to the very slow process by which carbon is transferred to ocean sediments.

## GREENHOUSE GAS STANDARDS AND REGULATION

### International

*Montreal Protocol*

In 1988, the United Nations established the Intergovernmental Panel on Climate Change (IPCC) to evaluate the impacts of global climate change and to develop strategies that nations could implement to curtail global climate change. In 1992, the United States joined other countries around the world in signing the United Nations' Framework Convention on Climate Change (UNFCCC) agreement with the goal of controlling GHG emissions. As a result, the Climate Change Action Plan was developed to address the reduction of GHGs in the United States. The plan consists of more than 50 voluntary programs.

Additionally, the Montreal Protocol was originally signed in 1987 and substantially amended in 1990 and 1992. The Montreal Protocol stipulates that the production and consumption of compounds that deplete ozone in the stratosphere—CFCs, halons, carbon tetrachloride, and methyl chloroform—were to be phased out, with the first three by the year 2000 and methyl chloroform by 2005.

*The Paris Agreement*

The Paris Agreement became effective on November 4, 2016. Thirty days after this date at least 55 Parties to the United Nations Framework Convention on Climate Change (Convention), accounting in total for at least an estimated 55 % of the total global greenhouse gas emissions, had deposited their instruments of ratification, acceptance, approval or accession with the Depositary.

The Paris Agreement built upon the Convention and – for the first time – attempted to bring all nations into a common cause to undertake ambitious efforts to combat climate change and adapt to its effects, with enhanced support to assist developing countries to do so. As such, it charts a new course in the global climate effort.

The Paris Agreement's central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Additionally, the agreement aims to strengthen the ability of countries to deal with the impacts of climate change. To reach these ambitious goals, appropriate financial flows, a new technology framework and an enhanced capacity building framework will be put in place, thus supporting action by developing countries and the most vulnerable countries, in line with their own national objectives. The Agreement also provides for enhanced transparency of action and support through a more robust transparency framework.

### Federal

The United States Environmental Protection Agency (USEPA) is responsible for implementing federal policy to address GHGs. The federal government administers a wide array of public-private partnerships to reduce the GHG intensity generated in the United States. These programs focus on energy efficiency, renewable energy, methane and other non-CO2 gases, agricultural practices, and implementation of technologies to achieve GHG reductions. The USEPA implements numerous voluntary programs that contribute to the reduction of GHG emissions. These programs (e.g., the ENERGY STAR labeling system for energy-efficient products) play a significant role in encouraging voluntary reductions from large corporations, consumers, industrial and commercial buildings, and many major industrial sectors.

In Massachusetts v. Environmental Protection Agency (Docket No. 05–1120), argued November 29, 2006 and decided April 2, 2007, the U.S. Supreme Court held that not only did the EPA have authority to regulate greenhouse gases, but the EPA's reasons for not regulating this area did not fit the statutory requirements. As

such, the U.S. Supreme Court ruled that the EPA should be required to regulate $CO_2$ and other greenhouse gases as pollutants under the federal Clean Air Act (CAA).

In response to the FY2008 Consolidations Appropriations Act (H.R. 2764; Public Law 110-161), EPA proposed a rule on March 10, 2009 that requires mandatory reporting of GHG emissions from large sources in the United States. On September 22, 2009, the Final Mandatory Reporting of GHG Rule was signed and published in the Federal Register on October 30, 2009. The rule became effective on December 29, 2009. This rule requires suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions to submit annual reports to EPA.

On December 7, 2009, the EPA Administrator signed two distinct findings under section 202(a) of the Clean Air Act. One is an endangerment finding that finds concentrations of the six GHGs in the atmosphere threaten the public health and welfare of current and future generations. The other is a cause or contribute finding, that finds emissions from new motor vehicles and new motor vehicle engines contribute to the GHG pollution which threatens public health and welfare. These actions will not themselves impose any requirements on industry or other entities. However, it is a prerequisite to finalizing the EPA's proposed GHG emission standards for light-duty vehicles, which were jointly proposed by the EPA and Department of Transportation on September 15, 2009.

*Clean Air Act*

In Massachusetts v. Environmental Protection Agency (Docket No. 05–1120), the U.S. Supreme Court held in April of 2007 that the USEPA has statutory authority under Section 202 of the federal Clean Air Act (CAA) to regulate GHGs. The court did not hold that the USEPA was required to regulate GHG emissions; however, it indicated that the agency must decide whether GHGs cause or contribute to air pollution that is reasonably anticipated to endanger public health or welfare. On December 7, 2009, the USEPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the CAA. The USEPA adopted a Final Endangerment finding for the six defined GHGs ($CO_2$, $CH_4$, $N_2O$, HFCs, PFCs, and $SF_6$) on December 7, 2009. The Endangerment Finding is required before USEPA can regulate GHG emissions under Section 202(a)(1) of the CAA consistently with the United States Supreme Court decision. The USEPA also adopted a Cause or Contribute Finding in which the USEPA Administrator found that GHG emissions from new motor vehicle and motor vehicle engines are contributing to air pollution, which is endangering public health and welfare. These findings do not, by themselves, impose any requirements on industry or other entities. However, these actions were a prerequisite for implementing GHG emissions standards for vehicles.

*Energy Independence Security Act*

The Energy Independence and Security Act of 2007 (EISA) facilitates the reduction of national GHG emissions by requiring the following:

- Increasing the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) that requires fuel producers to use at least 36 billion gallons of biofuel in 2022;
- Prescribing or revising standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances;
- Requiring approximately 25 percent greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014; requiring approximately 200 percent greater efficiency for light bulbs, or similar energy savings, by 2020; and
- While superseded by the USEPA and NHTSA actions described above, (i) establishing miles per gallon targets for cars and light trucks and (ii) directing the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for trucks.

Additional provisions of EISA address energy savings in government and public institutions, promote research for alternative energy, additional research in carbon capture, international energy programs, and the creation of green jobs.[13]

*Executive Order 13432*

In response to the Massachusetts v. Environmental Protection Agency ruling, the President signed Executive Order 13432 on May 14, 2007, directing the USEPA, along with the Departments of Transportation, Energy, and Agriculture, to initiate a regulatory process that responds to the Supreme Court's decision. Executive Order 13432 was codified into law by the 2009 Omnibus Appropriations Law signed on February 17, 2009. The order sets goals in the areas of energy efficiency, acquisition, renewable energy, toxics reductions, recycling, sustainable buildings, electronics stewardship, fleets, and water conservation. Light-Duty Vehicle Greenhouse Gas and Corporate Average Fuel Economy Standards.

On May 19, 2009, President Obama announced a national policy for fuel efficiency and emissions standards in the United States auto industry. The adopted federal standard applies to passenger cars and light-duty trucks for model years 2012 through 2016. The rule surpasses the prior Corporate Average Fuel Economy standards (CAFE)[14] and requires an average fuel economy standard of 35.5 miles per gallon (mpg) and 250 grams of CO2 per mile by model year 2016, based on USEPA calculation methods. These standards were formally adopted on April 1, 2010. In August 2012, standards were adopted for model year 2017 through 2025 for passenger cars and light-duty trucks. By 2025, vehicles are required to achieve 54.5 mpg (if GHG reductions are achieved exclusively through fuel economy improvements) and 163 grams of CO2 per mile. According to the USEPA, a model year 2025 vehicle would emit one-half of the GHG emissions from a model year 2010 vehicle.[15] In 2017, the USEPA recommended no change to the GHG standards for light-duty vehicles for model years 2022-2025.

Issued by NHTSA and EPA in March 2020 (published on April 30, 2020 and effective after June 29, 2020), the Safer Affordable Fuel-Efficient Vehicles Rule would maintain the CAFE and CO2 standards applicable in model year 2020 for model years 2021 through 2026. The estimated CAFE and CO2 standards for model year 2020 are 43.7 mpg and 204 grams of CO2 per mile for passenger cars and 31.3 mpg and 284 grams of CO2 per mile for light trucks, projecting an overall industry average of 37 mpg, as compared to 46.7 mpg under the standards issued in 2012. This Rule also excludes CO2- equivalent emission improvements associated with air conditioning refrigerants and leakage (and, optionally, offsets for nitrous oxide and methane emissions) after model year 2020.[16]

## State of California

*California Air Resources Board*

CARB, a part of the California Environmental Protection Agency (CalEPA), is responsible for the coordination and administration of both federal and state air pollution control programs within California. In this capacity,

[13] A green job, as defined by the United States Department of Labor, is a job in business that produces goods or provides services that benefit the environment or conserve natural resources.

[14] The Corporate Average Fuel Economy standards are regulations in the United States, first enacted by Congress in 1975, to improve the average fuel economy of cars and light trucks. The U.S Department of Transportation has delegated the National Highway Traffic Safety Administration as the regulatory agency for the Corporate Average Fuel Economy standards.

[15] United States Environmental Protection Agency, EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks, August 2012, https://nepis.epa.gov/Exe/ZyPDF.cgi/P100EZ7C.PDF?Dockey=P100EZ7C.PDF.

[16] National Highway Traffic Safety Administration (NHTSA) and U.S. Environmental Protection Agency (USEPA), 2018. Federal Register / Vol. 83, No. 165 / Friday, August 24, 2018 / Proposed Rules, The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks 2018. Available at: https://www.gpo.gov/fdsys/pkg/FR-2018-08-24/pdf/2018-16820.pdf.

CARB conducts research, sets state ambient air quality standards (California Ambient Air Quality Standards [CAAQS]), compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

In 2004, the California Air Resources Board (CARB) adopted an Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other toxic air contaminants (Title 13 California Code of Regulations [CCR], Section 2485). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure generally does not allow diesel-fueled commercial vehicles to idle for more than 5 minutes at any given location with certain exemptions for equipment in which idling is a necessary function such as concrete trucks. While this measure primarily targets diesel particulate matter emissions, it has co-benefits of minimizing GHG emissions from unnecessary truck idling.

In 2008, CARB approved the Truck and Bus regulation to reduce particulate matter and nitrogen oxide emissions from existing diesel vehicles operating in California (13 CCR, Section 2025, subsection (h)). CARB has also promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower such as bulldozers, loaders, backhoes and forklifts, as well as many other self-propelled off-road diesel vehicles. The regulation, adopted by the CARB on July 26, 2007, aims to reduce emissions by installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models. While these regulations primarily target reductions in criteria air pollutant emission, they have co-benefits of minimizing GHG emissions due to improved engine efficiencies.

The State currently has no regulations that establish ambient air quality standards for GHGs. However, the State has passed laws directing CARB to develop actions to reduce GHG emissions, which are listed below.

*Assembly Bill 1493*

California Assembly Bill 1493 enacted on July 22, 2002, required the CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. In 2005, the CARB submitted a "waiver" request to the EPA from a portion of the federal Clean Air Act in order to allow the State to set more stringent tailpipe emission standards for $CO_2$ and other GHG emissions from passenger vehicles and light duty trucks. On December 19, 2007 the EPA announced that it denied the "waiver" request. On January 21, 2009, CARB submitted a letter to the EPA administrator regarding the State's request to reconsider the waiver denial. The EPA approved the waiver on June 30, 2009.

*Executive Order S-3-05*

The California Governor issued Executive Order S-3-05, GHG Emission, in June 2005, which established the following reduction targets:

- By 2010, California shall reduce GHG emissions to 2000 levels;
- By 2020, California shall reduce GHG emissions to 1990 levels; and
- By 2050, California shall reduce GHG emissions to 80 percent below 1990 levels.

The Executive Order directed the secretary of the California Environmental Protection Agency (CalEPA) to coordinate a multi-agency effort to reduce GHG emissions to the target levels. To comply with the Executive Order, the secretary of CalEPA created the California Climate Action Team (CAT), made up of members from various state agencies and commissions. The team released its first report in March 2006. The report proposed

to achieve the targets by building on the voluntary actions of businesses, local governments, and communities and through State incentive and regulatory programs.

*Assembly Bill 32 (California Health and Safety Code, Division 25.5 – California Global Warming Solutions Act of 2006)*

In 2006, the California State Legislature adopted Assembly Bill (AB) 32 (codified in the California Health and Safety Code [HSC], Division 25.5 – California Global Warming Solutions Act of 2006), which focuses on reducing GHG emissions in California to 1990 levels by 2020. HSC Division 25.5 defines GHGs as CO2, CH4, N2O, HFCs, PFCs, and SF6 and represents the first enforceable statewide program to limit emissions of these GHGs from all major industries with penalties for noncompliance. The law further requires that reduction measures be technologically feasible and cost effective. Under HSC Division 25.5, CARB has the primary responsibility for reducing GHG emissions. CARB is required to adopt rules and regulations directing state actions that would achieve GHG emissions reductions equivalent to 1990 statewide levels by 2020.

*Senate Bill 32 and Assembly Bill 197*

In 2016, the California State Legislature adopted Senate Bill (SB) 32 and its companion bill AB 197, and both were signed by Governor Brown. SB 32 and AB 197 amends HSC Division 25.5 and establishes a new climate pollution reduction target of 40 percent below 1990 levels by 2030 and includes provisions to ensure the benefits of state climate policies reach into disadvantaged communities.

*Climate Change Scoping Plan (2008)*

A specific requirement of AB 32 was to prepare a Climate Change Scoping Plan for achieving the maximum technologically feasible and cost-effective GHG emission reduction by 2020 (Health and Safety Code section 38561 (h)). CARB developed an AB 32 Scoping Plan that contains strategies to achieve the 2020 emissions cap. The initial Scoping Plan was approved in 2008 and contains a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs calculated to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the State's long-range climate objectives.

As required by HSC Division 25.5, CARB approved the 1990 GHG emissions inventory, thereby establishing the emissions limit for 2020. The 2020 emissions limit was originally set at 427 $MMTCO_2e$ using the GWP values from the IPCC SAR. CARB also projected the state's 2020 GHG emissions under no-action-taken (NAT) conditions – that is, emissions that would occur without any plans, policies, or regulations to reduce GHG emissions. CARB originally used an average of the state's GHG emissions from 2002 through 2004 and projected the 2020 levels at approximately 596 $MMTCO_2e$ (using GWP values from the IPCC SAR). Therefore, under the original projections, the state must reduce its 2020 NAT emissions by 28.4 percent in order to meet the 1990 target of 427 $MMTCO_2e$.

*First Update to the Climate Change Scoping Plan (2014)*

The First Update to the Scoping Plan was approved by CARB in May 2014 and builds upon the initial Scoping Plan with new strategies and recommendations. In 2014, CARB revised the target using the GWP values from the IPCC AR4 and determined that the 1990 GHG emissions inventory and 2020 GHG emissions limit is 431 $MMTCO_2e$. CARB also updated the State's 2020 NAT emissions estimate to account for the effect of the 2007–2009 economic recession, new estimates for future fuel and energy demand, and the reductions required by regulation that were recently adopted for motor vehicles and renewable energy. CARB's projected statewide 2020 emissions estimate using the GWP values from the IPCC AR4 is 509.4 $MMTCO_2e$.

*2017 Climate Change Scoping Plan*

In response to the 2030 GHG reduction target, CARB adopted the 2017 Climate Change Scoping Plan at a public meeting held in December 2017. The 2017 Scoping Plan outlines the strategies the State will implement to achieve the 2030 GHG reduction target of 40 percent below 1990 levels. The 2017 Scoping Plan also addresses GHG emissions from natural and working lands of California, including the agriculture and forestry sectors. The 2017 Scoping Plan considered the Scoping Plan Scenario and four alternatives for achieving the required GHG reductions but ultimately selected the Scoping Plan Scenario.

