

# Initial Study and Mitigated Negative Declaration 3025 W. Edinger Avenue Townhomes Project

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June 2018



Prepared for:

City of Santa Ana  
20 Civic Center Plaza  
Santa Ana, CA 92701

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## Project Information

1. Project title:  
General Plan Amendment No. 2017-03/Tentative Map No. 2017-4/Variance No. 2017-10
2. Lead agency name and address:  
City of Santa Ana  
20 Civic Center Plaza  
Santa Ana, CA 92701
3. Contact person and phone number:  
Selena Kelaher, AICP  
714-667-2740
4. Project location:  
The 1.22-acre project site is located at 3025 W. Edinger Avenue, which is on the north side of Edinger Avenue, just east of Mohawk Drive and directly opposite Centennial Regional Park, in the western edge of the City of Santa Ana. Santa Ana is in the center of Orange County, with regional access from the I-5 and I-405 Freeways and State Routes 22, 55 and 57. The project's regional location and neighborhood location are shown on Exhibit 1 – Project Location.
5. Project sponsor's name and address:  
Haphan Group, Inc.  
10840 Warner Avenue, Suite 208  
Fountain Valley, CA 92708
6. General plan designation:  
The General Plan land use designation for the site is Low Density Residential, which allows residential development up to 7 dwelling units per acre (LR-7). Areas designated as LR-7 are typically characterized by neighborhoods of single family homes. The proposed 18-townhomes project, at 14.75 units per acre, is inconsistent with this land use designation. Accordingly, the Applicant proposes to amend this designation to Medium Density Residential (MR-15), which allows an intensity of up to 15 units per acre, and allows for development of attached, multi-family housing.
7. Zoning:  
The zoning for the site is R-2: Two Family Residences. This zone district was established for development of one-and two-family homes, townhomes, related accessory structures, private greenhouses and horticultural collections, and child care and adult day care facilities. Townhomes are subject to the development standards set forth in Division 6 of the City's Zoning Code.
8. Description of project:  
The proposed project involves the construction of 18 townhomes, arranged in two attached clusters of four units each, and one cluster of 10 units, along with the creation of an air-rights condominium subdivision. Each residence will be a three-story structure and will contain between 1,170 square feet and 2,021 square feet of living area. The smallest plan would provide 2 bedrooms and 2.5 baths, while the other plans will provide 3 bedrooms, a den, and 3.5 baths. All homes will have an attached two-car garage. Another 23 open spaces for guest parking would be provided along an interior drive, plus one disabled accessible parking space located near the site entrance. A summary of the proposed development features is provided in Table 1. Exhibit 2 presents the proposed site plan, Exhibit 3 illustrates the proposed tentative tract map, and Exhibit 4 and 5 are renderings of the proposed architectural characteristics of the project, as viewed from Edinger Avenue.

**Table 1 – Project Development Summary**

Plan Type	Units Proposed	Private Open Space (sf)	Building Area (sf)
Plan 1: 2 bedrooms + 2.5 baths	4	250	1,170
Plan 2: 3 bedrooms + den + 3.5 baths	10	267	2,001
Plan 3: 3 bedrooms + den + 3.5 baths	4	326	2,021
<b>Totals</b>	<b>18</b>	<b>4,799</b>	<b>32,774</b>

A contemporary architectural style is proposed, with enhanced design elements on all four sides of the structures. The proposed exterior materials include metal roofs and window canopies, stucco, wood, and stone veneer siding, and metal sectional garage doors. Coloring would be a mixture of muted earth tones and flat metallic tones.

The project developer will construct six-foot high concrete masonry walls along the western and northern boundaries, to match up with existing similar walls and to replace old wooden fence sections in various stages of decay. An existing six-foot high masonry wall along the eastern boundary will remain in place. Lavender “Trumpet” trees will be planted as street trees behind the sidewalk along the Edinger Avenue frontage. A variety of shrubs, flowering plants and ground covers would also be planted in that parkway area behind the sidewalk, and this plant palette would be continued into the adjoining front yards of the two homes facing the street. A 48-inch high wood fence would separate the front yards from the parkway area. The northern, eastern and western site borders would contain a five-foot wide, densely landscape buffer, comprised of closely spaced screening shrubs accented with Gingko Biloba “Autumn Gold” canopy trees, planted in 36-inch box containers. A wider (approximately 14 feet) landscape buffer is proposed along the southern half of the western boundary; this will be planted with a mixture of shrubs, flowering plants and ground covers, accented with canopy trees and will also function as a bio-filtration feature, as part of the project’s water quality management system.

Vehicular access will be from a gated entrance at the southeastern corner of the site, which leads to an internal drive that will continue along the eastern, northern and western boundaries, eventually exiting through a gate to Edinger Avenue at the southwest corner of the site. Vehicle movements at both drive entrances will be limited to right-in/right-out only. Fourteen of the 18 garages would be accessible from this internal drive, while the other four units would be accessible from a driveway area to the west of the gated entrance. The width and turning radii of the internal streets are designed to accommodate Orange County Fire Authority emergency vehicles as well as Waste Management waste collection service trucks.

### Project Infrastructure

**Street Improvements:** The City is requiring an irrevocable offer to dedicate eight feet along the Edinger Avenue frontage, for public street right of way. Existing drive approaches will be removed and replaced by the proposed drive entrances. The existing sidewalk will remain in place. New curb and gutter will be constructed where needed. A painted center median will be created within the adjacent section of Edinger Avenue, starting at the intersection of Edinger Avenue/Mohawk Drive, and extending the length of the site frontage. This median has been requested by the City to prevent left-turns into or out of the proposed western driveway.

**Water:** Domestic and irrigation water supply for the project will be provided by a new underground pipeline connection to the City’s existing water distribution main, in Edinger Avenue. Within the project site, individual service lines and meters will provide domestic and fire suppression water to the homes, and another line will provide water to the landscape areas.



**Sewer:** Wastewater generated by the proposed homes would be conveyed via a new sewer lateral connecting to the City's existing sewer main in the adjacent section of Edinger Avenue. The sewer system will be gravity-fed, and no pumps, lifts, or other on-site or off-site sewer facilities would be required.

**Drainage:** Runoff from the developed site will flow into a subsurface and surface drainage system to be constructed within the project streets. Filtration of runoff will be provided by bio-retention areas and underdrains, per the project-specific Water Quality Management Plan (WQMP). The project's drainage system will discharge runoff through a new parkway drain into the City's existing storm drain within Edinger Avenue.

**Electricity:** Existing overhead Southern California Edison electrical power lines and poles along Edinger Avenue would be replaced with underground facilities, and electrical service lines for all homes would be placed underground.

**Natural Gas:** Natural gas will be provided to all of the homes by Southern California Gas Company, via an underground main connecting to their existing main within the adjacent section of Edinger Avenue.

### Construction Program

Construction is currently anticipated to commence by Fall 2018, with all homes completed and ready for occupancy within approximately one year.

### Required City Approvals

1. **General Plan Amendment Application No. 2017-03.** The applicant is proposing to amend the General Plan Land use designation for the 1.2-acre project site from Low Density Residential (LR-7) to Medium Density Residential (MR-15). In addition, to amending the land use designation of the project site, the City is proposing to amend the land use designation of six parcels to the east (3019, 1013, 3007, 2395 and 2801 West Edinger Avenue), approximately 2.5 acres from LR-7 to MR-15. With the exception of a single-family dwelling and a commercial center, the amendments would create a block of MR-15 designated properties along Edinger Avenue between Mohawk Drive and Fairview Street.  
  