CARB states that the Scoping Plan Scenario "is the best choice to achieve the State's climate and clean air goals."[17] Under the Scoping Plan Scenario, the majority of the reductions would result from the continuation of the Cap-and-Trade regulation. Additional reductions are achieved from electricity sector standards (i.e., utility providers to supply at least 50 percent renewable electricity by 2030), doubling the energy efficiency savings at end uses, additional reductions from the LCFS, implementing the short-lived GHG strategy (e.g., hydrofluorocarbons), and implementing the mobile source strategy and sustainable freight action plan. The alternatives were designed to consider various combinations of these programs, as well as consideration of a carbon tax in the event the Cap-and-Trade regulation is not continued. However, in July 2017, the California Legislature voted to extend the Cap-and-Trade regulation to 2030. Implementing this Scoping Plan will ensure that California's climate actions continue to promote innovation, drive the generation of new jobs, and achieve continued reductions of smog and air toxics. The ambitious approach draws on a decade of successful programs that address the major sources of climate-changing gases in every sector of the economy:

- More Clean Cars and Trucks: The plan sets out far-reaching programs to incentivize the sale of millions of zero-emission vehicles, drive the deployment of zero-emission trucks, and shift to a cleaner system of handling freight statewide.
- Increased Renewable Energy: California's electric utilities are ahead of schedule meeting the requirement that 33 percent of electricity come from renewable sources by 2020. The Scoping Plan guides utilities to 50 percent renewables, as required under SB 350.
- Slashing Super-Pollutants: The plan calls for a significant cut in super-pollutants such as methane and HFC refrigerants, which are responsible for as much as 40 percent of global warming.
- Cleaner Industry and Electricity: California's renewed cap-and-trade program extends the declining cap on emissions from utilities and industries and the carbon allowance auctions. The auctions will continue to fund investments in clean energy and efficiency, particularly in disadvantaged communities.
- Cleaner Fuels: The Low Carbon Fuel Standard will drive further development of cleaner, renewable transportation fuels to replace fossil fuels.
- Smart Community Planning: Local communities will continue developing plans which will further link transportation and housing policies to create sustainable communities.
- Improved Agriculture and Forests: The Scoping Plan also outlines innovative programs to account for and reduce emissions from agriculture, as well as forests and other natural lands.

The 2017 Scoping Plan also evaluates reductions of smog-causing pollutants through California's climate programs.

*2022 Climate Change Scoping Plan*

CARB adopted the 2022 Scoping Plan for Achieving Carbon Neutrality on November 16, 2022. The 2022 Scoping Plan lays out the sector-by-sector roadmap for California, the world's fifth largest economy, to achieve

[17] California Air Resources Board, California's 2017 Climate Change Scoping Plan, November 2017, https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf

carbon neutrality by 2045 or earlier, outlining a technologically feasible, cost-effective, and equity-focused path to achieve the state's climate target. The Plan addresses recent legislation and direction from Governor Newsom and extends and expands upon earlier plans with a target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045. The plan also takes the unprecedented step of adding carbon neutrality as a science-based guide and touchstone for California's climate work. Specifically, this plan:

- Identifies a path to keep California on track to meet its SB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030.
- Identifies a technologically feasible, cost-effective path to achieve carbon neutrality by 2045 and a reduction in anthropogenic emissions by 85 percent below 1990 levels.
- Focuses on strategies for reducing California's dependency on petroleum to provide consumers with clean energy options that address climate change, improve air quality, and support economic growth and clean sector jobs.
- Integrates equity and protecting California's most impacted communities as driving principles throughout the document.
- Incorporates the contribution of natural and working lands (NWL) to the state's GHG emissions, as well as their role in achieving carbon neutrality.
- Relies on the most up-to-date science, including the need to deploy all viable tools to address the existential threat that climate change presents, including carbon capture and sequestration, as well as direct air capture.
- Evaluates the substantial health and economic benefits of taking action.
- Identifies key implementation actions to ensure success.

*SB 32, Pavley. California Global Warming Solutions Act of 2006*

(1) The California Global Warming Solutions Act of 2006 designates the State Air Resources Board as the state agency charged with monitoring and regulating sources of emissions of greenhouse gases. The state board is required to approve a statewide greenhouse gas emissions limit equivalent to the statewide greenhouse gas emissions level in 1990 to be achieved by 2020 and to adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective greenhouse gas emissions reductions. This bill would require the state board to ensure that statewide greenhouse gas emissions are reduced to 40% below the 1990 level by 2030.
(2) This bill would become operative only if AB 197 of the 2015–16 Regular Session is enacted and becomes effective on or before January 1, 2017. AB 197 requires that the California Air Resources Board, which directs implementation of emission-reduction programs, should target direct reductions at both stationary and mobile sources. AB 197 of the 2015-2016 Regular Session was approved on September 8, 2016.

*Executive Order S-1-07*

Executive Order S-1-07 was issued in 2007 and proclaims that the transportation sector is the main source of GHG emissions in the State, since it generates more than 40 percent of the State's GHG emissions. It establishes a goal to reduce the carbon intensity of transportation fuels sold in the State by at least ten percent by 2020. This Order also directs the CARB to determine whether this Low Carbon Fuel Standard (LCFS) could be adopted as a discrete early-action measure as part of the effort to meet the mandates in AB 32.

On April 23, 2009, the CARB approved the proposed regulation to implement the low carbon fuel standard. The low carbon fuel standard is anticipated to reduce GHG emissions by about 16 MMT per year by 2020. The low carbon fuel standard is designed to provide a framework that uses market mechanisms to spur the steady introduction of lower carbon fuels. The framework establishes performance standards that fuel

producers and importers must meet each year beginning in 2011. Separate standards are established for gasoline and diesel fuels and the alternative fuels that can replace each. The standards are "back-loaded", with more reductions required in the last five years, than during the first five years. This schedule allows for the development of advanced fuels that are lower in carbon than today's fuels and the market penetration of plug-in hybrid electric vehicles, battery electric vehicles, fuel cell vehicles, and flexible fuel vehicles. It is anticipated that compliance with the low carbon fuel standard will be based on a combination of both lower carbon fuels and more efficient vehicles.

Reformulated gasoline mixed with corn-derived ethanol at ten percent by volume and low sulfur diesel fuel represent the baseline fuels. Lower carbon fuels may be ethanol, biodiesel, renewable diesel, or blends of these fuels with gasoline or diesel as appropriate. Compressed natural gas and liquefied natural gas also may be low carbon fuels. Hydrogen and electricity, when used in fuel cells or electric vehicles are also considered as low carbon fuels for the low carbon fuel standard.

*Senate Bill 97*

Senate Bill 97 (SB 97) was adopted August 2007 and acknowledges that climate change is a prominent environmental issue that requires analysis under CEQA. SB 97 directed the Governor's Office of Planning and Research (OPR), which is part of the State Natural Resources Agency, to prepare, develop, and transmit to the CARB guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA, by July 1, 2009. The Natural Resources Agency was required to certify and adopt those guidelines by January 1, 2010.

Pursuant to the requirements of SB 97 as stated above, on December 30, 2009, the Natural Resources Agency adopted amendments to the state CEQA guidelines that address GHG emissions. The CEQA Guidelines Amendments changed 14 sections of the CEQA Guidelines and incorporate GHG language throughout the Guidelines. However, no GHG emissions thresholds of significance were provided and no specific mitigation measures were identified. The GHG emission reduction amendments went into effect on March 18, 2010, and are summarized below:

- Climate action plans and other greenhouse gas reduction plans can be used to determine whether a project has significant impacts, based upon its compliance with the plan.
- Local governments are encouraged to quantify the greenhouse gas emissions of proposed projects, noting that they have the freedom to select the models and methodologies that best meet their needs and circumstances. The section also recommends consideration of several qualitative factors that may be used in the determination of significance, such as the extent to which the given project complies with state, regional, or local GHG reduction plans and policies. OPR does not set or dictate specific thresholds of significance. Consistent with existing CEQA Guidelines, OPR encourages local governments to develop and publish their own thresholds of significance for GHG impacts assessment.
- When creating their own thresholds of significance, local governments may consider the thresholds of significance adopted or recommended by other public agencies, or recommended by experts.
- New amendments include guidelines for determining methods to mitigate the effects of greenhouse gas emissions in Appendix F of the CEQA Guidelines.
- OPR is clear to state that "to qualify as mitigation, specific measures from an existing plan must be identified and incorporated into the project; general compliance with a plan, by itself, is not mitigation".
- OPR's emphasizes the advantages of analyzing GHG impacts on an institutional, programmatic level. OPR therefore approves tiering of environmental analyses and highlights some benefits of such an approach.
- Environmental impact reports (EIRs) must specifically consider a project's energy use and energy efficiency potential.

*Senate Bill 100*

Senate Bill 100 (SB 100) requires 100 percent of total retail sales of electricity in California to come from eligible renewable energy resources and zero-carbon resources by December 31, 2045. SB 100 was adopted September 2018.

The interim thresholds from prior Senate Bills and Executive Orders would also remain in effect. These include Senate Bill 1078 (SB 1078), which requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. Senate Bill 107 (SB 107) which changed the target date to 2010. Executive Order S-14-08, which was signed on November 2008 and expanded the State's Renewable Energy Standard to 33 percent renewable energy by 2020. Executive Order S-21-09 directed the CARB to adopt regulations by July 31, 2010 to enforce S-14-08. Senate Bill X1-2 codifies the 33 percent renewable energy requirement by 2020.

*Senate Bill 375*

Senate Bill 375 (SB 375) was adopted September 2008 and aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPO) to adopt a sustainable communities strategy (SCS) or alternate planning strategy (APS) that will prescribe land use allocation in that MPOs Regional Transportation Plan (RTP). The CARB, in consultation with each MPO, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. The CARB is also charged with reviewing each MPO's sustainable communities strategy or alternate planning strategy for consistency with its assigned targets.

The proposed project is located within the Southern California Association of Governments (SCAG) jurisdiction, which has authority to develop the SCS or APS. For the SCAG region, the targets set by the CARB are at eight percent below 2005 per capita GHG emissions levels by 2020 and 19 percent below 2005 per capita GHG emissions levels by 2035. These reduction targets became effective October 2018.

*Senate Bill X7-7*

Senate Bill X7-7 (SB X7-7), enacted on November 9, 2009, mandates water conservation targets and efficiency improvements for urban and agricultural water suppliers. SB X7-7 requires the Department of Water Resources (DWR) to develop a task force and technical panel to develop alternative best management practices for the water sector. In addition, SB X7-7 required the DWR to develop criteria for baseline uses for residential, commercial, and industrial uses for both indoor and landscaped area uses. The DWR was also required to develop targets and regulations that achieve a statewide 20 percent reduction in water usage.

*Assembly Bill 939 and Senate Bill 1374*

Assembly Bill 939 (AB 939) requires that each jurisdiction in California to divert at least 50 percent of its waste away from landfills, whether through waste reduction, recycling or other means. Senate Bill 1374 (SB 1374) requires the California Integrated Waste Management Board to adopt a model ordinance by March 1, 2004, suitable for adoption by any local agency to require 50 to 75 percent diversion of construction and demolition of waste materials from landfills.

*California Code of Regulations (CCR) Title 24, Part 6*

CCR Title 24, Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24) were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new

energy efficiency technologies and methods. Although it was not originally intended to reduce GHG emissions, electricity production by fossil fuels results in GHG emissions and energy efficient buildings require less electricity. Therefore, increased energy efficiency results in decreased GHG emissions.

The Energy Commission adopted 2008 Standards on April 23, 2008, and Building Standards Commission approved them for publication on September 11, 2008. These updates became effective on August 1, 2009. 2013 Standards were approved and have been effective since July 1, 2014. 2016 Standards were adopted January 1, 2017. 2019 standards were published July 1, 2019 and became effective January 1, 2020. The 2016 residential standards were estimated to be approximately 28 percent more efficient than the 2013 standards, whereas the 2019 residential standards are estimated to be approximately 7 percent more efficient than the 2016 standards. Furthermore, once rooftop solar electricity generation is factored in, 2019 residential standards are estimated to be approximately 53 percent more efficient than the 2016 standards. Under the 2019 standards, nonresidential buildings are estimated to be approximately 30 percent more efficient than the 2016 standards. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases greenhouse gas emissions.

Per Section 100 Scope, the 2019 Title 24, Part 6 Building Code now requires healthcare facilities, such as assisted living facilities, hospitals, and nursing homes, to meet documentation requirements of Title 24, Part 1 Chapter 7 – Safety Standards for Health Facilities. A healthcare facility is defined as any building or portion thereof licensed pursuant to California Health and Safety Code Division 2, Chapter 1, Section 1204 or Chapter 2, Section 1250.

Section 120.1 Ventilation and Indoor Air Quality included both additions and revisions in the 2019 Code. This section now requires nonresidential and hotel/motel buildings to have air filtration systems that use forced air ducts to supply air to occupiable spaces to have air filters. Further, the air filter efficiency must be either MERV 13 or use a particle size efficiency rating specific in the Energy Code AND be equipped with air filters with a minimum 2-inch depth or minimum 1-inch depth if sized according to the equation 120.1-A. If natural ventilation is to be used the space must also use mechanical unless ventilation openings are either permanently open or controlled to stay open during occupied times. The 2019 version of the Code also completely revised the minimum ventilation requirements including DVC airflow rates within Section 120.1 Table 120.1–A. Table 120.1-A now includes air classification and recirculation limitations, these are based on either the number of occupants or the CFM/$ft^2$ (cubic feet per minute per square foot), whichever is greater.

Section 120.1 Ventilation and Indoor Air Quality also included additions for high-rise residential buildings. Requirements include that mechanical systems must provide air filters that and that air filters must be MERV 13 or use a particle size efficiency rating specified in the Energy Code. Window operation is no longer a method allowed to meet ventilation requirements, continuous operation of central forced air system handlers used in central fan integrated ventilation system is not a permissible method of providing the dwelling unit ventilation airflow, and central ventilation systems that serve multiple dwelling units must be balanced to provide ventilation airflow to each dwelling unit. In addition, requirements for kitchen range hoods were also provided in the updated Section 120.1.

Per Section 120.1(a) healthcare facilities must be ventilated in accordance with Chapter 4 of the California Mechanical Code and are NOT required to meet the ventilations requirements of Title 24, Part 6.

Section 140.4 Space Conditioning Systems included both additions and revisions within the 2019 Code. The changes provided new requirements for cooling tower efficiency, new chilled water-cooling system requirements, as well as new formulas for calculating allowed fan power. Section 140.4(n) also provide a new exception for mechanical system shut-offs for high-rise multifamily dwelling units, while Section 140.4(o) added new requirements for conditioned supply air being delivered to space with mechanical exhaust.

Section 120.6 Covered Processes added information in regards to adiabatic chiller requirements that included that all condenser fans for air-cooled converseness, evaporative-cooled condensers, adiabatic condensers, gas coolers, air or water fluid coolers or cooling towers must be continuously variable speed, with the speed of all

fans serving a common condenser high side controlled in unison .Further, the mid-condensing setpoint must be 70 degrees Fahrenheit for all of the above mentioned systems.

New regulations were also adopted under Section 130.1 Indoor Lighting Controls. These included new exceptions being added for restrooms, the exception for classrooms being removed, as well as exceptions in regard to sunlight provided through skylights and overhangs.

Section 130.2 Outdoor Lighting Controls and Equipment added automatic scheduling controls which included that outdoor lighting power must be reduced by 50 to 90 percent, turn the lighting off during unoccupied times and have at least two scheduling options for each luminaire independent from each other and with a 2-hour override function. Furthermore, motion sensing controls must have the ability to reduce power within 15 minutes of area being vacant and be able to come back on again when occupied. An exception allows for lighting subject to a health or life safety statute, ordinance, or regulation may have a minimum time-out period longer than 15 minutes or a minimum dimming level above 50% when necessary to comply with the applicable law.

The 2022 Building Energy Efficiency Standards became effective on January 1, 2023.[18] The core focus of the building standards has been efficiency, but the 2019 Energy Code ventured into onsite generation by requiring solar PV on new homes, providing significant GHG savings. The 2022 update builds off this progress with expanded solar standards and the move to onsite energy storage that will help Californians save on utility bills while bolstering the grid. The 2022 Energy Code update focuses on four key areas in new construction of homes and businesses:

- Encouraging electric heat pump technology and use, which consumes less energy and produces fewer emissions than traditional HVACs and water heaters.
- Establishing electric-ready requirements when natural gas is installed, which positions owners to use cleaner electric heating, cooking and electric vehicle (EV) charging options whenever they choose to adopt those technologies.
- Expanding solar photovoltaic (PV) system and battery storage standards to make clean energy available onsite and complement the state's progress toward a 100 percent clean electricity grid.
- Strengthening ventilation standards to improve indoor air quality.

The 2022 Energy Code affects homes by establishing energy budgets based on efficient heat pumps for space or water heating to encourage builders to install heat pumps over gas-fueled HVAC units; requiring homes to be electric-ready, with dedicated 240-volt outlets and space (with plumbing for water heaters) so electric appliances can eventually replace installed gas appliances; increasing minimum kitchen ventilation requirements so that fans over cooktops have higher airflow or capture efficiency to better exhaust pollution from gas cooking and improve indoor air quality; and allowing exceptions to existing solar PV standards when roof area is not available (such as for smaller homes). In addition, the effect on businesses includes establishing combined solar PV and battery standards for select businesses with systems being sized to maximize onsite use of solar energy and avoid electricity demand during times when the grid must use gas-powered plants; establishing new efficiency standards for commercial greenhouses (primarily cannabis growing); and improving efficiency standards for building envelope, various internal systems, and grid integration equipment, such as demand-responsive controls to buoy grid stability.[19,20]

[18] California Energy Commission (CEC). 2022. Building Energy Efficiency Standards. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency.

[19] https://www.lightnowblog.com/2021/08/california-energy-commission-adopts-2022-building-energy-efficiency-standards/

[20] State of California Energy Commission. 2022 Building Energy Efficiency Standards Summary. https://www.energy.ca.gov/sites/default/files/2021-08/CEC_2022_EnergyCodeUpdateSummary_ADA.pdf

*California Code of Regulations (CCR) Title 24, Part 11 (California Green Building Standards)*

On January 12, 2010, the State Building Standards Commission unanimously adopted updates to the California Green Building Standards Code, which went into effect on January 1, 2011. The 2016 version of the California Green Building Standards became effective January 1, 2017.

2016 CALGreen Code: The 2016 residential standards were estimated to be approximately 28 percent more efficient than the 2013 standards. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases greenhouse gas emissions. During the 2016-2017 fiscal year, the Department of Housing and Community Development (HCD) updated CALGreen through the 2015 Triennial Code Adoption Cycle.

HCD also increased the required construction waste reduction from 50 percent to 65 percent of the total building site waste. This increase aids in meeting CalRecycle's statewide solid waste recycling goal of 75 percent for 2020 as stated in Chapter 476, Statutes of 2011 (AB 341). HCD adopted new regulations requiring recycling areas for multifamily projects of five or more dwelling units. This regulation requires developers to provide readily accessible areas adequate in size to accommodate containers for depositing, storage and collection of non-hazardous materials (including organic waste) for recycling. This requirement assists businesses that were required as of April 1, 2016, to meet the requirements of Chapter 727, Statutes of 2014 (AB 1826).

HCD adopted new regulations to require information on photovoltaic systems and electric vehicle chargers to be included in operation and maintenance manuals. Currently, CALGreen section 4.410.1 Item 2(a) requires operation and maintenance instructions for equipment and appliances. Photovoltaic systems and electric vehicle chargers are systems that play an important role in many households in California, and their importance is increasing every day. HCD incorporated these two terms in the existing language in order to provide clarity to code users as to additional systems requiring operation and maintenance instructions.

HCD updated the reference to Clean Air Standards of the United States Environmental Protection Agency applicable to woodstoves and pellet stoves. HCD also adopted a new requirement for woodstoves and pellet stoves to have a permanent label indicating they are certified to meet the emission limits. This requirement provides clarity to the code user and is consistent with the United States Environmental Protection Agency's New Source Performance Standards. HCD updated the list of standards which can be used for verification of compliance for exterior grade composite wood products. This list now includes four standards from the Canadian Standards Association (CSA): CSA O121, CSA O151, CSA O153 and CSA O325. HCD updated heating and air-conditioning system design references to the ANSI/ACCA 2 Manual J, ANSI/ACCA 1 Manual D, and ANSI/ACCA 3 Manual S to the most recent versions approved by ANSI. HCD adopted a new elective measure for hot water recirculation systems for water conservation. The United States Department of Energy estimates that 3,600 to 12,000 gallons of water per year can be saved by the typical household (with four points of hot water use) if a hot water recirculation system is installed.

2019 CALGreen Code: During the 2019-2020 fiscal year, the Department of Housing and Community Development (HCD) updated CALGreen through the 2019 Triennial Code Adoption Cycle. The 2019 version of the California Green Building Standards became effective January 1, 2020.

HCD modified the best management practices for stormwater pollution prevention adding Section 5.106.2 for projects that disturb one or more acres of land. This section requires projects that disturb one acre or more of land or less than one acre of land but are part of a larger common plan of development or sale must comply with the post construction requirement detailed in the applicable National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities issued by the State Water Resources Control Board. The NPDES permits require post construction runoff (post-project hydrology) to match the preconstruction runoff pre-project hydrology) with installation of post construction stormwater management measures.

HCD added sections 5.106.4.1.3 and 5.106.4.1.5 in regard to bicycle parking. Section 5.106.4.1.3 requires new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5 percent of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility. In addition, Section 5.106.4.1.5 states that acceptable bicycle parking facility for Sections 5.106.4.1.2 through 5.106.4.1.4 shall be convenient from the street and shall meeting one of the following: (1) covered, lockable enclosures with permanently anchored racks for bicycles; (2) lockable bicycle rooms with permanently anchored racks; or (3) lockable, permanently anchored bicycle lockers.

HCD amended section 5.106.5.3.5 allowing future charging spaces to qualify as designated parking for clean air vehicles.

HCD updated section 5.303.3.3 in regard to showerhead flow rates. This update reduced the flow rate to 1.8 GPM.

HCD amended section 5.304.1 for outdoor potable water use in landscape areas and repealed sections 5.304.2 and 5.304.3. The update requires nonresidential developments to comply with a local water efficient landscape ordinance or the current California Department of Water Resource's' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent. Some updates were also made in regard to the outdoor potable water use in landscape areas for public schools and community colleges.

HCD updated Section 5.504.5.3 in regard to the use of MERV filters in mechanically ventilated buildings. This update changed the filter use from MERV 8 to MERV 13. MERV 13 filters are to be installed prior to occupancy, and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual.

The 2022 California Green Building Standards Code became effective on January 1, 2023.[21]

HCD amended Section 5.106.5.3 in regard to increasing the EV capable space percentages and adding a new requirement for installed Level 2 DCFC chargers.

HCD under Section 5.106.5.4 added new regulation for electric vehicle charging readiness requirements for new construction of warehouse, grocery stores, and retail stores with planned off-street loading spaces. [22]

*Executive Order B-30-15*

On April 29, 2015, Governor Brown issued Executive Order B-30-15. Therein, the Governor directed the following:

- Established a new interim statewide reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030.
- Ordered all state agencies with jurisdiction over sources of GHG emissions to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 reduction targets.
- Directed CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent.

[21] California Building Standards Commission (CBSC). 2022. California Green Building Standards. Website: https://codes.iccsafe.org/content/CAGBC2022P1.

[22] https://www.dgs.ca.gov/BSC/Resources/2022-Title-24-California-Code-Changes

*Executive Order B-29-15*

Executive Order B-29-15 mandates a statewide 25 percent reduction in potable water usage. EO B-29-15 signed into law on April 1, 2015.

*Executive Order B-37-16*

Executive Order B-37-16, continuing the State's adopted water reductions, was signed into law on May 9, 2016. The water reductions build off the mandatory 25 percent reduction called for in EO B-29-15.

*Executive Order N-79-20*

Executive Order N-79-20 Signed in September 2020, Executive Order N-79-20 establishes as a goal that where feasible, all new passenger cars and trucks, as well as all drayage/cargo trucks and off-road vehicles and equipment, sold in California, will be zero-emission by 2035. The executive order sets a similar goal requiring that all medium and heavy-duty vehicles will be zero-emission by 2045 where feasible. It also directs CARB to develop and propose rulemaking for passenger vehicles and trucks, medium-and heavy-duty fleets where feasible, drayage trucks, and off-road vehicles and equipment "requiring increasing volumes" of new zero emission vehicles (ZEVs) "towards the target of 100 percent." The executive order directs the California Environmental Protection Agency, the California Geologic Energy Management Division (CalGEM), and the California Natural Resources Agency to transition and repurpose oil production facilities with a goal toward meeting carbon neutrality by 2045. Executive Order N-79-20 builds upon the CARB Advanced Clean Trucks regulation, which was adopted by CARB in July 2020.

*SBX1 2*

Signed into law in April 2011, SBX1 2, requires one-third of the State's electricity to come from renewable sources. The legislation increases California's current 20 percent renewables portfolio standard target in 2010 to a 33 percent renewables portfolio standard by December 31, 2020.

*Senate Bill 350*

Signed into law October 7, 2015, SB 350 increases California's renewable electricity procurement goal from 33 percent by 2020 to 50 percent by 2030. This will increase the use of Renewables Portfolio Standard (RPS) eligible resources, including solar, wind, biomass, geothermal, and others. In addition, SB 350 requires the state to double statewide energy efficiency savings in electricity and natural gas end uses by 2030. To help ensure these goals are met and the greenhouse gas emission reductions are realized, large utilities will be required to develop and submit Integrated Resource Plans (IRPs). These IRPs will detail how each entity will meet their customers resource needs, reduce greenhouse gas emissions and ramp up the deployment of clean energy resources.

*Energy Sector and CEQA Guidelines Appendix F*

The CEC first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although not originally intended to reduce GHG emissions, increased energy efficiency and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically (typically every three years) to allow for the consideration and inclusion of new energy efficiency technologies and methods. The 2016 update to the Energy Efficiency Standards for Residential and Nonresidential Buildings focuses on several key areas to improve the energy efficiency of renovations and addition to existing buildings as well as newly constructed buildings and renovations and additions to existing buildings. The major efficiency

improvements to the residential Standards involve improvements for attics, walls, water heating, and lighting, whereas the major efficiency improvements to the nonresidential Standards include alignment with the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) 90.1-2013 national standards. Furthermore, the 2016 update required that enforcement agencies determine compliance with CCR, Title 24, Part 6 before issuing building permits for any construction.[23]

Part 11 of the Title 24 Building Energy Efficiency Standards is referred to as the California Green Building Standards (CALGreen) Code. The purpose of the CALGreen Code is to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality."[24] As of January 1, 2011, the CALGreen Code is mandatory for all new buildings constructed in the state. The CALGreen Code establishes mandatory measures for new residential and non-residential buildings. Such mandatory measures include energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality. The CALGreen Code was most recently updated in 2022 to include new mandatory measures for residential and nonresidential uses; the new measures took effect on January 1, 2023.

**Regional – South Coast Air Quality Management District**

The project is within the South Coast Air Basin, which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

*SCAQMD Regulation XXVII, Climate Change*

SCAQMD Regulation XXVII currently includes three rules:

- The purpose of Rule 2700 is to define terms and post global warming potentials.
- The purpose of Rule 2701, SoCal Climate Solutions Exchange, is to establish a voluntary program to encourage, quantify, and certify voluntary, high quality certified greenhouse gas emission reductions in the SCAQMD.
- Rule 2702, Greenhouse Gas Reduction Program, was adopted on February 6, 2009. The purpose of this rule is to create a Greenhouse Gas Reduction Program for greenhouse gas emission reductions in the SCAQMD. The SCAQMD will fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

A variety of agencies have developed greenhouse gas emission thresholds and/or have made recommendations for how to identify a threshold. However, the thresholds for projects in the jurisdiction of the SCAQMD remain in flux. The California Air Pollution Control Officers Association explored a variety of threshold approaches but did not recommend one approach (2008). The CARB recommended approaches for setting interim significance thresholds (California Air Resources Board 2008b), in which a draft industrial project threshold suggests that non-transportation related emissions under 7,000 $MTCO_2e$ per year would be less than significant; however, the ARB has not approved those thresholds and has not published anything since then. The SCAQMD is in the process of developing thresholds, as discussed below.

[23] California Energy Commission, 2016 Building Energy Efficiency Standards, June 2015, http://www.energy.ca.gov/2015publications/CEC-400-2015-037/CEC-400-2015-037-CMF.pdf

[24] California Building Standards Commission, 2010 California Green Building Standards Code, (2010).

*SCAQMD Threshold Development*

On December 5, 2008, the SCAQMD Governing Board adopted an interim greenhouse gas significance threshold for stationary sources, rules, and plans where the SCAQMD is lead agency (SCAQMD permit threshold). The SCAQMD permit threshold consists of five tiers. However, the SCAQMD is not the lead agency for this project. Therefore, the five permit threshold tiers do not apply to the proposed project.

The SCAQMD is in the process of preparing recommended significance thresholds for greenhouse gases for local lead agency consideration ("SCAQMD draft local agency threshold"); however, the SCAQMD Board has not approved the thresholds as of the date of the Notice of Preparation. The current draft thresholds consist of the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether the project is consistent with a greenhouse gas reduction plan. If a project is consistent with a qualifying local greenhouse gas reduction plan, it does not have significant greenhouse gas emissions.
- Tier 3 consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to a project's operational emissions. If a project's emissions are under one of the following screening thresholds, then the project is less than significant:
  - All land use types: 3,000 $MTCO_2e$ per year.
  - Based on land use type: residential: 3,500 $MTCO_2e$ per year; commercial: 1,400 $MTCO_2e$ per year; or mixed use: 3,000 $MTCO_2e$ per year.
  - Based on land type: Industrial (where SCAQMD is the lead agency), 10,000 $MTCO_2e$ per year.
- Tier 4 has the following options:
  - Option 1: Reduce emissions from business as usual (BAU) by a certain percentage; this percentage is currently undefined.
  - Option 2: Early implementation of applicable AB 32 Scoping Plan measures.
  - Option 3, 2020 target for service populations (SP), which includes residents and employees: 4.8 $MTCO_2e$/SP/year for projects and 6.6 $MTCO_2e$/SP/year for plans.
  - Option 3, 2035 target: 3.0 $MTCO_2e$/SP/year for projects and 4.1 $MTCO_2e$/SP/year for plans.
- Tier 5 involves mitigation offsets to achieve target significance threshold.

The SCAQMD's draft threshold uses the Executive Order S-3-05 goal as the basis for the Tier 3 screening level. Achieving the Executive Order's objective would contribute to worldwide efforts to cap carbon dioxide concentrations at 450 ppm, thus stabilizing global climate. Specifically, the Tier 3 screening level for stationary sources is based on an emission capture rate of 90 percent for all new or modified projects. A 90 percent emission capture rate means that 90 percent of total emissions from all new or modified stationary source projects would be subject to a CEQA analysis, including a negative declaration, a mitigated negative declaration, or an environmental impact report, which includes analyzing feasible alternatives and imposing feasible mitigation measures. A GHG significance threshold based on a 90 percent emission capture rate may be more appropriate to address the long-term adverse impacts associated with global climate change because most projects will be required to implement GHG reduction measures. Further, a 90 percent emission capture rate sets the emission threshold low enough to capture a substantial fraction of future stationary source projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a

relatively small fraction of the cumulative statewide GHG emissions. This assertion is based on the fact that staff estimates that these GHG emissions would account for slightly less than one percent of future 2050 statewide GHG emissions target (85 $MMTCO_2eq$/year). In addition, these small projects may be subject to future applicable GHG control regulations that would further reduce their overall future contribution to the statewide GHG inventory. Finally, these small sources are already subject to BACT for criteria pollutants and are more likely to be single-permit facilities, so they are more likely to have few opportunities readily available to reduce GHG emissions from other parts of their facility.