The density of the proposed development is 14.75 units per acre which would be consistent with the MR-15 maximum density of 15 dwelling units per acre. The existing land uses of the properties to the east are multi-family and townhome developments consistent with the land uses intended for the MR-15 designation and the existing zoning of those properties, i.e., Two-Family Residences (R2.)
2. **Tentative Tract Map No. 17976.** Approval of a tentative tract map is required subdivide the existing three parcels into an air rights condominium subdivision for 18 townhomes, along with common areas for internal driveways, shared open spaces and landscaping.
3. **Variance No. 2017-10.** Several of the proposed design elements do not conform to the Townhome Development Standards, as set forth in Division 6 of Chapter 41-Zoning, of the Santa Ana Municipal Code. Accordingly, the Applicant is requesting City approval of the following variances from those standards:
  - A. **Building Height.** Section 41-277 of Division 6 sets a maximum building height of 27 feet or two stories. The proposed structures would be 34' 6" high, with two floors of living spaces over ground level garages that increase the building height beyond a 'standard' two stories or 27 feet.



- B. Front Yards. Section 41-279 of Division 6 requires minimum 20-foot deep front yards. The proposed front yard along Edinger Avenue would be 16 feet from the future right of way, a result of the City's requirement to dedicate 8 feet along the frontage for additional Edinger Avenue right-of-way. The front yard area is 24 feet deep, if measured from the current right-of-way.
- C. Ground Level Accessible Living Area. Section 41-286 of Division 6 requires that at least 40% of the living area of each townhome is to be accessible from the ground level. Since this project proposes two floors of living area above the ground level garages, this standard cannot be met.
- D. Parking. Section 41-282 of Division 6 requires two parking spaces per unit and two guest spaces per unit, requiring a minimum of 72 parking spaces, including guest spaces for the proposed project; however, the applicant is requesting a variance to provide a total of 60 spaces, which has 12 fewer guest spaces than required.
- E. Open Space. Section 41-283 of Division 6 sets standards for private and common open space. Modifications are proposed to required dimensions and for a reduced amount of common open space.

9. **Surrounding land uses and setting:**

The relatively flat, vacant site is bordered by one-story, single-family homes to the west and north, a two-story multi-family building to the east, and Centennial Park is located directly opposite the site, on the southern side of Edinger Avenue. The Site has been cleared of all previous surface improvements and structures, and is a bare ground surface at this time. A chain link fence with screening material has been erected along the Edinger Avenue frontage, and vehicle access is currently limited to a single driveway, near the southeastern corner of the site. An aerial view of the neighborhood setting is provided in Exhibit 6. Photographs of the site and surroundings are provided in Exhibit 7 through 9.

10. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)**

None





### REGIONAL MAP



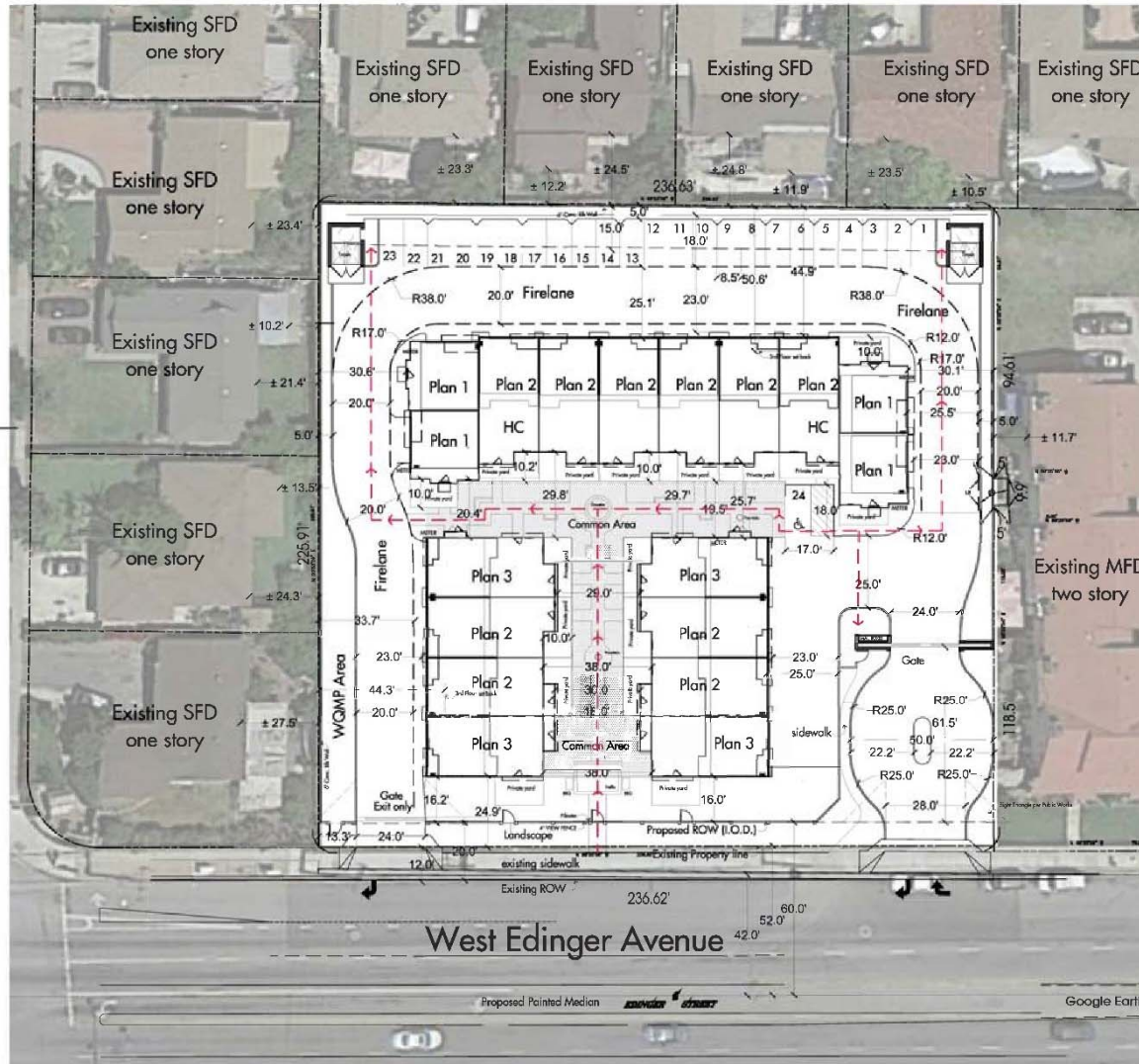
Source: Google Maps - July 12, 2016

### VICINITY MAP



**Exhibit 1 – Project Location**





**Project Summary**

Project Address:	3025 West Edinger
APN:	407-107-31, 407-107-32 and 407-107-22
Zoning:	R2
General Plan	Existing LR 7.0 Proposed MR 15.0
Lot Area:	± 1.22 Acres (53,129 S.F.) GROSS (51,236 S.F.) NET BASED ON (I.O.D.)
Lot Coverage:	Maximum allowed: 50% 15,300 S.F. / 53,129 S.F. = 28.8% on Gross 15,300 S.F. / 51,236 S.F. = 29.9% on Net
Lot Area per Unit	53,129 S.F. / 18 Unit = 2,951 S.F.
Density:	14.75 Homes per acre (Gross Area)
Total Homes:	18 Homes (4) Plan 1: 2 Bed, 2.5 Bath 1,170 S.F. (10) Plan 2: 3 Bed, 3.5 Bath 2,001 S.F. (4) Plan 3: 3 Bed, 3.5 Bath 2,021 S.F. Total: 32,774 S.F. Living Area
Required Parking:	18 units x 2 = 36 spaces (Garage) Guest Parking: 18 x 2 = 36 spaces Total required = 72 spaces
Provided Parking:	60 Spaces (3.3 spaces per home) • Garage: 36 Spaces • On Site: 23 Spaces (9' x 18') 01 Van HC (17' x 18')
Required Private Open Space:	250 S.F./unit x 18 = 4,500 S.F.
Provided Private Open Space:	Unit 1: 175 S.F. 75 S.F. 250 S.F. Unit 2: 161 S.F. 106 S.F. 267 S.F. Unit 3: 220 S.F. 106 S.F. 326 S.F. Total: (4 x Unit 1 + 10 x Units 2 + 4 x Units 3) = 4,799 S.F.
Required Common Area Open Space:	250 S.F. x 18 units = 4,500 S.F.
Provided Common Area Open Spaces:	4,205 S.F.
Front Yard	REQUIRED 20' PROVIDED 16' from Proposed IOD
Rear Yard	15' 44.9'
Side Yard	10' 30.1'
Building Height Limited 27'	Proposed Approx. 34.5'
Proposed Occupancy Classification and Construction Type:	R-2, Type V, Sprinklered
--- ACCESSIBLE PATH TRAVEL	

- All driveway and staging areas must be able to carry a minimum of 60,000 lbs gross vehicle weight.
- Enclosure must be big enough to hold bins 7'x4'x4' each plus enough room to maneuver bins.
- Minimum 9 yards of combined solid waste and recycle bin service per week.

Source: Williams Hezmalchal Architects, Inc. – November 6, 2017

**Exhibit 2 – Proposed Site Plan**





# TENTATIVE TRACT MAP NO. 17976

IN THE CITY OF SANTA ANA, COUNTY OF ORANGE  
STATE OF CALIFORNIA

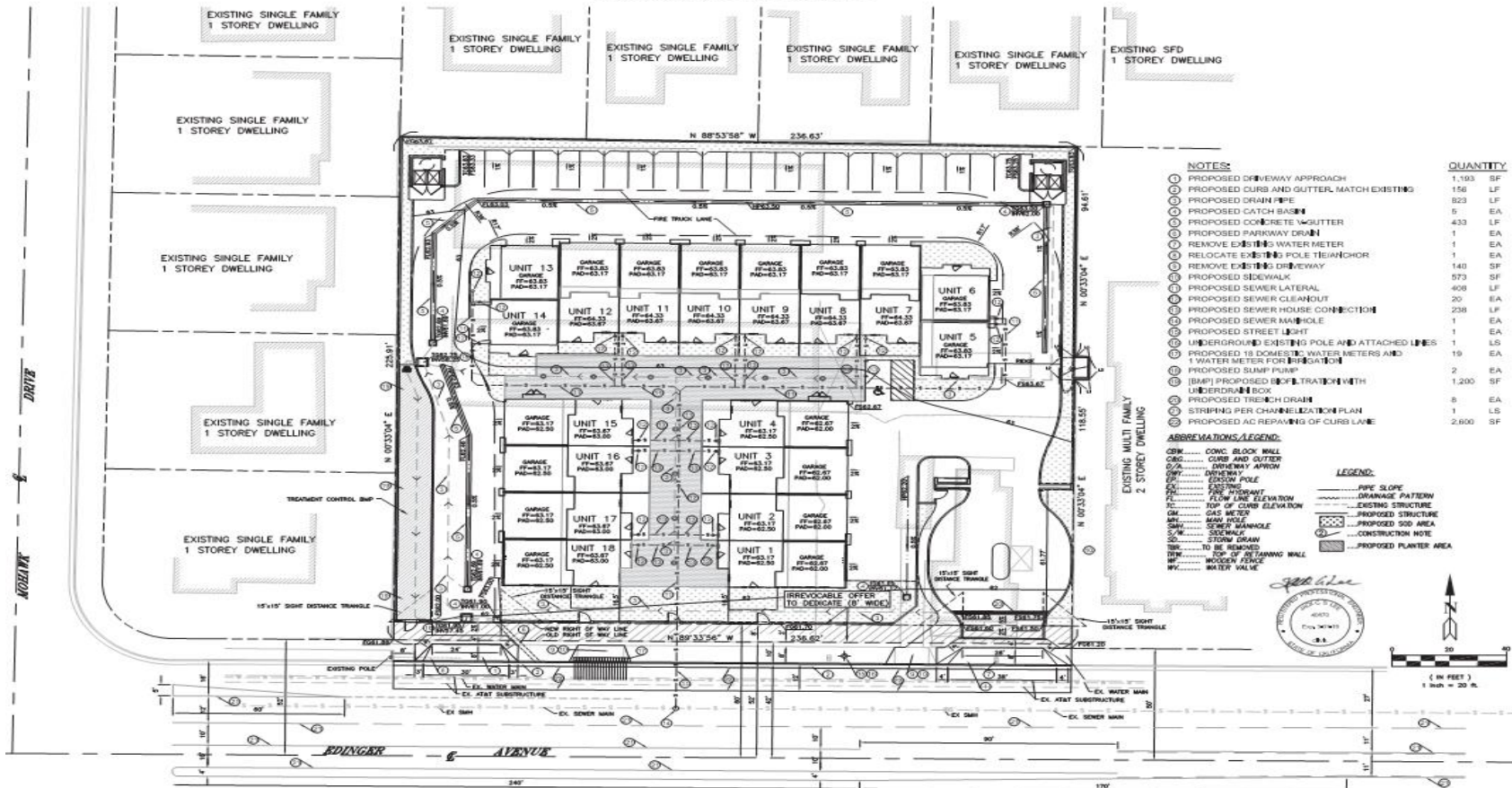
A PORTION OF THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 22, TOWNSHIPS SOUTH, RANGH 10 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE CITY OF SANTA ANA, COUNTY OF ORANGE, STATE OF CALIFORNIA.

APN: 407-107-31, 407-107-32 AND 407-107-22

FOR CONDOMINIUM PURPOSES

PREPARED BY:  
JACK LEE, PCE 40670  
CAL LAND ENGINEERING, INC.  
576 E. LAURET ROAD,  
BREA, CA 92821  
TEL: (714) 671-1090  
FAX: (714) 671-1090

OWNER/SUBDIVIDER:  
HAPHAN GROUP, INC., A CALIFORNIA CORPORATION  
10640 WARNER AVE #208  
FOURTH VALLEY, CA 92708



**NOTES:**

- PROPOSED DRIVEWAY APPROACH
- PROPOSED CURB AND GUTTER, MATCH EXISTING
- PROPOSED DRAIN PIPE
- PROPOSED CATCH BASIN
- PROPOSED CONCRETE W/GUTTER
- PROPOSED PARKWAY DRAIN
- REMOVE EXISTING WATER METER
- RELOCATE EXISTING POLE TIE/ANCHOR
- REMOVE EXISTING DRIVEWAY
- PROPOSED SIDEWALK
- PROPOSED SEWER LATERAL
- PROPOSED SEWER CLEANOUT
- PROPOSED SEWER HOUSE CONNECTION
- PROPOSED SEWER MANHOLE
- PROPOSED STREET LIGHT
- UNDERGROUND EXISTING POLE AND ATTACHED LINES
- PROPOSED 1/2 DOMESTIC WATER METERS AND 1 WATER METER FOR IRRIGATION
- PROPOSED SLUMP PUMP
- [BMT] PROPOSED SLOPE FLATTENING WITH UNDERDRAIN BOX
- PROPOSED TRENCH DRAIN
- STRIPING PER CHANNELIZATION PLAN
- PROPOSED AC REPAIRING OF CURB LANE