*SCAQMD Working Group*

Since neither the CARB nor the OPR has developed GHG emissions threshold, the SCAQMD formed a Working Group to develop significance thresholds related to GHG emissions. At the September 28, 2010 Working Group meeting, the SCAQMD released its most current version of the draft GHG emissions thresholds, which recommends a tiered approach that provides a quantitative annual threshold of 10,000 $MTCO_2e$ for industrial uses.

In order to assist local agencies with direction on GHG emissions, the SCAQMD organized a working group and adopted Rules 2700, 2701, 2702, and 3002 which are described below.

*SCAQMD Rules 2700 and 2701*

The SCAQMD adopted Rules 2700 and 2701 on December 5, 2008, which establishes the administrative structure for a voluntary program designed to quantify GHG emission reductions. Rule 2700 establishes definitions for the various terms used in Regulation XXVII – Global Climate Change. Rule 2701 provides specific protocols for private parties to follow to generate certified GHG emission reductions for projects within the district. Approved protocols include forest projects, urban tree planting, and manure management. The SCAQMD is currently developing additional protocols for other reduction measures. For a GHG emission reduction project to qualify, it must be verified and certified by the SCAQMD Executive Officer, who has 60 days to approve or deny the Plan to reduce GHG emissions. Upon approval of the Plan, the Executive Officer issues required to issue a certified receipt of the GHG emission reductions within 90 days.

*SCAQMD Rule 2702*

The SCAQMD adopted Rule 2702 on February 6, 2009, which establishes a voluntary air quality investment program from which SCAQMD can collect funds from parties that desire certified GHG emission reductions, pool those funds, and use them to purchase or fund GHG emission reduction projects within two years, unless extended by the Governing Board. Priority will be given to projects that result in co-benefit emission reductions of GHG emissions and criteria or toxic air pollutants within environmental justice areas. Further, this voluntary program may compete with the cap-and-trade program identified for implementation in CARB's Scoping Plan, or a federal cap and trade program.

*SCAQMD Rule 3002*

The SCAQMD amended Rule 3002 on November 5, 2010 to include facilities that emit greater than 100,000 tons per year of $CO_2e$ are required to apply for a Title V permit by July 1, 2011. A Title V permit is for facilities that are considered major sources of emissions.

**Local – City of Orange**

The City of Orange has not adopted a Climate Action Plan; however, the City's General Plan Natural Resource Element includes the following goals and policies related to Climate Change.

Goal 3.0 Prepare for and adapt to the effects of climate change and promote practices that decrease the City's contribution to climate change.

*Policies*

*Policy 3.1* Evaluate the potential effects of climate change on the City's human and natural systems and prepare strategies that allow the City to appropriately respond and adapt.

*Policy 3.2* Develop and adopt a comprehensive strategy to reduce greenhouse gasses (GHGs) within Orange by at least 15 percent from current levels by 2020.

## SIGNIFICANCE THRESHOLDS

### Appendix G of State CEQA Guidelines

The CEQA Guidelines recommend that a lead agency consider the following when assessing the significance of impacts from GHG emissions on the environment:

- The extent to which the project may increase (or reduce) GHG emissions as compared to the existing environmental setting;
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;
- The extent to which the project complies with regulations or requirements adopted to implement an adopted statewide, regional, or local plan for the reduction or mitigation of GHG emissions.[25]

### Thresholds of Significance for this Project

To determine whether the project's GHG emissions are significant, this analysis uses the SCAQMD draft screening threshold of 3,000 $MTCO_2e$ per year for all land uses.

## METHODOLOGY

The proposed project is anticipated to generate GHG emissions from area sources, energy usage, mobile sources, waste, water, and construction equipment. The following provides the methodology used to calculate the project-related GHG emissions and the project impacts.

CalEEMod Version 2022.1.1.6 was used to calculate the GHG emissions from the proposed project. The CalEEMod Output for year 2026 is available in Appendix B. Each source of GHG emissions is described in greater detail below.

*Area Sources*

Area sources include emissions from consumer products, landscape equipment and architectural coatings. No changes were made to the default area source emissions.

*Energy Usage*

Energy usage includes emissions from the generation of electricity and natural gas used on-site. No changes were made to the default energy usage parameters.

[25] The Governor's Office of Planning and Research recommendations include a requirement that such a plan must be adopted through a public review process and include specific requirements that reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable, notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

*Mobile Sources*

Mobile sources include emissions from the additional vehicle miles generated from the proposed project. The vehicle trips associated with the proposed project have been analyzed by inputting the project-generated vehicular trips from the TA into the CalEEMod Model. The program then applies the emission factors for each trip which is provided by the EMFAC2021 model to determine the vehicular traffic pollutant emissions. See Section 2 for details.

*Waste*

Waste includes the GHG emissions generated from the processing of waste from the proposed project as well as the GHG emissions from the waste once it is interred into a landfill. AB 341 requires that 75 percent of waste be diverted from landfills by 2020. No changes were made to the default waste parameters.

*Water*

Water includes the water used for the interior of the building as well as for landscaping and is based on the GHG emissions associated with the energy used to transport and filter the water. No changes were made to CalEEMod default values for waste generated.

*Construction*

The construction-related GHG emissions were also included in the analysis and were based on a 30-year amortization rate as recommended in the SCAQMD GHG Working Group meeting on November 19, 2009. The construction-related GHG emissions were calculated by CalEEMod and in the manner detailed above in Section 2.

## PROJECT GREENHOUSE GAS EMISSIONS

The GHG emissions have been calculated based on the parameters described above. A summary of the results is shown below in Table 11 and the CalEEMod Model run for the proposed project is provided in Appendix B. Table 11 shows that the total for the proposed project's emissions (without credit for any reductions from sustainable design and/or regulatory requirements) would be 149.53 $MTCO_2e$ per year. According to the thresholds of significance established above, a cumulative global climate change impact would occur if the GHG emissions created from the on-going operations of the proposed project would exceed the SCAQMD draft threshold of 3,000 $MTCO_2e$ per year for all land uses. Therefore, operation of the proposed project would not create a significant cumulative impact to global climate change.

**Table 11**
**Project-Related Greenhouse Gas Emissions**

| Category | Greenhouse Gas Emissions (Metric Tons/Year) | | | | | |
|---|---|---|---|---|---|---|
| | Bio-CO2 | NonBio-$CO_2$ | $CO_2$ | $CH_4$ | $N_2O$ | $CO_2e$ |
| Maximum Annual Operations | 1.08 | 137.00 | 138.00 | 0.12 | 0.01 | 142.00 |
| Construction[1] | 0.00 | 7.50 | 7.50 | 0.00 | 0.00 | 7.53 |
| Total Emissions | 1.08 | 144.50 | 145.50 | 0.12 | 0.01 | 149.53 |
| SCAQMD Draft Screening Threshold | | | | | | 3,000 |
| Exceeds Threshold? | | | | | | No |

Notes:

Source: CalEEMod Version 2022.1.1.6 for Opening Year 2026.

(1) Construction GHG emissions CO2e based on a 30 year amortization rate.

## Consistency With Applicable Greenhouse Gas Reduction Plans and Policies

The proposed project could have the potential to conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. As stated above, the City of Orange has not adopted a Climate Action Plan. Therefore, the project's emissions have been compared to the goals of the CARB Scoping Plan.

*Consistency with the CARB Scoping Plan*

Emission reductions in California alone would not be able to stabilize the concentration of greenhouse gases in the earth's atmosphere. However, California's actions set an example and drive progress towards a reduction in greenhouse gases elsewhere. If other states and countries were to follow California's emission reduction targets, this could avoid medium or higher ranges of global temperature increases. Thus, severe consequences of climate change could also be avoided.

The ARB Board approved a Climate Change Scoping Plan in December 2008. The Scoping Plan outlines the State's strategy to achieve the 2020 greenhouse gas emissions limit. The Scoping Plan "proposes a comprehensive set of actions designed to reduce overall greenhouse gas emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health" (California Air Resources Board 2008). The measures in the Scoping Plan have been in place since 2012.

This Scoping Plan calls for an "ambitious but achievable" reduction in California's greenhouse gas emissions, cutting approximately 30 percent from business-as-usual emission levels projected for 2020, or about 10 percent from today's levels. On a per-capita basis, that means reducing annual emissions of 14 tons of carbon dioxide for every man, woman and child in California down to about 10 tons per person by 2020.

In May 2014, CARB released its *First Update to the Climate Change Scoping Plan* (CARB 2014). This *Update* identifies the next steps for California's leadership on climate change. While California continues on its path to meet the near-term 2020 greenhouse gas limit, it must also set a clear path toward long-term, deep GHG emission reductions. This report highlights California's success to date in reducing its GHG emissions and lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050.

In November 2017, CARB release the 2017 Scoping Plan. This Scoping Plan incorporates, coordinates, and leverages many existing and ongoing efforts and identifies new policies and actions to accomplish the State's climate goals, and includes a description of a suite of specific actions to meet the State's 2030 GHG limit. In addition, Chapter 4 provides a broader description of the many actions and proposals being explored across the sectors, including the natural resources sector, to achieve the State's mid and long-term climate goals.

Guided by legislative direction, the actions identified in the 2017 Scoping Plan reduce overall GHG emissions in California and deliver policy signals that will continue to drive investment and certainty in a low carbon economy. The 2017 Scoping Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while identifying new, technologically feasible, and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The Plan includes policies to require direct GHG reductions at some of the State's largest stationary sources and mobile sources. These policies include the use of lower GHG fuels, efficiency regulations, and the Cap-and Trade Program, which constrains and reduces emissions at covered sources.

Independent studies confirm CARB's determination that the state's existing and proposed regulatory framework will put the state on a pathway to reduce its GHG emissions level to 40 percent below 1990 levels by 2030, and to 80 percent below 1990 levels by 2050 if additional appropriate reduction measures are

adopted.[26] Even though these studies did not provide an exact regulatory and technological roadmap to achieve the 2030 and 2050 goals, they demonstrated that various combinations of policies could allow the statewide emissions level to remain very low through 2050, suggesting that the combination of new technologies and other regulations not analyzed in the studies would allow the state to meet the 2050 target.

In November of 2022, the CARB released the 2022 Scoping Plan. The 2022 Scoping Plan lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by Assembly Bill 1279. The actions and outcomes in the plan will achieve significant reductions in fossil fuel combustion by deploying clean technologies and fuels, further reductions in short-lived climate pollutants, support for sustainable development, increased action on natural and working lands to reduce emissions and sequester carbon, and the capture and storage of carbon.

In addition, on May 22, 2014, CARB approved its first update to the AB 32 Scoping Plan (CARB's First Update).[27] CARB's First Update "lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050," and many of the emission reduction strategies recommended by ARB would serve to reduce the Project's post-2020 emissions level to the extent required by applicable by law. As the latest, 2022 Scoping Plan builds upon previous versions, project consistency with applicable strategies of the 2008, 2017, and 2022 Plan are assessed in Table 12. As shown in Table 12, the project is consistent with the applicable strategies within the Scoping Plan.

Therefore, the project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases. Furthermore, the project will also comply with applicable Green Building Standards and City of Orange's policies regarding sustainability (as dictated by the City's General Plan).

[26] Energy and Environmental Economics (E3). "Summary of the California State Agencies' PATHWAYS Project: Long-term Greenhouse Gas Reduction Scenarios" (April 2015); Greenblatt, Jeffrey, Energy Policy, "Modeling California Impacts on Greenhouse Gas Emissions" (Vol. 78, pp. 158–172). The California Air Resources Board, California Energy Commission, California Public Utilities Commission, and the California Independent System Operator engaged E3 to evaluate the feasibility and cost of a range of potential 2030 targets along the way to the state's goal of reducing GHG emissions to 80 percent below 1990 levels by 2050. With input from the agencies, E3 developed scenarios that explore the potential pace at which emission reductions can be achieved, as well as the mix of technologies and practices deployed. E3 conducted the analysis using its California PATHWAYS model. Enhanced specifically for this study, the model encompasses the entire California economy with detailed representations of the buildings, industry, transportation and electricity sectors. https://www.ethree.com/wp-content/uploads/2017/02/E3_Project_Overview_20150406.pdf

[27] California Air Resources Board, First Update to the Climate Change Scoping Plan, May 2014; https://ww2.arb.ca.gov/sites/default/files/classic//cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf

## Table 12 (1 of 2)
## Project Consistency with CARB Scoping Plan Policies and Measures

| 2008 Scoping Plan Measures to Reduce Greenhouse Gas Emissions | Project Compliance with Measure |
|---|---|
| California Light-Duty Vehicle Greenhouse Gas Standards – Implement adopted standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals. | No Conflict. These are CARB enforced standards; vehicles that access the project (that are required to comply with the standards) will comply with the strategy. |
| Energy Efficiency – Maximize energy efficiency building and appliance standards; pursue additional efficiency including new technologies, policy, and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California. | No Conflict. The project will be compliant with the current Title 24 standards. |
| Low Carbon Fuel Standard – Develop and adopt the Low Carbon Fuel Standard. | No Conflict. These are CARB enforced standards; vehicles that access the project (that are required to comply with the standards) will comply with the strategy. |
| Vehicle Efficiency Measures – Implement light-duty vehicle efficiency measures. | No Conflict. These are CARB enforced standards; vehicles that access the project (that are required to comply with the standards) will comply with the strategy. |
| Medium/Heavy-Duty Vehicles – Adopt medium and heavy-duty vehicle efficiency measures. | No Conflict. These are CARB enforced standards; vehicles that access the project (that are required to comply with the standards) will comply with the strategy. |
| Green Building Strategy – Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. | No Conflict. The California Green Building Standards Code (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code in the CCR. Part 11 establishes voluntary standards, that are mandatory in the 2019 edition of the Code, on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. In addition, the 2022 edition of the Code will take effect January 1, 2023. The project will be subject to these mandatory standards. |
| High Global Warming Potential Gases – Adopt measures to reduce high global warming potential gases. | No Conflict. CARB identified five measures that reduce HFC emissions from vehicular and commercial refrigeration systems; vehicles that access the project that are required to comply with the measures will comply with the strategy. |
| Recycling and Waste – Reduce methane emissions at landfills. Increase waste diversion, composting, and commercial recycling. Move toward zero-waste. | No Conflict. The state is currently developing a regulation to reduce methane emissions from municipal solid waste landfills. The project will be required to comply with City programs, such as City's recycling and waste reduction program, which comply, with the 75 percent reduction required by 2020 per AB 341. |
| Water – Continue efficiency programs and use cleaner energy sources to move and treat water. | No Conflict. The project will comply with all applicable City ordinances and CAL Green requirements. |

| 2017 Scoping Plan Recommended Actions to Reduce Greenhouse Gas Emissions | Project Compliance with Recommended Action |
|---|---|
| Implement Mobile Source Strategy: Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean Car regulations. | No Conflict. These are CARB enforced standards; vehicles that access the project (that are required to comply with the standards) will comply with the strategy. |
| Implement Mobile Source Strategy: At least 1.5 million zero emission and plug-in hybrid light-duty electric vehicles by 2025 and at least 4.2 million zero emission and plug-in hybrid light-duty electric vehicles by 2030. | No Conflict. These are CARB enforced standards; vehicles that access the project (that are required to comply with the standards) will comply with the strategy. |
| Implement Mobile Source Strategy: Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options. Assumed 20 percent of new urban buses purchased beginning in 2018 will be zero emission buses with the penetration of zero-emission technology ramped up to 100 percent 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-NOX standard. | No Conflict. These are CARB enforced standards; vehicles that access the project (that are required to comply with the standards) will comply with the strategy. |
| Implement Mobile Source Strategy: Last Mile Delivery: New regulation that would result in the use of low NOX 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 percent of new Class 3–7 truck sales in local fleets starting in 2020, increasing to 10 percent in 2025 and remaining flat through 2030. | No Conflict. These are CARB enforced standards; vehicles that access the project (that are required to comply with the standards) will comply with the strategy. |
| Implement SB 350 by 2030: 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. | No Conflict. The project will be compliant with the current Title 24 standards. |

## Table 12 (2 of 2)
## Project Consistency with CARB Scoping Plan Policies and Measures

| | |
|---|---|
| By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLCP and SB 1383. | No Conflict. The project will be required to comply with City programs, such as City's recycling and waste reduction program, which comply, with the 75 percent reduction required by 2020 per AB 341. |

| 2022 Scoping Plan Priority Key Actions and Recommendations | Project Compliance with Recommended Actions |
|---|---|
| 100 percent of light-duty vehicle sales are ZEVs by 2035. | Not Applicable. This action is in regard to vehcile sales, with an aim to have 100 percent of light-duty vehicle sales be ZEVs by 2035. The proposed project is that of 13 single-family residential dwelling units and would not interfere with such policymaking. |
| VMT per capita reduced 25 percent below 2019 levels by 2030 and 30 percent below 2019 levels by 2045. | No Conflict. The Project would not result in an unmitigated impact to VMT. The Project is a residential project located in close proximity to existing public transit, including the OCTA Route 167, and residential and commercial uses. Therefore, the Project would be anticipated to contribute to a reduction in VMT per capita. |
| All electric appliances in new construction beginning 2026 (residential) and 2029 (commercial). | No Conflict. The California Green Building Standards Code (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code in the CCR. Part 11 establishes voluntary standards, that are mandatory in the 2019 edition of the Code, on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. In addition, the 2022 edition of the Code will take effect January 1, 2023. The project will be subject to these mandatory standards. |
| For existing residential buildings, 80 percent of appliance sales are electric by 2030 and 100 percent of appliance sales are electric by 2035 (appliances replaced at end of life).<br><br>For existing commercial buildings, 80 percent of appliance sales are electric by 2030 and 100 percent of appliance sales are electric by 2045 (appliances replaced at end of life) | Not Applicable. This action is in regard to appliance sales and the proposed residential project would not interfere with such policymaking. Furthermore, although this action is not necessarily applicable on a project-specific basis, the proposed project is subject to the California Green Building Standards Code (proposed Part 11, Title 24) which was adopted as part of the California Building Standards Code in the CCR. Part 11 establishes voluntary standards, that are mandatory in the 2019 edition of the Code, on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. In addition, the 2022 edition of the Code will take effect January 1, 2023. The project will be subject to these mandatory standards. |

Notes:
(1) Source: CARB Scoping Plan (2008, 2017, and 2022)

### CUMULATIVE GREENHOUSE GAS IMPACTS

Although the project is expected to emit GHGs, the emission of GHGs by a single project into the atmosphere is not itself necessarily an adverse environmental effect. Rather, it is the increased accumulation of GHG from more than one project and many sources in the atmosphere that may result in global climate change. Therefore, in the case of global climate change, the proximity of the project to other GHG emission generating activities is not directly relevant to the determination of a cumulative impact because climate change is a global condition. According to CAPCOA, "GHG impacts are exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective."[28] The resultant consequences of that climate change can cause adverse environmental effects. A project's GHG emissions typically would be very small in comparison to state or global GHG emissions and, consequently, they would, in isolation, have no significant direct impact on climate change.

The state has mandated a goal of reducing statewide emissions to 1990 levels by 2020, even though statewide population and commerce are predicted to continue to expand. In order to achieve this goal, CARB is in the process of establishing and implementing regulations to reduce statewide GHG emissions. Consistent with CEQA Guidelines Section 15064h(3),[29] the City, as lead agency, has determined that the project's contribution to cumulative GHG emissions and global climate change would be less than significant if the project is consistent with the applicable regulatory plans and policies to reduce GHG emissions.

As discussed in the Consistency With Applicable Greenhouse Gas Reduction Plans and Policies section above, the project is consistent with the CARB Scoping Plan.

Thus, given the project's consistency with the CARB Scoping Plan and SCAQMD's draft 3,000 $MTCO_2e$ per year threshold for all land uses, the project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs. Given this consistency, it is concluded that the project's incremental contribution to greenhouse gas emissions and their effects on climate change would not be cumulatively considerable.

[28] Source: California Air Pollution Control Officers Association, CEQA & Climate change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act, (2008).

[29] The State CEQA Guidelines were amended in response to SB 97. In particular, the State CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction program renders a cumulative impact insignificant. Per State CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project will comply with an approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area of the project. To qualify, such a plan or program must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, [and] plans or regulations for the reduction of greenhouse gas emissions."

# 4. ENERGY ANALYSIS

## EXISTING CONDITIONS

This section provides an overview of the existing energy conditions in the project area and region.

### Overview

California's estimated annual energy use as of 2021 included:

- Approximately 277,764 gigawatt hours of electricity;[30]
- Approximately 2,092,612 million cubic feet of natural gas per year;[31] and
- Approximately 23.2 billion gallons of transportation fuel (for the year 2015).[32]

As of 2020, the year of most recent data currently available by the United States Energy Information Administration (EIA), energy use in California by demand sector was:

- Approximately 34 percent transportation;
- Approximately 24.6 percent industrial;
- Approximately 21.8 percent residential; and
- Approximately 19.6 percent commercial.[33]

California's electricity in-state generation system generates approximately 194,127 gigawatt-hours each year. In 2021, California produced approximately 70 percent of the electricity it uses; the rest was imported from the Pacific Northwest (approximately 12 percent) and the U.S. Southwest (approximately 18 percent). Natural gas is the main source for electricity generation at approximately 50.2 percent of the total in-state electric generation system power as shown Table 13.

A summary of and context for energy consumption and energy demands within the State is presented in "U.S. Energy Information Administration, California State Profile and Energy Estimates, Quick Facts" excerpted below:

- California was the seventh-largest producer of crude oil among the 50 states in 2021, and, as of January 2021, it ranked third in oil refining capacity.
- California is the largest consumer of jet fuel and second-largest consumer of motor gasoline among the 50 states and accounted for fifteen percent of the nation's jet fuel consumption and ten percent of motor gasoline consumption in 2020.
- In 2019, California was the second-largest total energy consumer among the states, but its per capita energy consumption was less than in all other states except Rhode Island, due in part to its mild climate and its energy efficiency programs

[30] California Energy Commission. Energy Almanac. Total Electric Generation. [Online] 2021. https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2020-total-system-electric-generation.

[31] Natural Gas Consumption by End Use. U.S. Energy Information Administration. [Online] 2021. https://www.eia.gov/dnav/ng/ng_cons_sum_dcu_SCA_a.htm.

[32] California Energy Commission. Revised Transportation Energy Demand Forecast 2018-2030. [Online] 2021. https://www.energy.ca.gov/data-reports/planning-and-forecasting

[33] U.S. Energy Information Administration. California Energy Consumption by End-Use Sector, 2020. California State Profile Overview.[Online] December 20, 2022 https://www.eia.gov/state/?sid=CA#tabs-2

- In 2021, California was the nation's top producer of electricity from solar, geothermal, and biomass energy. The state was fourth in the nation in conventional hydroelectric power generation, down from second in 2019, in part because of drought and increased water demand
- In 2021, California was the fourth-largest electricity producer in the nation, but the state was also the nation's second-largest consumer of electricity, and in 2020, it received about 30% of its electricity supply from generating facilities outside of California, including imports from Mexico.[34]

As indicated above, California is one of the nation's leading energy-producing states, and California per capita energy use is among the nation's most efficient. Given the nature of the proposed project, the remainder of this discussion will focus on the three sources of energy that are most relevant to the project—namely, electricity and natural gas for building uses, and transportation fuel for vehicle trips associated with the proposed project.

**Electricity**

Electricity would be provided to the project by Southern California Edison (SCE). SCE provides electric power to more than 15 million persons, within a service area encompassing approximately 50,000 square miles.[35] SCE derives electricity from varied energy resources including: fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms. SCE also purchases from independent power producers and utilities, including out-of-state suppliers.[36]

Table 14 identifies SCE's specific proportional shares of electricity sources in 2021. As shown in Table 14, the 2021 SCE Power Mix has renewable energy at 34.1 percent of the overall energy resources, of which biomass and waste is at 0.1 percent, geothermal is at 5.7 percent, eligible hydroelectric is at 0.5 percent, solar energy is at 14.9 percent, and wind power is at 10.2 percent; other energy sources include large hydroelectric at 2.3 percent, natural gas at 22.3 percent, nuclear at 9.2 percent, and unspecified sources of power at 34.6 percent.

**Natural Gas**

Natural gas would be provided to the project by Southern California Gas (SoCalGas). The following summary of natural gas resources and service providers, delivery systems, and associated regulation is excerpted from information provided by the California Public Utilities Commission (CPUC).

The CPUC regulates natural gas utility service for approximately 11 million customers that receive natural gas from Pacific Gas and Electric (PG&E), Southern California Gas (SoCalGas), San Diego Gas & Electric (SDG&E), Southwest Gas, and several smaller investor-owned natural gas utilities. The CPUC also regulates independent storage operators Lodi Gas Storage, Wild Goose Storage, Central Valley Storage and Gill Ranch Storage.

The vast majority of California's natural gas customers are residential and small commercial customers, referred to as "core" customers. Larger volume gas customers, like electric generators and industrial customers, are called "noncore" customers. Although very small in number relative to core customers, noncore customers consume about 65% of the natural gas delivered by the state's natural gas utilities, while core customers consume about 35%.

The PUC regulates the California utilities' natural gas rates and natural gas services, including in-state transportation over the utilities' transmission and distribution pipeline systems, storage, procurement, metering and billing.

[34] State Profile Overview. [Online] [Cited: March 17, 2022.] https://www.eia.gov/state/?sid=CA#tabs-2

[35] https://www.sce.com/about-us/who-we-are/leadership/our-service-territory

[36] California Energy Commission. Utility Energy Supply plans from 2015. https://www.energy.ca.gov/almanac/electricity_data/supply_forms.html

Most of the natural gas used in California comes from out-of-state natural gas basins. In 2017, for example, California utility customers received 38% of their natural gas supply from basins located in the U.S. Southwest, 27% from Canada, 27% from the U.S. Rocky Mountain area, and 8% from production located in California."[37]

### Transportation Energy Resources

The project would attract additional vehicle trips with resulting consumption of energy resources, predominantly gasoline and diesel fuel. Gasoline (and other vehicle fuels) are commercially provided commodities and would be available to the project patrons and employees via commercial outlets.

The most recent data available shows the transportation sector emits 38 percent of the total greenhouse gases in the state and about 84 percent of smog-forming oxides of nitrogen (NOx).[38,39] About 28 percent of total United States energy consumption in 2021 was for transporting people and goods from one place to another. In 2021, petroleum comprised about 77 percent of all transportation energy use, excluding fuel consumed for aviation and most marine vessels.[40] In 2021, about 134.83 billion gallons (or about 3.21 billion barrels) of finished motor gasoline were consumed in the United States, an average of about 369 million gallons (or about 8.8 million barrels) per day.[41]

## Regulatory Background

Federal and state agencies regulate energy use and consumption through various means and programs. On the federal level, the United States Department of Transportation, the United States Department of Energy, and the United States Environmental Protection Agency are three federal agencies with substantial influence over energy policies and programs. On the state level, the PUC and the California Energy Commissions (CEC) are two agencies with authority over different aspects of energy. Relevant federal and state energy-related laws and plans are summarized below.

### Federal Regulations

*Corporate Average Fuel Economy (CAFE) Standards*

First established by the U.S. Congress in 1975, the Corporate Average Fuel Economy (CAFE) standards reduce energy consumption by increasing the fuel economy of cars and light trucks. The National Highway Traffic Safety Administration (NHTSA) and U.S. Environmental Protection Agency (USEPA) jointly administer the CAFE standards. The U.S. Congress has specified that CAFE standards must be set at the "maximum feasible level" with consideration given for: (1) technological feasibility; (2) economic practicality; (3) effect of other standards on fuel economy; and (4) need for the nation to conserve energy.[42]

Issued by NHTSA and EPA in March 2020 (published on April 30, 2020 and effective after June 29, 2020), the Safer Affordable Fuel-Efficient Vehicles Rule would maintain the CAFE and CO2 standards applicable in model year 2020 for model years 2021 through 2026. The estimated CAFE and CO2 standards for model year 2020 are 43.7 mpg and 204 grams of CO2 per mile for passenger cars and 31.3 mpg and 284 grams of

[37] California Public Utilities Commission. Natural Gas and California. http://www.cpuc.ca.gov/natural_gas/

[38] CARB. California Greenhouse Gas Emissions Inventory – 2022 Edition. https://www.arb.ca.gov/cc/inventory/data/data.htm

[39] CARB. 2016 SIP Emission Projection Data. https://www.arb.ca.gov/app/emsinv/2017/emseic1_query.php?F_DIV=-4&F_YR=2012&F_SEASON=A&SP=SIP105ADJ&F_AREA=CA

[40] US Energy Information Administration. Use of Energy in the United States Explained: Energy Use for Transportation. https://www.eia.gov/energyexplained/?page=us_energy_transportation

[41] https://www.eia.gov/tools/faqs/faq.php?id=23&t=10

[42] https://www.nhtsa.gov/lawsregulations/corporate-average-fuel-economy.

CO2 per mile for light trucks, projecting an overall industry average of 37 mpg, as compared to 46.7 mpg under the standards issued in 2012.[43]

*Intermodal Surface transportation Efficiency Act of 1991 (ISTEA)*

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) promoted the development of intermodal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) were to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions.

*The Transportation Equity Act of the 21st Century (TEA-21)*

The Transportation Equity Act for the 21st Century (TEA-21) was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation, discussed above. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of good transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems, to help improve operations and management of transportation systems and vehicle safety.

## State Regulations

Integrated Energy Policy Report (IEPR)

Senate Bill 1389 requires the California Energy Commission (CEC) to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the State's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety. The Energy Commission prepares these assessments and associated policy recommendations every two years, with updates in alternate years, as part of the Integrated Energy Policy Report.

The 2019 Integrated Energy Policy Report (2019 IEPR) was adopted February 20, 2020, and continues to work towards improving electricity, natural gas, and transportation fuel energy use in California. The 2019 IEPR focuses on a variety of topics such as decarbonizing buildings, integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecast, and the California Energy Demand Forecast.[44]

State of California Energy Plan

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The Plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce

[43] National Highway Traffic Safety Administration (NHTSA) and U.S. Environmental Protection Agency (USEPA), 2018. Federal Register / Vol. 83, No. 165 / Friday, August 24, 2018 / Proposed Rules, The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks 2018. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/safer-affordable-fuel-efficient-safe-vehicles-final-rule.

[44] California Energy Commission. Final 2019 Integrated Energy Policy Report. February 20, 2020. https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2019-integrated-energy-policy-report

congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled and accommodate pedestrian and bicycle access.

California Building Standards Code (Title 24)

The California Building Standards Code Title 24 was previously discussed in Section 3 of this report.