**QUANTITY**

1,193	SF
156	LF
829	LF
5	EA
433	LF
1	EA
1	EA
1	EA
140	SF
573	SF
408	LF
20	EA
238	LF
1	EA
1	EA
1	LS
19	EA
2	EA
1,200	SF
8	EA
1	LS
2,600	SF

**ABBREVIATIONS/LEGEND:**

CBM..... CONCRETE BLOCK WALL  
CG..... CURB AND GUTTER  
DA..... DRIVEWAY APPROX  
DW..... DRIVEWAY  
EP..... EXISTING POLE  
FL..... FLOW LINE ELEVATION  
FL..... FLOW LINE ELEVATION  
GM..... GAS METER  
SM..... SEWER MANHOLE  
S..... SIDEWALK  
SD..... STORM DRAIN  
TR..... TO BE REMOVED  
TRM..... TOP OF RETAINING WALL  
WF..... WATER VALVE

**LEGEND:**

..... PIPE SLOPE  
..... DRAINAGE PATTERN  
..... EXISTING STRUCTURE  
..... PROPOSED STRUCTURE  
..... PROPOSED SOD AREA  
..... CONSTRUCTION NOTE  
..... PROPOSED PLANTER AREA

Source: CalLand Engineering, Inc. – June 2, 2017

Exhibit 3 – Tentative Tract Map







Source: William Hezmalhalch Architects, Inc. – November 6, 2017

### Exhibit 4 – Architectural Renderings 1







Source: William Hezmalhalch Architects, Inc. – November 6, 2017

## Exhibit 5 – Architectural Renderings 2



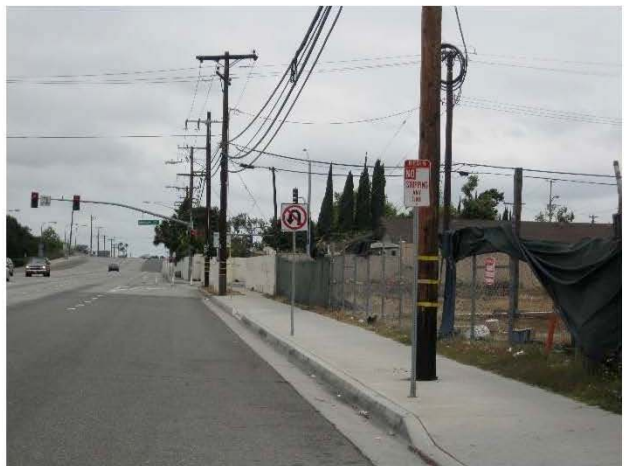




Source: Google Earth – April 20, 2018

**Exhibit 6 – Aerial View of Site and Surroundings**





Photographs taken May 30, 2018

**Exhibit 7 – Views along Edinger Avenue Frontage**







Photographs taken May 30, 2018

**Exhibit 8 – Views of Site Interior**







Apartments immediately east



Single family homes immediately west



Centennial Park, directly across Edinger Avenue

Photographs taken July 11, 2016

### Exhibit 9 – Views of Surrounding Land Uses





### Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Aesthetics               | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality                        |
| <input type="checkbox"/> Biological Resources     | <input type="checkbox"/> Cultural Resources                 | <input type="checkbox"/> Geology/Soils                      |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials      | <input type="checkbox"/> Hydrology/Water Quality            |
| <input type="checkbox"/> Land Use/Planning        | <input type="checkbox"/> Mineral Resources                  | <input type="checkbox"/> Noise                              |
| <input type="checkbox"/> Population/Housing       | <input type="checkbox"/> Public Services                    | <input type="checkbox"/> Recreation                         |
| <input type="checkbox"/> Transportation/Traffic   | <input type="checkbox"/> Utilities/Service Systems          | <input type="checkbox"/> Mandatory Findings of Significance |

### Determination

(To be completed by the Lead Agency)

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Selena Kelaher  
Signature

6/11/18  
Date

Selena Kelaher  
Printed Name

City of Santa Ana, PBA  
For





## Environmental Checklist Summary

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>I. AESTHETICS – Would the project:</b>				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>II. AGRICULTURE AND FOREST RESOURCES:</b> In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. – Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code §12220(g)), timberland (as defined by Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code §51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>III. AIR QUALITY –</b> 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>IV. BIOLOGICAL RESOURCES – Would the project:</b>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>V. CULTURAL RESOURCES – Would the project:</b>				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>VI. GEOLOGY AND SOILS – Would the project:</b>				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>VII. GREENHOUSE GAS EMISSIONS – Would the project:</b>				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>VIII. HAZARDS AND HAZARDOUS MATERIALS – Would the project:</b>				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>IX. HYDROLOGY AND WATER QUALITY -- Would the project:</b>				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>X. LAND USE AND PLANNING – Would the project:</b>				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>XI. MINERAL RESOURCES – Would the project:</b>				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>XII. NOISE – Would the project result in:</b>				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>XIII. POPULATION AND HOUSING – Would the project:</b>				
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>





	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XIV. PUBLIC SERVICES</b>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>XV. RECREATION –</b>				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>XVI. TRANSPORTATION/TRAFFIC -- Would the project:</b>				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>XVII 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</b>				
a) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>XVIII. UTILITIES AND SERVICE SYSTEMS – Would the project:</b>				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>XIV. MANDATORY FINDINGS OF SIGNIFICANCE –</b>				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Note: Authority cited: §21083 and §21083.05, *Public Resources Code*.

Reference: §65088.4, *Government Code*; §21080(c), §21080.1, §21080.3, §21082.1, §21083, §21083.05, §21083.3, §21093, §21094, §21095, and §21151, *Public Resources Code*; *Sundstrom v. County of Mendocino*, (1988) 202 Cal.App.3d. 296; *Leonoff v. Monterey Board of Supervisors*, (1990) 222 Cal.App.3d 1337; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th at 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.

## Checklist Responses

### I. Aesthetics

Would the project:

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

*No Impact.* The vacant, flat site is within a fully urbanized neighborhood of low-scale, mixed residential development. This site does not comprise any part of a scenic vista; therefore, there would be no impacts to such visual resources.

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

*No Impact.* The project site is vacant and contains no trees or surface features of any sort. Since there are no scenic resources on-site, there would be no impacts to such resources. There are no cultural landmarks or historic structures on or near the project site. Edinger Avenue is a local two-lane arterial and is not part of the state highway system.

- c) Substantially degrade the existing visual character or quality of the site and its surroundings?