*California Building Energy Efficiency Standards (Title 24, Part 6)*

The California Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) were adopted to ensure that building construction and system design and installation achieve energy efficiency and preserve outdoor and indoor environmental quality. The current California Building Energy Efficiency Standards (Title 24 standards) are the 2019 Title 24 standards, which became effective on January 1, 2020. The 2019 Title 24 standards include efficiency improvements to the lighting and efficiency improvements to the non-residential standards include alignment with the American Society of Heating and Air-Conditioning Engineers. For example, window operation is no longer a method allowed to meet ventilation requirements, continuous operation of central forced air system handlers used in central fan integrated ventilation system is not a permissible method of providing the dwelling unit ventilation airflow, and central ventilation systems that serve multiple dwelling units must be balanced to provide ventilation airflow to each dwelling unit. In addition, requirements for kitchen range hoods were also provided in the updated Section 120.1. Ventilation and Indoor Air Quality included both additions and revisions in the 2019 Code. This section now requires nonresidential and hotel/motel buildings to have air filtration systems that use forced air ducts to supply air to occupiable spaces to have air filters. Further, the air filter efficiency must be either MERV 13 or use a particle size efficiency rating specific in the Energy Code AND be equipped with air filters with a minimum 2-inch depth or minimum 1-inch depth if sized according to the equation 120.1-A. If natural ventilation is to be used the space must also use mechanical unless ventilation openings are either permanently open or controlled to stay open during occupied times.

New regulations were also adopted under Section 130.1 Indoor Lighting Controls. These included new exceptions being added for restrooms, the exception for classrooms being removed, as well as exceptions in regard to sunlight provided through skylights and overhangs.

All buildings for which an application for a building permit is submitted on or after January 1, 2020 must follow the 2019 standards. The 2016 residential standards were estimated to be approximately 28 percent more efficient than the 2013 standards, whereas the 2019 residential standards are estimated to be approximately 7 percent more efficient than the 2016 standards. Furthermore, once rooftop solar electricity generation is factored in, 2019 residential standards are estimated to be approximately 53 percent more efficient than the 2016 standards. Under the 2019 standards, nonresidential buildings are estimated to be approximately 30 percent more efficient than the 2016 standards. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases greenhouse gas emissions.

The 2022 Building Energy Efficiency Standards will become effective on January 1, 2023. [45] The core focus of the building standards has been efficiency, but the 2019 Energy Code ventured into onsite generation by requiring solar PV on new homes, providing significant GHG savings. The 2022 update builds off this progress with expanded solar standards and the move to onsite energy storage that will help Californians save on utility bills while bolstering the grid. The 2022 Energy Code update focuses on four key areas in new construction of homes and businesses:

[45] California Energy Commission (CEC). 2022. Building Energy Efficiency Standards. https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency.

- Encouraging electric heat pump technology and use, which consumes less energy and produces fewer emissions than traditional HVACs and water heaters.
- Establishing electric-ready requirements when natural gas is installed, which positions owners to use cleaner electric heating, cooking and electric vehicle (EV) charging options whenever they choose to adopt those technologies.
- Expanding solar photovoltaic (PV) system and battery storage standards to make clean energy available onsite and complement the state's progress toward a 100 percent clean electricity grid.
- Strengthening ventilation standards to improve indoor air quality.

The 2022 Energy Code affects homes by establishing energy budgets based on efficient heat pumps for space or water heating to encourage builders to install heat pumps over gas-fueled HVAC units; requiring homes to be electric-ready, with dedicated 240-volt outlets and space (with plumbing for water heaters) so electric appliances can eventually replace installed gas appliances; increasing minimum kitchen ventilation requirements so that fans over cooktops have higher airflow or capture efficiency to better exhaust pollution from gas cooking and improve indoor air quality; and allowing exceptions to existing solar PV standards when roof area is not available (such as for smaller homes). In addition, the effect on businesses includes establishing combined solar PV and battery standards for select businesses with systems being sized to maximize onsite use of solar energy and avoid electricity demand during times when the grid must use gas-powered plants; establishing new efficiency standards for commercial greenhouses (primarily cannabis growing); and improving efficiency standards for building envelope, various internal systems, and grid integration equipment, such as demand-responsive controls to buoy grid stability.[46,47]

*California Building Energy Efficiency Standards (Title 24, Part 11)*

The 2019 California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as the CALGreen Code, went into effect on January 1, 2020. The 2019 CALGreen Code includes mandatory measures for non-residential development related to site development; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental quality.

As previously discussed in Section 3 of this report, the Department of Housing and Community Development (HCD) updated CALGreen through the 2019 Triennial Code Adoption Cycle. HCD modified the best management practices for stormwater pollution prevention adding Section 5.106.2 for projects that disturb one or more acres of land. This section requires projects that disturb one acre or more of land or less than one acre of land but are part of a larger common plan of development or sale must comply with the postconstruction requirement detailed in the applicable National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities issued by the State Water Resources Control Board. The NPDES permits require postconstruction runoff (post-project hydrology) to match the preconstruction runoff pre-project hydrology) with installation of postconstruction stormwater management measures.

HCD added sections 5.106.4.1.3 and 5.106.4.1.5 in regard to bicycle parking. Section 5.106.4.1.3 requires new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5 percent of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility. In addition, Section 5.106.4.1.5 states that acceptable bicycle parking facility for Sections 5.106.4.1.2 through 5.106.4.1.4 shall be convenient from the street and shall meeting one of the following: (1) covered, lockable enclosures with permanently anchored racks for bicycles; (2) lockable bicycle rooms with permanently anchored racks; or (3) lockable, permanently anchored bicycle lockers.

[46] https://www.lightnowblog.com/2021/08/california-energy-commission-adopts-2022-building-energy-efficiency-standards/

[47] State of California Energy Commission. 2022 Building Energy Efficiency Standards Summary. https://www.energy.ca.gov/sites/default/files/2021-08/CEC_2022_EnergyCodeUpdateSummary_ADA.pdf

HCD amended section 5.106.5.3.5 allowing future charging spaces to qualify as designated parking for clean air vehicles.

HCD updated section 5.303.3.3 in regard to showerhead flow rates. This update reduced the flow rate to 1.8 GPM.

HCD amended section 5.304.1 for outdoor potable water use in landscape areas and repealed sections 5.304.2 and 5.304.3. The update requires nonresidential developments to comply with a local water efficient landscape ordinance or the current California Department of Water Resource's' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent. Some updates were also made in regard to the outdoor potable water use in landscape areas for public schools and community colleges.

HCD updated Section 5.504.5.3 in regard to the use of MERV filters in mechanically ventilated buildings. This update changed the filter use from MERV 8 to MERV 13. MERV 13 filters are to be installed prior to occupancy, and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual.

The 2022 California Green Building Standards Code became effective on January 1, 2023.[48]

HCD amended Section 5.106.5.3 in regard to increasing the EV capable space percentages and adding a new requirement for installed Level 2 DCFC chargers.

HCD under Section 5.106.5.4 added new regulation for electric vehicle charging readiness requirements for new construction of warehouse, grocery stores, and retail stores with planned off-street loading spaces. [49]

Senate Bill 100

Senate Bill 100 (SB 100) requires 100 percent of total retail sales of electricity in California to come from eligible renewable energy resources and zero-carbon resources by December 31, 2045. SB 100 was adopted September 2018.

The interim thresholds from prior Senate Bills and Executive Orders would also remain in effect. These include Senate Bill 1078 (SB 1078), which requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. Senate Bill 107 (SB 107) which changed the target date to 2010. Executive Order S-14-08, which was signed on November 2008 and expanded the State's Renewable Energy Standard to 33 percent renewable energy by 2020. Executive Order S-21-09 directed the CARB to adopt regulations by July 31, 2010 to enforce S-14-08. Senate Bill X1-2 codifies the 33 percent renewable energy requirement by 2020.

Senate Bill 350

As previously discussed in Section 3 of this report, Senate Bill 350 (SB 350) was signed into law October 7, 2015, SB 350 increases California's renewable electricity procurement goal from 33 percent by 2020 to 50 percent by 2030. This will increase the use of Renewables Portfolio Standard (RPS) eligible resources, including solar, wind, biomass, geothermal, and others. In addition, SB 350 requires the state to double statewide energy efficiency savings in electricity and natural gas end uses by 2030. To help ensure these goals are met and the greenhouse gas emission reductions are realized, large utilities will be required to develop and submit Integrated Resource Plans (IRPs). These IRPs will detail how each entity will meet their customers resource needs, reduce greenhouse gas emissions and ramp up the deployment of clean energy resources.

[48] California Building Standards Commission (CBSC). 2022. California Green Building Standards. Website: https://codes.iccsafe.org/content/CAGBC2022P1.

[49] https://www.dgs.ca.gov/BSC/Resources/2022-Title-24-California-Code-Changes

Assembly Bill 32

As discussed in Section 3 of this report, in 2006 the California State Legislature adopted Assembly Bill 32 (AB 32), the California Global Warming Solutions Act of 2006. AB 32 requires CARB, to adopt rules and regulations that would achieve GHG emissions equivalent to statewide levels in 1990 by 2020 through an enforceable statewide emission cap which will be phased in starting in 2012. Emission reductions shall include carbon sequestration projects that would remove carbon from the atmosphere and best management practices that are technologically feasible and cost effective. Please see Section 3 for further detail on AB 32.

Assembly Bill 1493/Pavley Regulations

As discussed in Section 3 of this report, California Assembly Bill 1493 enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. In 2005, the CARB submitted a "waiver" request to the EPA from a portion of the federal Clean Air Act in order to allow the State to set more stringent tailpipe emission standards for $CO_2$ and other GHG emissions from passenger vehicles and light duty trucks. On December 19, 2007 the EPA announced that it denied the "waiver" request. On January 21, 2009, CARB submitted a letter to the EPA administrator regarding the State's request to reconsider the waiver denial. The EPA approved the waiver on June 30, 2009.

Executive Order S-1-07/Low Carbon Fuel Standard

As discussed in Section 3 of this report, Executive Order S-1-07 was issued in 2007 and proclaims that the transportation sector is the main source of GHG emissions in the State, since it generates more than 40 percent of the State's GHG emissions. It establishes a goal to reduce the carbon intensity of transportation fuels sold in the State by at least ten percent by 2020. This Order also directs CARB to determine whether this Low Carbon Fuel Standard (LCFS) could be adopted as a discrete early-action measure as part of the effort to meet the mandates in AB 32.

On April 23, 2009 CARB approved the proposed regulation to implement the low carbon fuel standard. The low carbon fuel standard is anticipated to reduce GHG emissions by about 16 MMT per year by 2020. The low carbon fuel standard is designed to provide a framework that uses market mechanisms to spur the steady introduction of lower carbon fuels. The framework establishes performance standards that fuel producers and importers must meet each year beginning in 2011. Separate standards are established for gasoline and diesel fuels and the alternative fuels that can replace each. The standards are "back-loaded", with more reductions required in the last five years, than during the first five years. This schedule allows for the development of advanced fuels that are lower in carbon than today's fuels and the market penetration of plug-in hybrid electric vehicles, battery electric vehicles, fuel cell vehicles, and flexible fuel vehicles. It is anticipated that compliance with the low carbon fuel standard will be based on a combination of both lower carbon fuels and more efficient vehicles.

Reformulated gasoline mixed with corn-derived ethanol at ten percent by volume and low sulfur diesel fuel represent the baseline fuels. Lower carbon fuels may be ethanol, biodiesel, renewable diesel, or blends of these fuels with gasoline or diesel as appropriate. Compressed natural gas and liquefied natural gas also may be low carbon fuels. Hydrogen and electricity, when used in fuel cells or electric vehicles are also considered as low carbon fuels for the low carbon fuel standard.

California Air Resources Board

*CARB's Advanced Clean Cars Program*

Closely associated with the Pavley regulations, the Advanced Clean Cars emissions control program was approved by CARB in 2012. The program combines the control of smog, soot, and GHGs with requirements for greater numbers of zero-emission vehicles for model years 2015–2025.15 The components of the Advanced Clean Cars program include the Low-Emission Vehicle (LEV) regulations that reduce criteria

pollutants and GHG emissions from light- and medium-duty vehicles, and the Zero-Emission Vehicle (ZEV) regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles (PHEV) in the 2018 through 2025 model years.[50]

*Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling*

The Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (Title 13, California Code of Regulations, Division 3, Chapter 10, Section 2435) was adopted to reduce public exposure to diesel particulate matter and other air contaminants by limiting the idling of diesel-fueled commercial motor vehicles. This section applies to diesel-fueled commercial motor vehicles with gross vehicular weight ratings of greater than 10,000 pounds that are or must be licensed for operation on highways. Reducing idling of diesel-fueled commercial motor vehicles reduces the amount of petroleum-based fuel used by the vehicle.

*Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen, and other Criteria Pollutants, form In-Use Heavy-Duty Diesel-Fueled Vehicles*

The Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles (Title 13, California Code of Regulations, Division 3, Chapter 1, Section 2025) was adopted to reduce emissions of diesel particulate matter, oxides of nitrogen (NOX) and other criteria pollutants from in-use diesel-fueled vehicles. This regulation is phased, with full implementation by 2023. The regulation aims to reduce emissions by requiring the installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models. The newer emission-controlled models would use petroleum-based fuel in a more efficient manner.

Sustainable Communities Strategy

The Sustainable Communities and Climate Protection Act of 2008, or Senate Bill 375 (SB 375), coordinates land use planning, regional transportation plans, and funding priorities to help California meet the GHG reduction mandates established in AB 32.

As previously stated in Section 3 of this report, Senate Bill 375 (SB 375) was adopted September 2008 and aligns regional transportation planning efforts, regional GHG emission reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPO) to adopt a sustainable communities strategy (SCS) or alternate planning strategy (APS) that will prescribe land use allocation in that MPOs Regional Transportation Plan (RTP). CARB, in consultation with each MPO, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. CARB is also charged with reviewing each MPO's sustainable communities strategy or alternate planning strategy for consistency with its assigned targets.

The proposed project is located within the Southern California Association of Governments (SCAG) jurisdiction, which has authority to develop the SCS or APS. For the SCAG region, the targets set by CARB are at eight percent below 2005 per capita GHG emissions levels by 2020 and 19 percent below 2005 per capita GHG emissions levels by 2035. These reduction targets became effective October 2018.

[50] California Air Resources Board, California's Advanced Clean Cars Program, January 18, 2017. www.arb.ca.gov/msprog/acc/acc.htm.

## PROJECT ENERGY DEMANDS AND ENERGY EFFICIENCY MEASURES

### Evaluation Criteria

In compliance with Appendix G of the State CEQA Guidelines, this report analyzes the project's anticipated energy use to determine if the project would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

In addition, Appendix F of the State CEQA Guidelines states that the means of achieving the goal of energy conservation includes the following:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on fossil fuels such as coal, natural gas and oil; and
- Increasing reliance on renewable energy sources.

### Methodology

Information from the CalEEMod 2022.1.1.6 Output contained in Appendix B, utilized for air quality and greenhouse gas analyses in Sections 2 and 3 of this report, were also utilized for this analysis. The CalEEMod outputs detail project related construction equipment, transportation energy demands, and facility energy demands.

### Construction Energy Demands

Construction is anticipated to occur no sooner than early September 2024 with completion early September 2026, and be completed in one phase. Staging of construction vehicles and equipment will occur on-site. The approximately twenty-four-month schedule is relatively short, and the project site is approximately 1.93 acres.