*Less Than Significant Impact.* The vacant, flat site is within a fully urbanized neighborhood of low-scale, i.e., one- and two-story mixed residential development. The proposed three-story homes would be compatible in scale with surrounding one-, two-, and story buildings because of the substantial visual separation between the nearest homes and the proposed homes. For example, the one-story homes immediately to the west would be a minimum of 52 feet from the nearest proposed home on the project site. The nearest homes to the north are more than 41 feet from the nearest proposed home on the project site, and the two-story apartment building immediately east is over 71 feet away from the nearest proposed building footprint on the project site. The separations between the proposed project homes and existing homes are much larger than the separations between existing homes located along the western and northern site boundaries, where a typical side yard setback is approximately five feet, with separations between homes on adjacent lots at approximately 10 feet. In several instances, garages on adjoining lots are less than 10 feet apart. With these separations between existing homes and the proposed homes, the proposed three-story structures on the project site would be prominently visible from Edinger Avenue, but would not loom over neighboring buildings or compete with their visual character. With six-foot high concrete masonry walls to be constructed along the northern and western boundaries, an existing six-foot high concrete masonry wall along the eastern boundary, and densely planted landscape buffers along each of those boundaries, the proposed development would not result in privacy impacts or other visual intrusions into adjacent properties. As shown in the Architectural Renderings in Exhibits 4 and 5, the proposed contemporary architectural styles will feature a variety of design elements on all building sides, and the site will be finished with substantial landscaping treatments in the front yard, along the boundaries, and within internal common open space areas. Existing overhead power lines and poles along the Edinger Avenue frontage would be removed and replaced with underground facilities, which would reduce the level of visual clutter from existing overhead utility lines in this area.

The visual quality of the built project would not degrade the character or quality of the site or its surroundings; rather, the proposed development may be regarded as a visual improvement, compared to the current visual condition of a vacant lot with scattered trash. As such, the visual quality and character of this project would be compatible with the quality of surrounding development.

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



*Less Than Significant Impact.* Ambient lighting sources near the site include street lights along Edinger Avenue, interior lighting from nearby homes, headlights from automobiles, and a few exterior lighting fixtures for neighboring yards and walkways. There are no existing light sources on the vacant site.

The proposed project would include light sources typical of modern homes – i.e., interior lighting, exterior fixtures for yard and walkway security, and headlights on automobiles driven by nighttime residents and visitors to the homes. Additional lighting will be provided to illuminate the main driveways and the community entrance. The poles/fixtures will be spaced evenly such that they provide sufficient lighting for safety and security, but not so much lighting as to be a nuisance to the residents of the community or to neighboring land uses. These new light sources would be similar to and no more intensive than similar light sources from surrounding residential development. Exterior lighting would be oriented to confine the illumination to the targeted area and to stay within the project site. As such, no glare impacts resulting from off-site illumination are anticipated. Proposed finish materials for the homes would include non-reflective surfaces such as exterior cement plaster, wood siding, and stone veneer. Windows would be translucent rather than reflective. Metal roofing and window canopies would be comprised of non-reflective surfaces. There would be no glare impacts due to sunlight reflecting off the buildings or windows. One new street light would be installed along the Edinger Avenue frontage, with the same illumination qualities as existing street lighting found along this street. This would not result in light or glare impacts to neighboring homes or visibility of passing motorists.

## II. Agriculture and Forest Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. – Would the project:

- 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?

*No Impact.* The vacant site has been cleared of the previous single-family residence, garage and two storage buildings, and is within a fully urbanized neighborhood of mixed residential land uses. This site has not been farmed for more than 70 years and is not considered to be farmland.

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

*No Impact.* The existing zoning classification of R-2: Two Family Residences, does not support agricultural or farming uses, except for limited private horticultural activities or a greenhouse. This zoning is intended primarily for residential development and related accessory uses, and would not be changed by this project. This property is not encumbered by a Williamson Act contract or any other sort of deed or land use restrictions intended to preserve or foster agricultural uses. This project would have no impact involving a conflict with zoning for agricultural use.

- c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code §12220(g)), timberland (as defined by Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code §51104(g))?

*No Impact.* This vacant site does not contain any forest land or timberland; therefore, there would be no impact to such resources.



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

*No Impact.* This vacant site does not contain any forest land; therefore, there would be no impact to such resources.

- 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?

*No Impact.* Since there are no agricultural uses, no forest land, and no timberland on or near the site and this is a fully urbanized area, this residential development project would have no impacts on any such resources.

### 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:

Responses to the following questions include information provided in a quantitative assessment of this project's air quality impacts (Synectecology, July 2016—see Appendix A). Please refer to that study for additional details concerning modeling of air pollutant emissions and significance thresholds recommended by the South Coast Air Quality Management District (SCAQMD).

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

*No Impact.* The main objectives of the 2016 Air Quality Management Plan adopted by the SCAQMD are to achieve compliance with federal Clean Air Act (CAA) standards for fine particulates (PM<sub>2.5</sub>) and ozone. Key strategies to reduce emissions of PM<sub>2.5</sub> include direct source controls such as episodic curtailment of wood-burning fireplaces and open burning from agricultural practices, brush clearance, prescribed burns, along with emissions controls at combustion-based industrial facilities, reduction of ammonia emission from livestock waste, and transportation control measures to reduce vehicular emissions. Key strategies to reduce direct emissions that result in excessive ozone levels include: restrictions on coatings and solvents; restrictions and technological advances on combustion sources, restrictions and process improvements on petroleum operations and related fugitive VOC emissions; restrictions on multiple-pollutant generation sources, incentive programs and education. Several ozone-reducing strategies target emissions reduction for various transportation sources, primarily through advanced control technologies, replacement of older fleets with newer, cleaner vehicles, use of alternative fuels, and vehicles powered by non-combustion engines, etc.

This relatively small-scale, urban infill project would not conflict with the above strategies and would be consistent with AQMP land use and transportation strategies that encourage infill development as a way to reduce total vehicle miles traveled (VMT) and thus reduce vehicular emissions, compared to expanding on the edge of urban centers or in more outlying areas, which increases VMT and associated air pollution emissions. As discussed in the response to item b), below, the project's construction and operational emissions would be below SCAQMD significance thresholds for all criteria pollutants and would thus not jeopardize attainment of the region's PM<sub>2.5</sub> and ozone goals.

- b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

*Less Than Significant Impact.* Monitoring of regional air quality is conducted by the SCAQMD at 38 monitoring stations throughout the region. Data collected at the central Orange County monitoring stations are representative of air quality in Santa Ana. Results of monitoring at that station in years 2014 thru 2016 indicate very few violations of federal or state air quality standards for any of the criteria pollutants. The few violations noted are summarized in Table 2 below.



Table 2 – Summary of Ambient Air Quality Data

Pollutant	Primary Standard		Year	Maximum Concentration <sup>1</sup>	Number of Days State/Federal Std. Exceeded
	California	Federal			
Carbon Monoxide (CO) <sup>2,3</sup> (1-Hour)	20 ppm for 1 hour	35 ppm for 1 hour	2014	2.678 ppm	0/0
			2015	2.983	0/0
			2016	2.058	0/0
Ozone (O <sub>3</sub> ) <sup>3</sup> (1-Hour)	0.09 ppm for 1 hour	NA <sup>7</sup>	2014	0.096 ppm	1/0
			2015	0.099	1/0
			2016	0.090	0/0
Ozone (O <sub>3</sub> ) <sup>3</sup> (8-Hour)	0.07ppm for 8 hours	0.075 ppm for 8 hours	2014	0.080 ppm	6/6
			2015	0.080	2/2
			2016	0.069	0/0
Nitrogen Dioxide (NO <sub>x</sub> ) <sup>3</sup>	0.18 ppm for 1 hour	0.100 ppm	2014	60.6 ppb	0/0
			2015	52.4	0/0
			2016	59.8	0/0
Particulate Matter (PM <sub>10</sub> ) <sup>4,5,6</sup>	50 µg/m <sup>3</sup> for 24 hours	150 µg/m <sup>3</sup> for 24 hours	2014	85.0 µg/m <sup>3</sup>	2/0
			2015	59.0	2/0
			2016	74.0	NM/0
Fine Particulate Matter (PM <sub>2.5</sub> ) <sup>4,6</sup>	No Separate State Standard	35 µg/m <sup>3</sup> for 24 hours	2014	46.5 µg/m <sup>3</sup>	NM/4
			2015	53.8	NM/3
			2016	45.5	NM/1

ppm = parts per million

ppb = parts per billion

µg/m<sup>3</sup> = micrograms per cubic meter

NM = Not Measured

PM<sub>10</sub> = particulate matter 10 microns in diameter or lessPM<sub>2.5</sub> = particulate matter 2.5 microns in diameter or less