*Construction Equipment Electricity Usage Estimates*

As stated previously, Electrical service will be provided by SCE. The focus within this section is the energy implications of the construction process, specifically the power cost from on-site electricity consumption during construction of the proposed project. Based on the 2021 National Construction Estimator, Richard Pray (2021)[51], the typical power cost per 1,000 square feet of building construction per month is estimated to be $2.37. The project is the construction of 13 single-family residential dwelling units with a total square footage of up to approximately 35,500 square feet. Based on Table 15, the total power cost of the on-site electricity usage during the construction of the proposed project is estimated to be approximately $2,019.24. Furthermore, the total electricity usage from project construction related activities is estimated to be approximately 20,192 kWh.[52]

*Construction Equipment Fuel Estimates*

Fuel consumed by construction equipment would be the primary energy resource expended over the course of project construction. Fuel consumed by construction equipment was evaluated with the following assumptions:

[51] Pray, Richard. 2021 National Construction Estimator. Carlsbad: Craftsman Book Company, 2021.

[52] Assumes the project will be under the Residential Tiered Rate Plan under SCE. https://www.sce.com/residential/rates.

- Construction schedule of 24 months
- All construction equipment was assumed to run on diesel fuel
- Typical daily use of 8 hours, with some equipment operating from ~6-7 hours
- Aggregate fuel consumption rate for all equipment was estimated at 18.5 hp-hr/gallon (from CARB's 2017 Emissions Factors Tables and fuel consumption rate factors as shown in Table D-21 of the Moyer Guidelines: (https://www.arb.ca.gov/msprog/moyer/guidelines/2017gl/2017_gl_appendix_d.pdf).
- Diesel fuel would be the responsibility of the equipment operators/contractors and would be sources within the region.
- Project construction represents a "single-event" for diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources during long term operation.

Using the CalEEMod data input for the air quality and greenhouse gas analyses (Sections 2 and 3 of this report), the project's construction phase would consume electricity and fossil fuels as a single energy demand, that is, once construction is completed their use would cease. CARB's 2017 Emissions Factors Tables show that on average aggregate fuel consumption (gasoline and diesel fuel) would be approximately 18.5 hp-hr-gal. Table 16 shows the results of the analysis of construction equipment.

As presented in Table 16, project construction activities would consume an estimated 40,886 gallons of diesel fuel. As stated previously, project construction would represent a "single-event" diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose.

*Construction Worker Fuel Estimates*

It is assumed that construction worker trips are from light duty autos (LDA), light duty truck 1 (LDT1), and light duty truck 2 (LDT2) at a mix of 25 percent/50 percent/25 percent, respectively, along area roadways.[53] With respect to estimated VMT, the construction worker trips would generate an estimated 51,124 VMT. Data regarding project related construction worker trips were based on CalEEMod 2022.1.1.6 model defaults.

Vehicle fuel efficiencies for construction workers were estimated in the air quality and greenhouse gas analyses (Sections 2 and 3 of this report) using information generated using CARB's 2021 EMFAC model (see Appendix B for details). An aggregate fuel efficiency of 26.02 miles per gallon (mpg) was used to calculate vehicle miles traveled for construction worker trips. Table 17 shows that an estimated 1,965 gallons of fuel would be consumed for construction worker trips.

*Construction Vendor/Hauling Fuel Estimates*

Tables 18 and 19 show the estimated fuel consumption for vendor and hauling during building construction and architectural coating. With respect to estimated VMT, the vendor and hauling trips would generate an estimated 8,047 VMT. Data regarding project related construction worker trips were based on CalEEMod 2022.1.1.6 model defaults.

For the architectural coatings it is assumed that the contractors would be responsible for bringing coatings and equipment with them in their light duty vehicles. Therefore, vendors delivering construction material or hauling debris from the site during demolition, grading, and building construction would use medium to heavy duty vehicles with an average fuel consumption of 7.75 mpg for medium heavy-duty trucks and 6.05 mpg for

[53] CalEEMod User's Guide Appendix C (April 2022) states that construction work trips are made by a fleet consisting of 25 percent light-duty auto (or passenger car), 50 percent light-duty truck type 1 (LDT1), and 25 percent light duty truck type 2 (LDT2).

heavy heavy-duty trucks (see Appendix B for details).[54] Tables 18 and 19 show that an estimated 1,208 gallons of fuel would be consumed for vendor and hauling trips.

*Construction Energy Efficiency/Conservation Measures*

Construction equipment used over the approximately twenty-four-month construction phase would conform to CARB regulations and California emissions standards and is evidence of related fuel efficiencies. There are no unusual project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in construction of the project would therefore not result in inefficient wasteful, or unnecessary consumption of fuel.

The project would utilize construction contractors which practice compliance with applicable CARB regulation regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. Additionally, CARB has adopted the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants. Compliance with these measures would result in a more efficient use of construction-related energy and would minimize or eliminate wasteful or unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption.

Additionally, as required by California Code of Regulations Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than five minutes, thereby minimizing or eliminating 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, and/or in response to citizen complaints.

**Operational Energy Demands**

Energy consumption in support of or related to project operations would include transportation energy demands (energy consumed by employee and patron vehicles accessing the project site) and facilities energy demands (energy consumed by building operations and site maintenance activities).

*Transportation Fuel Consumption*

Using the CalEEMod output from the air quality and greenhouse gas analyses (Sections 2 and 3 of this report), it is assumed that an average trip for autos and light trucks was assumed to be 6.1 miles and medium to heavy (2-4-axle) trucks were assumed to travel an average of 16 miles.[55] In order to present a worst-case scenario, it was assumed that vehicles would operate 365 days per year. Table 20 shows the estimated annual fuel consumption for all classes of vehicles from autos to heavy-heavy trucks.[56]

The proposed project would generate a maximum of 84 trips per day. The vehicle fleet mix was used from the CalEEMod output. Table 20 shows that an estimated 10,140 of fuel would be consumed per year for the operation of the proposed project.

Trip generation and VMT generated by the proposed project are consistent with other similar residential land uses of similar scale and configuration as reflected respectively in the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition, 2021). That is, the proposed project does not propose uses or

[54] CalEEMod User's Guide Appendix C (April 2022) states that vendor trips are made by a fleet consisting of 50 percent medium trucks (MHDT) and 50 percent heavy trucks (HHDT) and that hauling and onsite truck trips are made by a fleet consisting of 100 percent HHDT.

[55] CalEEMod default distance for H-W (home-work) is 16.03 miles; 6.08 miles for H-O (home-other).

[56] Average fuel economy based on aggregate mileage calculated in EMFAC 2021 for opening year (2026). See Appendix B for EMFAC output.

operations that would inherently result in excessive and wasteful vehicle trips and VMT, nor associated excess and wasteful vehicle energy consumption. Furthermore, the state of California consumed approximately 4.2 billion gallons of diesel and 15.1 billion gallons of gasoline in 2015.[57,58] Therefore, the increase in fuel consumption from the proposed project is insignificant in comparison to the State's demand. Therefore, project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

*Facility Energy Demands (Electricity and Natural Gas)*

Building operation and site maintenance (including landscape maintenance) would result in the consumption of electricity (provided by SCE) and natural gas (provided by Southern California Gas Company). The annual natural gas and electricity demands were provided per the CalEEMod output from the air quality and greenhouse gas analyses (Sections 2 and 3 of this report) and are provided in Table 21.

As shown in Table 21, the estimated electricity demand for the proposed project is approximately 89,637 kWh per year. In 2021, the residential sector of the County of Orange consumed approximately 7,272 million kWh of electricity.[59] In addition, the estimated natural gas consumption for the proposed project is approximately 498,360 kBTU per year. In 2021, the residential sector of the County of Orange consumed approximately 362 million therms of gas.[60] Therefore, the increase in both electricity and natural gas demand from the proposed project is insignificant compared to the County's 2021 residential sector demand.

Energy use in buildings is divided into energy consumed by the built environment and energy consumed by uses that are independent of the construction of the building such as in plug-in appliances. In California, the California Building Standards Code Title 24 governs energy consumed by the built environment, mechanical systems, and some types of fixed lighting. Non-building energy use, or "plug-in" energy use can be further subdivided by specific end-use (refrigeration, cooking, appliances, etc.). The proposed project would be required to comply with Title 24 standards.

Furthermore, the proposed project energy demands in total would be comparable to other residential projects of similar scale and configuration. Therefore, the project facilities' energy demands, and energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

### Renewable Energy and Energy Efficiency Plan Consistency

Regarding federal transportation regulations, the project site is located in an already developed area. Access to/from the project site is from existing roads. These roads are already in place so the project would not interfere with, nor otherwise obstruct intermodal transportation plans or projects that may be proposed pursuant to the ISTEA because SCAG is not planning for intermodal facilities in the project area.

Regarding the State's Energy Plan and compliance with Title 24 CCR energy efficiency standards, the applicant is required to comply with the California Green Building Standard Code requirements for energy efficient buildings and appliances as well as utility energy efficiency programs implemented by Southern California Edison and Southern California Gas Company.

Regarding Pavley (AB 1493) regulations, an individual project does not have the ability to comply or conflict with these regulations because they are intended for agencies and their adoption of procedures and protocols for reporting and certifying GHG emission reductions from mobile sources. However, the vehicles associated with the proposed project would be required to comply with federal and state fuel efficiency standards.

[57] https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-gasoline-data-facts-and-statistics
[58] https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/diesel-fuel-data-facts-and-statistics
[59] California Energy Commission, Electricity Consumption by County. https://ecdms.energy.ca.gov/elecbycounty.aspx
[60] California Energy Commission, Gas Consumption by County. http://ecdms.energy.ca.gov/gasbycounty.aspx

Regarding the State's Renewable Energy Portfolio Standards, the project would be required to meet or exceed the energy standards established in the California Green Building Standards Code, Title 24, Part 11 (CALGreen). CALGreen Standards require that new buildings reduce water consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials.

As shown in Section 3 above, the proposed project would be consistent with the goals of the CARB Scoping Plan.

### Conclusions

As supported by the preceding analyses, project construction and operations would not result in the inefficient, wasteful or unnecessary consumption of energy. The proposed project does not include any unusual project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities and is a residential project that is not proposing any additional features that would require a larger energy demand than other residential projects of similar scale and configuration. The energy demands of the project are anticipated to be accommodated within the context of available resources and energy delivery systems. The project would therefore not cause or result in the need for additional energy producing or transmission facilities. The project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservations goals within the State of California. Notwithstanding, the project proposes residential uses and will not have any long-term effects on an energy provider's future energy development or future energy conservation strategies.

**Table 13**
**Total Electricity System Power (California 2021)**

| Fuel Type | California In-State Generation (GWh) | Percent of California In-State Generation | Northwest Imports (GWh) | Southwest Imports (GWh) | Total Imports (GWh) | Percent of Imports | Total California Energy Mix (GWh) | Total California Power Mix |
|---|---|---|---|---|---|---|---|---|
| Coal | 303 | 0.20% | 181 | 7,788 | 7,969 | 9.50% | 8,272 | 3.00% |
| Natural Gas | 97,431 | 50.20% | 45 | 7,880 | 7,925 | 9.50% | 105,356 | 37.90% |
| Oil | 37 | 0.00% | - | - | - | 0.00% | 37 | 0.00% |
| Other (Waste Heat/Petroleum Coke) | 382 | 0.20% | 68 | 15 | 83 | 0.10% | 465 | 0.20% |
| Nuclear | 16,477 | 8.50% | 524 | 8756 | 9281 | 11.10% | 25,758 | 9.30% |
| Large Hydro | 12,036 | 6.20% | 12,042 | 1,578 | 13,620 | 16.30% | 25,656 | 9.20% |
| Unspecified Sources of Power | - | 0.00% | 8,156 | 10,731 | 18,887 | 22.60% | 18,887 | 6.80% |
| Renewables | 67,461 | 34.80% | 11,555 | 14,317 | 25,872 | 30.90% | 93,333 | 33.60% |
| Biomass | 5,381 | 2.80% | 864 | 26 | 890 | 1.10% | 6,271 | 2.30% |
| Geothermal | 11,116 | 5.70% | 192 | 1,906 | 2,098 | 2.50% | 13,214 | 4.80% |
| Small Hydro | 2,531 | 1.30% | 304 | 1 | 304 | 0.40% | 2,835 | 1.00% |
| Solar | 33,260 | 17.10% | 220 | 5,979 | 6,199 | 7.40% | 39,458 | 14.20% |
| Wind | 15,173 | 7.80% | 9,976 | 6,405 | 16,381 | 19.60% | 31,555 | 11.40% |
| **Total** | **194,127** | **100%** | **32,572** | **51,064** | **83,636** | **100%** | **277,764** | **100%** |

Notes:

(1) Source: California Energy Commission. 2021 Total System Electric Generation. https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2021-total-system-electric-generation

**Table 14**
**SCE 2021 Power Content Mix**

| Energy Resources | 2021 SCE Power Mix |
|---|---|
| Eligible Renewable | 31.4% |
| *Biomass & Biowaste* | *0.1%* |
| *Geothermal* | *5.7%* |
| *Eligible Hydroelectric* | *0.5%* |
| *Solar* | *14.9%* |
| *Wind* | *10.2%* |
| Coal | 0.0% |
| Large Hydroelectric | 2.3% |
| Natural Gas | 22.3% |
| Nuclear | 9.2% |
| Other | 0.2% |
| Unspecified Sources of power* | 34.6% |
| Total | 100% |

Notes:

(1) https://www.energy.ca.gov/filebrowser/download/4676

* Unspecified sources of power means electricity from transactions that are not traceable to specific generation sources.

## Table 15
## Project Construction Power Cost and Electricity Usage

| Power Cost (per 1,000 square foot of building per month of construction) | Total Building Size (1,000 Square Foot)[1] | Construction Duration (months) | Total Project Construction Power Cost |
|---|---|---|---|
| $2.37 | 35.500 | 24 | $2,019.24 |

| Cost per kWh[2] | Total Project Construction Electricity Usage (kWh) |
|---|---|
| $0.10 | 20,192 |

Notes:

(1) Total building square footage estimated based on: two dwelling units at 1,900 square foot, six dwelling units at 2,200 square foot, five dwelling units at 2,500 square foot, and garage square footage of approximately 500 square feet for each dwelling unit.

(2) Assumes the project will be under the Residential Tiered Rate Plan under SCE. https://www.sce.com/residential/rates

## Table 16
## Construction Equipment Fuel Consumption Estimates

| Phase | Number of Days | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor | HP hrs/day | Total Fuel Consumption (gal diesel fuel)[1] |
|---|---|---|---|---|---|---|---|---|
| Demolition | 42 | Concrete/Industrial Saw | 1 | 8 | 33 | 0.73 | 193 | 438 |
| | 42 | Rubber Tired Dozers | 1 | 8 | 367 | 0.4 | 1,174 | 2,666 |
| | 42 | Tractors/Loaders/Backhoes | 1 | 8 | 84 | 0.37 | 249 | 564 |
| Grading | 15 | Graders | 1 | 8 | 148 | 0.41 | 485 | 394 |
| | 15 | Rubber Tired Dozers | 1 | 8 | 367 | 0.4 | 1,174 | 952 |
| | 15 | Tractors/Loaders/Backhoes | 2 | 7 | 84 | 0.37 | 435 | 353 |
| Building Construction | 422 | Cranes | 1 | 6 | 367 | 0.29 | 639 | 14,567 |
| | 422 | Forklifts | 1 | 6 | 82 | 0.2 | 98 | 2,245 |
| | 422 | Generator Sets | 1 | 8 | 14 | 0.74 | 83 | 1,891 |
| | 422 | Tractors/Loaders/Backhoes | 1 | 6 | 84 | 0.37 | 186 | 4,254 |
| | 422 | Welders | 3 | 8 | 46 | 0.45 | 497 | 11,332 |
| Paving | 24 | Cement and Mortar Mixers | 1 | 6 | 10 | 0.56 | 34 | 44 |
| | 24 | Pavers | 1 | 6 | 81 | 0.42 | 204 | 265 |
| | 24 | Paving Equipment | 1 | 8 | 89 | 0.36 | 256 | 333 |
| | 24 | Rollers | 1 | 7 | 36 | 0.38 | 96 | 124 |
| | 24 | Tractors/Loaders/Backhoes | 1 | 8 | 84 | 0.37 | 249 | 323 |
| Architectural Coating | 25 | Air Compressors | 1 | 6 | 37 | 0.48 | 107 | 144 |
| **CONSTRUCTION FUEL DEMAND (gallons of diesel fuel)** | | | | | | | | **40,886** |

Notes:

(1) Using Carl Moyer Guidelines Table D-21 Fuel consumption rate factors (bhp-hr/gal) for engines less than 750 hp. (Source: https://www.arb.ca.gov/msprog/moyer/guidelines/2017gl/2017_gl_appendix_d.pdf)

## Table 17
## Construction Worker Fuel Consumption Estimates

| Phase | Number of Days | Worker Trips/Day | Trip Length (miles) | Vehicle Miles Traveled | Average Vehicle Fuel Economy (mpg) | Estimated Fuel Consumption (gallons) |
|---|---|---|---|---|---|---|
| Demolition | 42 | 7.5 | 18.5 | 5,828 | 26.02 | 224 |
| Grading | 15 | 10 | 18.5 | 2,775 | 26.02 | 107 |
| Building Construction | 422 | 4.68 | 18.5 | 36,537 | 26.02 | 1,404 |
| Paving | 24 | 12.5 | 18.5 | 5,550 | 26.02 | 213 |
| Architectural Coating | 25 | 0.94 | 18.5 | 435 | 26.02 | 17 |
| **Total Construction Worker Fuel Consumption** | | | | | | **1,965** |

Notes:

(1) Assumptions for the worker trip length and vehicle miles traveled are consistent with CalEEMod 2022.1.1.6 defaults.

(2) Per CalEEMod User's Guide Appendix C (April 2022), CalEEMod assumes that construction work trips are made by a fleet consisting of 25 percent light-duty auto (or passenger car), 50 percent light-duty truck type 1 (LDT1), and 25 percent light duty truck type 2 (LDT2).

## Table 18
## Construction Vendor Fuel Consumption Estimates (MHD & HHD Trucks)

| Phase | Number of Days | Vendor Trips/Day | Trip Length (miles) | Vehicle Miles Traveled | Average Vehicle Fuel Economy (mpg) | Estimated Fuel Consumption (gallons) |
|---|---|---|---|---|---|---|
| Demolition | 42 | 0 | 10.2 | 0 | 6.9 | 0 |
| Grading | 15 | 0 | 10.2 | 0 | 6.9 | 0 |
| Building Construction | 422 | 1.39 | 10.2 | 5,983 | 6.9 | 867 |
| Paving | 24 | 0 | 10.2 | 0 | 6.9 | 0 |
| Architectural Coating | 25 | 0 | 10.2 | 0 | 6.9 | 0 |
| **Total Construction Vendor Fuel Consumption** | | | | | | **867** |

Notes:

(1) Assumptions for the vendor trip length and vehicle miles traveled are consistent with CalEEMod 2022.1.1.6 defaults.

(2) Per CalEEMod User's Guide Appendix C (April 2022), CalEEMod assumes vendor trips are made by a fleet consisting of 50 percent medium trucks (MHDT) and 50 percent heavy trucks (HHDT).

**Table 19**
**Construction Hauling Fuel Consumption Estimates (HHD Trucks)**

| Phase | Number of Days | Total Hauling Trips | Trip Length (miles) | Vehicle Miles Traveled | Average Vehicle Fuel Economy (mpg) | Estimated Fuel Consumption (gallons) |
|---|---|---|---|---|---|---|
| Demolition | 42 | 0.1 | 20 | 84 | 6.05 | 14 |
| Grading | 15 | 7 | 20 | 1,980 | 6.05 | 327 |
| Building Construction | 422 | 0 | 20 | 0 | 6.05 | 0 |
| Paving | 24 | 0 | 20 | 0 | 6.05 | 0 |
| Architectural Coating | 25 | 0 | 20 | 0 | 6.05 | 0 |
| **Total Construction Hauling Fuel Consumption** | | | | | | **341** |

Notes:

(1) Assumptions for the hauling trip length and vehicle miles traveled are consistent with CalEEMod 2022.1.1.6 defaults.

## Table 20
## Estimated Vehicle Operations Fuel Consumption

| Vehicle Type | Vehicle Mix | Number of Vehicles | Average Trip (miles)[1] | Daily VMT | Average Fuel Economy (mpg)[2] | Total Gallons per Day | Total Annual Fuel Consumption (gallons) |
|---|---|---|---|---|---|---|---|
| Light Auto | Automobile | 42 | 6.1 | 256 | 33.51 | 7.65 | 2,791 |
| Light Truck | Automobile | 4 | 6.1 | 24 | 25.58 | 0.95 | 348 |
| Light Truck | Automobile | 20 | 6.1 | 122 | 25.64 | 4.76 | 1,737 |
| Light Heavy Truck | 2-Axle Truck | 2 | 16.0 | 32 | 16.47 | 1.95 | 710 |
| Light Heavy Truck 10,000 lbs + | 2-Axle Truck | 1 | 16.0 | 16 | 15.61 | 1.03 | 375 |
| Motorcycle | Automobile | 2 | 6.1 | 12 | 41.79 | 0.29 | 107 |
| Medium Truck | Automobile | 12 | 16.0 | 192 | 21.01 | 9.16 | 3,342 |
| Motor Home | -- | 0 | 6.1 | 0 | 5.78 | 0.00 | 0 |
| Medium Heavy Truck | 3-Axle Truck | 1 | 16.0 | 16 | 8.01 | 2.00 | 730 |
| Other Bus | -- | 0 | 6.1 | 0 | 6.29 | 0.00 | 0 |
| School Bus | -- | 0 | 6.1 | 0 | 6.55 | 0.00 | 0 |
| Urban Bus | -- | 0 | 6.1 | 0 | 3.53 | 0.00 | 0 |
| Heavy Heavy Truck | 4-Axle Truck | 0 | 16.0 | 0 | 6.26 | 0.00 | 0 |
| Total | | 84 | -- | 671 | - | 27.78 | -- |
| Total Annual Fuel Consumption | | | | | | | 10,140 |

Notes:

(1) Based on the size of the site and relative location, trips were assumed to be local rather than regional.

(2) Based on EMFAC2021 emission rates for opening year of 2026.

## Table 21
## Project Annual Operational Energy Demand Summary

| Natural Gas Demand | kBTU/year[1,2] |
|---|---|
| Single-Family Residential | 498,360 |
| **Total** | **498,360** |

| Electricity Demand | kWh/year |
|---|---|
| Single-Family Residential | 89,637 |
| **Total** | **89,637** |

Notes:

(1) Taken from the CalEEMod 2022.1.1.6 output (Appendix B of this report).

# 5. EMISSIONS REDUCTION MEASURES

### CONSTRUCTION MEASURES

*Adherence to SCAQMD Rule 403 is required.*

No construction mitigation is required.

### OPERATIONAL MEASURES

No operational mitigation is required.

# 6. REFERENCES


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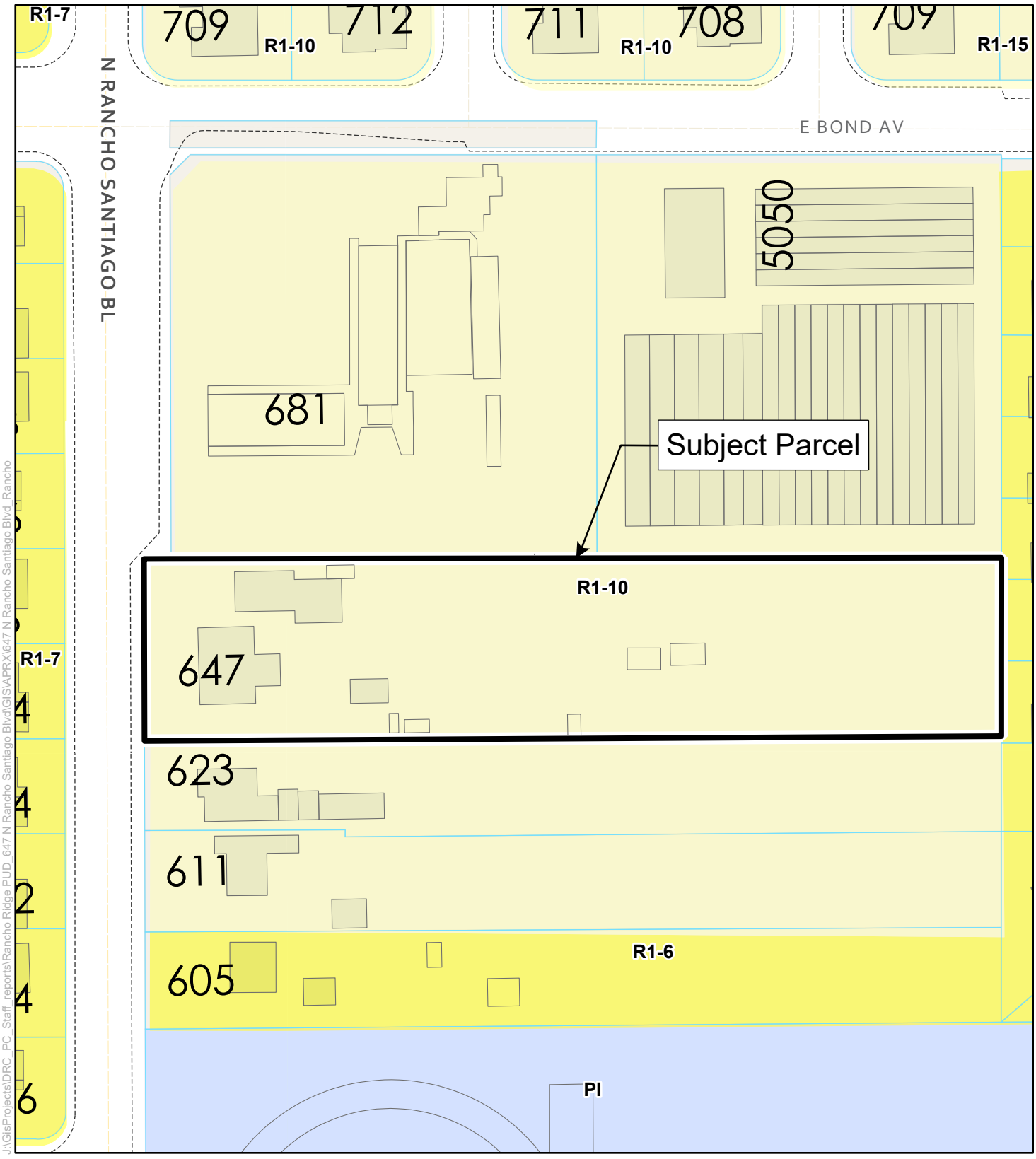
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(Source: https://www.epa.gov/ghgemissions/understanding-global-warming-potentials)

**U.S. Geological Survey**

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J:\GisProjects\DRC_PC_Staff_reports\Rancho Ridge PUD_647 N Rancho Santiago Blvd\GIS\APRX\647 N Rancho Santiago Blvd_Rancho

City of Orange
Geographic Information System

**Legend**

Parcels

Subject Parcels

**Zoning:**

PI

R1-6

R1-7

R1-10

R1-15

N

W E

S

0 50 100 Feet

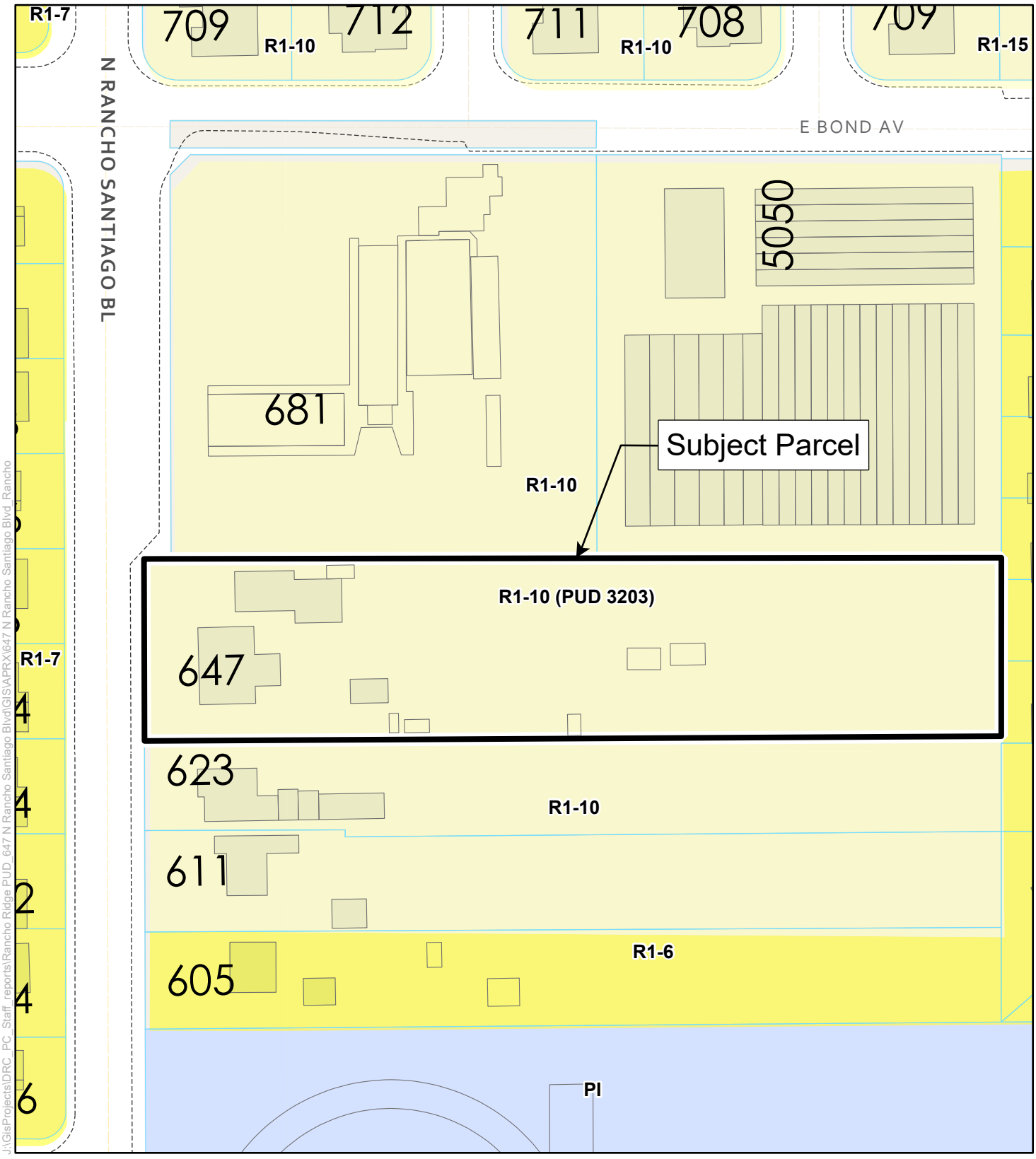
3/24/2026

Source: City of Orange (2026)

**Project Number:** ZC-1318
**Address:** 647 N Rancho Santiago Blvd
**Zoning:** R1-10

647 N RANCHO SANTIAGO BLVD

# EXISTING ZONING




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City of Orange
Geographic Information System

**Legend**

Parcels

Subject Parcels

**Zoning:**

PI

R1-6

R1-7

R1-10

R1-15

**Project Number:** ZC-1318
**Address:** 647 N Rancho Santiago Blvd
**Zoning:** R1-10

N
W E
S

0 50 100 Feet

3/24/2026

Source: City of Orange (2026)

647 N RANCHO SANTIAGO BLVD

# PROPOSED ZONING MAP