NA = Not Applicable

## Notes:

1. Maximum concentration is measured over the same period as the California Standard.
2. Data collected from the CARB Air Quality and Meteorological Information System (AQMIS) Database: <https://www.arb.ca.gov/aqmis2/aqmis2.php>
3. Measurements taken at the Costa Mesa Monitoring Station located at 2850 Mesa Verde Drive East, Costa Mesa, California, 92626.
4. Measurements taken at the Anaheim-Pampas Lane Monitoring Station located at 1630 W Pampas Lane, Anaheim, California 92802.
5. PM<sub>10</sub> exceedances are based on State thresholds established prior to amendments adopted on June 20, 2002.
6. PM<sub>10</sub> and PM<sub>2.5</sub> exceedances are derived from the number of samples exceeded, not days.
7. The Federal standard was revoked in June 2005.

Source: California Air Resources Board, *Aerometric Data Analysis and Measurement System (ADAM) Air Quality Data Statistics*, <http://www.arb.ca.gov/adam/welcome.html>, accessed on April 16, 2018.

This project would generate emissions of gases and particulate matter classified as criteria air pollutants during construction and throughout the long-term operational life of the completed development, but these emissions would be well below the significance thresholds identified by SCAQMD, as summarized in Table 3 and Table 4 below. Please note that the calculated construction emissions shown in Table 3 assume implementation of all applicable fugitive control measures specified in SCAQMD Rule 403, which are regulatory standards that all construction projects in the SCAB must implement. These control measures include, for example: (1) soil stabilizers shall be applied to unpaved roads; (2) ground cover shall be quickly applied in all disturbed areas; and (3) the active construction site shall be watered twice daily. The emissions calculating model assigns a control efficiency of 55 percent for twice daily watering and a similar efficiency was assumed for other controlled dust-producing, heavy equipment activities.



**Table 3 – Construction Emissions**

Source	ROG	NOx	CO	SO <sub>2</sub>	PM <sub>10</sub> Dust	PM <sub>10</sub> Exhaust	PM <sub>10</sub> Total	PM <sub>2.5</sub> Dust	PM <sub>2.5</sub> Exhaust	PM <sub>2.5</sub> Total
<b>Site Preparation</b>										
Off Road Diesel	2.31	24.22	15.93	0.02	1.17	1.31	2.48	0.60	1.20	1.80
Worker Trips	0.03	0.04	0.40	0.00	0.09	0.00	0.09	0.02	0.00	0.02
Totals	2.34	24.26	16.33	0.02	1.26	1.31	2.57	0.62	1.20	1.82
<b>Grading</b>										
Off Road Diesel	1.88	19.79	13.18	0.01	1.00	1.07	2.06	0.51	0.98	1.49
Worker Trips	0.03	0.04	0.40	0.00	0.09	0.00	0.09	0.02	0.00	0.02
Totals	1.91	19.83	13.58	0.01	1.09	1.07	2.15	0.53	0.98	1.51
<b>Building Construction</b>										
Off Road Diesel	2.95	19.10	14.31	0.02	0.00	1.23	1.23	0.00	1.18	1.18
Vendor Trips	0.17	0.16	0.23	0.00	0.01	0.00	0.02	0.00	0.00	0.01
Worker Trips	0.04	0.06	0.65	0.00	0.15	0.00	0.15	0.04	0.00	0.04
Totals	3.16	19.32	15.19	0.02	0.16	1.23	1.40	0.04	1.18	1.23
<b>Asphalt Paving</b>										
Off Road Diesel	1.19	12.10	9.03	0.01	0.00	0.73	0.73	0.00	0.68	0.68
Worker Trips	0.04	0.06	0.65	0.00	0.15	0.00	0.15	0.04	0.00	0.04
Asphalt Totals	1.23	12.16	9.68	0.01	0.15	0.73	0.88	0.04	0.68	0.72
<b>Coating</b>										
Off-Gas	3.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off Road Diesel	0.33	2.19	1.87	0.00	0.00	0.17	0.17	0.00	0.17	0.17
Worker Trips	0.01	0.01	0.15	0.00	0.03	0.00	0.03	0.01	0.00	0.01
Coating Totals	4.09	2.20	2.02	0.00	0.03	0.17	0.20	0.01	0.17	0.18
Daily Threshold (Any Phase)	75	100	550	150	→	→	150	→	→	55
Exceeds Threshold?	No	No	No	No			No			No

Source: Synectecology, July 2016 (see Appendix A)

Notes:

The CalEEMod model projects summer and winter emissions and the higher of the two values is included in the table.

**Table 4– Operational Emissions**

Source	ROG	NOx	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Mobile Sources	0.39	0.96	4.36	0.01	0.94	0.26
Natural Gas	0.01	0.07	0.03	0.00	0.01	0.01
Structural Maintenance	0.01	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.10	0.00	0.00	0.00	0.00	0.00
Hearth	4.72	0.12	9.05	0.01	1.38	1.38
Landscape Maintenance	0.05	0.02	1.50	0.00	0.01	0.01
Total Daily Emissions	5.28	1.17	14.94	0.02	2.34	1.66
Threshold	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Source: Synectecology, July 2016 (see Appendix A)

Notes:

The CalEEMod model projects summer and winter emissions. These can differ for mobile sources and the higher of the two values were included in the table.



- c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

*Less Than Significant Impact.* The South Coast Air Basin is presently in non-attainment status with respect to state and federal PM<sub>2.5</sub>, PM<sub>10</sub> and ozone standards. As summarized in the preceding response to item b), this project would generate minor volumes of pollutants that would contribute to regional PM<sub>2.5</sub>, PM<sub>10</sub> and ozone levels, but these project emissions would be well below the level of significance identified by the SCAQMD for both construction and operational emissions. As such, this project would generate less than cumulatively considerable emissions of these criteria pollutants.

- d) Expose sensitive receptors to substantial pollutant concentrations?

*Less Than Significant Impact.* Project construction and operational emissions were compared to SCAQMD's screening-level localized thresholds to determine the significance of exposure levels at neighboring residential land uses. In the case of CO and NO<sub>x</sub>, the SCAQMD screening tables show allowable values for the Central Orange County area (Source Receptor Area 17) of 485 and 81 pounds per day, respectively, for a 1-acre construction site with nearest receptors at 25 meters. At peak values of 15.93 and 24.22 pounds per day for CO and NO<sub>x</sub>, respectively, this project's construction emissions would be well below the SCAQMD thresholds and would not create significant localized impacts involving these criteria pollutants.

Because the Basin is a non-attainment area for particulate matter, the localized thresholds for both PM<sub>10</sub> and PM<sub>2.5</sub> are much more stringent than those for CO and NO<sub>x</sub>. In the case of PM<sub>10</sub> and PM<sub>2.5</sub>, the SCAQMD screening tables show allowable values of 4 and 3 pounds per day, respectively, for a 1-acre construction site with receptors at 25 meters. At peak values of 2.48 and 1.80 pounds per day for PM<sub>10</sub> and PM<sub>2.5</sub>, respectively, this project's construction emissions would not create localized impacts for particulates.

Small-scale residential projects like the proposed project generate negligible air pollutant emissions from interior or exterior activities; therefore, the fully operational project would not generate significant localized concentrations of directly emitted air pollutants on site or at any of the surrounding land uses.

The primary form of air pollution that would occur with this project is in the exhaust of the automobile traffic generated by the residents, their visitors and service trucks. That vehicular exhaust is dispersed over a wide area, rather than concentrated in the immediate vicinity, and rarely results in a significant concentration of air pollutants, except at severely congested intersections where traffic idles for extended periods of time and exhaust emissions can build up. Carbon monoxide is a main constituent of automotive exhausts and can be analyzed as an indicator of elevated pollutant concentrations at an intersection, where congested conditions occur. The South Coast Air Basins is in attainment status with respect to state and federal air quality standards for CO and there have been no reported CO concentration problems reported by the SCAQMD in this area for at least 5 years. The minor amount of traffic generated by this project would not result in significant concentrations of CO at any affected intersections.

- e) Create objectionable odors affecting a substantial number of people?

*Less Than Significant Impact.* During construction, a variety of typical construction-related odors could be generated, from sources such as diesel and gasoline exhaust emissions, paints and other coatings, asphalt covering of the streets, etc. These would be temporary, highly localized and would dissipate quickly, while affecting mainly construction crews. Construction period odors would be less than significant. The developed residential community would generate odors on an occasional basis, from sources such as outdoor barbeques, painting of accessory structures, exhaust from combustion-powered landscape machinery, etc. Community trash enclosures would have covers that would prevent release of





significant emit rubbish odors from regular household trash disposal. Odors associated with daily residential activities would be minor and insignificant.

#### 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?

*No Impact.* There are no trees or any other vegetation on this vacant site, with a bare ground surface. There is thus no habitat for any sensitive plants or wildlife species on this Site. There is also no habitat that supports sensitive species in the surrounding, fully urbanized area, where a variety of common ornamental varieties of trees, shrubs and groundcovers occur.

- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

*No Impact.* There are no trees or any other vegetation on this vacant site, with a bare ground surface. There are no surface depressions where water regularly ponds or where any type of water-dependent vegetation occurs. There would thus be no impact to any riparian habitat or to any other kind of sensitive natural community.

- c) 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?

*No Impact.* There are no trees or any other vegetation on this vacant site, with a bare ground surface. There are no surface depressions where water regularly ponds or where any type of water-dependent vegetation occurs. There would thus be no impact to any kind of federally-regulated wetland or to any State-regulated streambeds.

- 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?

*No Impact.* This fully urbanized area does not provide any habitat or fulfill any wildlife nursery functions that support wildlife or fish movement.

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

*No Impact.* There are no trees or other vegetation on the vacant Site, with a bare ground surface.

- 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?

*No Impact.* There is no Habitat Conservation Plan, Natural Community Conservation Plan or other type of conservation plan to govern the use of land in this fully urbanized part of central Orange County.



## V. Cultural Resources

Would the project:

- a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?  
*No Impact.* There are no buildings, structures or other cultural features on this Site.

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

*No Impact.* There are no buildings, structures or other cultural features on this Site. Past land use features have been removed. Shallow excavations will be required to prepare building pads and install site infrastructure. Penetrations into native soil materials, if at all, would be minor. Given the extensive level of ground disturbance on and around this site and the many years since any of this land was undeveloped, no impact to surface or subsurface archaeological resources is anticipated.

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

*No Impact.* Shallow excavations will be required to prepare building pads and install site infrastructure. Penetrations into native soil materials, if at all, would be minor. Given the extensive level of ground disturbance on and around this site and the many years since any of this land was undeveloped, no impact to subsurface paleontological resources is anticipated.

- d) Disturb any human remains, including those interred outside of formal cemeteries?

*No Impact.* This subject Site is not known to have ever been used as a human burial ground and the Preliminary Water Quality Management Plan indicates that groundwater is historically is high, i.e., less than five feet below the ground surface, which is an indication that the soils would not be appropriate for burials. The likelihood of encountering buried human remains during shallow site excavations is considered to be remote at best. Nonetheless, in accordance with existing state law, in the event of the discovery of a burial, human bone, or suspected human bone, all excavation or grading in the vicinity of the find shall halt immediately and the area of the find shall be protected. The contractor shall immediately notify the Orange County Coroner of the find and comply with the provisions of §7050.5 of the California Health and Safety Code, including Public Resources Code §5097.98, if applicable. In the event that human remains are determined to be of Native American origin, the applicant shall consult with the Most Likely Descendent to determine the appropriate treatment for the Native American human remains. Compliance with these existing regulations will prevent accidental disturbance or destruction of human remains.

## VI. Geology and Soils

Would the project:

- a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
- i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

*No Impact.* No traces of any earthquake faults have been identified in the City of Santa Ana. (Santa Ana General Plan Seismic Safety Element, page 9).



ii) Strong seismic ground shaking?

*Less Than Significant Impact.* The site is situated in a seismically active area that has historically been affected by generally moderate to occasionally high levels of ground motion. The site lies in relative close proximity to several active faults; therefore, during the life of the proposed structures, the property will probably 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 closest known active faults affecting the Santa Ana area are the Newport-Inglewood Fault located within approximately 8 miles, and the Whittier-Elsinore Fault Zone, located approximately 12.5 miles from the Santa Ana, respectively (Santa Ana General Plan Seismic Safety Element, Table 1). Design and construction of the proposed homes in accordance with the current seismic safety standards of the California Building Code, as required by the City of Santa Ana, will ensure that the appropriate ground shaking design criteria are applied to reduce potential ground-shaking impacts to less than significant.

iii) Seismic-related ground failure, including liquefaction?

*Less Than Significant Impact.* The Site is within an area identified as subject to liquefaction hazards (Santa Ana General Plan Seismic Safety Element, Exhibit 5). The occurrence of liquefaction could lead to significant settlement and possible tilting of and damage to buildings and infrastructure. Specific soils and groundwater characteristics that influence the behavior of liquefiable soils during ground shaking events will be determined in a site-specific geotechnical study required as a routine element of the City's building permit process. The geotechnical study will include on-site soils sampling and laboratory analysis to determine the specific soils characteristics, the level of liquefaction hazard, and identify the most appropriate means of mitigating potential liquefaction conditions. Such measures may include, but are not limited to: post-tensioned slabs or post-tensioned mat foundations. Compliance with the recommendations in the geotechnical report and the City's associated building permit conditions will mitigate liquefaction hazards to a level of less than significant.

iv) Landslides?

*No Impact.* There are no slopes on this nearly flat site; therefore, there is no potential for a landslide.

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

*Less Than Significant Impact.* The currently vacant site contains no vegetation or impervious surfaces, and is thus exposed to potential erosional forces of wind and rain. With the proposed site development, the potential for erosion would be reduced to a level of insignificance, due to construction of buildings and paved areas and landscaping of yards and common areas.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

*Less Than Significant Impact.* Unstable geologic or soils conditions are not known to be a problem in the immediate vicinity of the project site. Previous land uses built on this site showed no evidence of damage due to unstable ground conditions. As noted in the earlier response to a)iii, a site-specific geotechnical study will be prepared and submitted with the applications for grading and building permits. This study will include on-site soils sampling to determine the specific characteristic of the underlying geological structure and upper soil layers, and identify specific design and construction measures to address whatever limitations or constraints these conditions may present relative to ground instability. Given the absence of ground instability problems in this area, no extraordinary measures are anticipated to address



such conditions for this project. Compliance with the recommendations of the geotechnical report and the City's associated permit conditions will mitigate potential impacts involving unstable ground conditions, if any, to a level of less than significant.

- 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?

*Less Than Significant Impact.* Laboratory tests and visual examinations of soil materials conducted as part of the required geotechnical report described in the two preceding responses will also determine whether the site is located on expansive soil and whether special design and construction measures are warranted to mitigate potential impacts that could occur due to shrink/swell soil dynamics. Compliance with the recommendations in the geotechnical report, and any associated City grading and building permit conditions, would mitigate potential impacts involving expansive soils to a level of less than significant.

- e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

*No Impact.* The proposed project will connect to the City's sanitary sewer system. There would thus be no impacts involving use of soil-based sewer disposal systems.

## VII. Greenhouse Gas Emissions

Would the project:

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

*Less Than Significant Impact.* During the construction phases, greenhouse gases would be emitted from combustion-powered construction machinery and vehicle exhausts, from asphalt and concrete paving, and from architectural coatings. Estimated construction period GHG emissions have been calculated with the emissions factors and methods of the CalEEMod software program. CalEEMod 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 greenhouse gas (GHG) emissions associated with construction and operations from a variety of land use projects. The model quantifies direct emissions from construction and operations (including vehicle and off-road equipment use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. CalEEMod was developed in coordination with various air pollution control districts around the state, and the most common emissions calculating program in California.

The project's total construction-related GHG emissions have been calculated to be approximately 214 metric tons CO<sub>2</sub> equivalent (MTE), all of which is expected to occur within a 12-month time frame. These emissions levels are typical of this type of construction, and these levels have not been identified by any regulatory agency as sufficient to result in a significant impact on the environment. As such, the project's construction GHG impact would be less than significant.

Over the long-term operational life of the project, GHGs would be generated by automotive exhausts from gasoline and/or diesel-fueled internal combustion engines and possibly natural gas vehicles driven by residents, visitors, delivery services, and trash trucks. GHG emissions would also be indirectly emitted as a result of energy consumption within each home, involving emissions from energy production facilities that use fossil fuels and combustion processes to generate electricity and natural gas. Estimated annual GHG emissions from the developed site are listed in Table 5 below. The projected emission levels are typical of the amount of GHGs generated by new single-family residential land uses. The total projected annual GHGs of approximately 211.24 MTE per year (218.38 MTE if construction emissions



are amortized over the first 30 years of the fully operational project life), is well below the 3,000 tons per year identified by the SCAQMD as a recommended guideline for assessing the significance of project-level GHG emissions. As such, the project’s annual GHGs would be considered to be less than significant.

It is noted that all of the homes must be built in accordance with the 2016 California Building Energy Efficiency Standards (Title 24, Part 6 of the California Code of Regulations) which establish stringent energy efficiency performance requirements in new residential construction that will reduce the total energy demand and thus the total amount of potential energy generation-based GHGs associated with this project. GHGs emitted by power generation facilities would be based on the mixture of clean, renewable power sources versus carbon-emitting combustion sources in Southern California Edison’s power system. Vehicular emissions cannot be controlled by the developer or the City, as these are a result of the individual household choices for the type of automobile they purchase and the range and distances of trips they make. There are a variety of state and federal regulations that require lower carbon content fuels and exhaust emission control technologies that help to reduce GHGs associated with vehicle traffic.

**Table 5 – Annual Greenhouse Gas Emissions**

Source	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	Total Metric Tons CO <sub>2</sub> e*
Mobile Sources	155.43	0.01	0.00	155.56
Electricity	22.28	0.00	0.00	22.36
Natural Gas	15.20	0.00	0.00	15.29
Hearth	5.59	0.01	0.00	5.75
Landscape Maintenance	0.30	0.00	0.00	0.31
Water Use	7.09	0.04	0.00	8.20
Waste Disposal	1.68	0.10	0.00	3.77
Operational Total	207.57	0.16	0.00	211.24
Threshold	---	---	---	3,000
<b>Exceeds Threshold?</b>				<b>No</b>

Source: Synectecology, July 2016. (See Appendix A)

\*Because different gases have different conversion factors, totals may not equal.

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

*No Impact.* A variety of federal and state regulatory programs have been adopted to reduce GHGs sources through broad strategies aimed at major sectors of the economy and the primary sources of GHG emissions. These programs target such things as technological advances, use of alternative fuels and low or zero emission vehicles, industrial process and emissions controls, increased production of electricity through clean, renewable energy sources, high performance energy efficiency standards for building construction, and reductions in vehicle miles travelled. Southern California Edison (SCE), for example, the local electrical utility company that will provide electrical service for this project, is obligated under California Senate Bill 350 to increase the clean/renewables share of its electricity generation portfolio to 50% by 2030. As SCE continues to expand the amount of electricity generated by clean and renewable sources, the GHG footprint of the electricity delivered to Santa Ana will continue to be reduced. No plans, policies, or programs have been adopted by the State of California, the SCAQMD or the City of Santa Ana, to establish GHG emission limits or performance standards for GHG reduction in individual land use projects. This project would not, therefore, conflict with any such standards.



As noted in the preceding response, all of the proposed homes must be built in accordance with the 2016 California building energy efficiency standards. California Energy Commission staff completed an Initial Study of the environmental impacts of the 2016 Standards for residential and nonresidential buildings. In this study, Energy Commission staff estimated that the implementation of the 2016 Standards could reduce statewide annual electricity consumption by approximately 281 gigawatt-hours per year, electrical peak demand by 195 megawatts per year, and natural gas consumption by 16 million therms per year. The potential effect of these energy savings to air quality may be a net reduction in the emissions of nitric oxide by approximately 508 tons per year, sulfur oxides by 13 tons per year, carbon monoxide by 41 tons per year, and particulate matter less than 2.5 microns in diameter by 13.57 tons per year. Additionally, Energy Commission staff estimated that the implementation of the 2016 Standards may reduce statewide greenhouse gas emissions by 160 thousand metric tons of carbon dioxide equivalent (CO<sub>2</sub>e) per year. These latest standards are more energy efficient than the previous set of standards for residential construction, which were significantly more energy efficient than the standards in effect in the 1950s, 1960s and 1970s, when the surrounding residential properties were developed. If the City of Santa Ana should adopt the 2016 CBC standards prior to such time as the Project Applicant submits an application for a building permit for this project, then even more stringent energy efficiency standards will apply to the design and construction of this project. Through compliance with the energy efficiency standards of the CBC, this project will have a lower energy footprint that will reduce potential GHGs associated with energy consumption and generation.

Since the project site is within a fully urbanized area, in central Orange County, it is likely that future households will have jobs within a convenient driving distance, compared to households located on the edge or well outside of established urban areas where job-related trips are often longer. As such, the average commuting trip lengths for this project are likely to be lower than for projects in outlying areas, and with a preponderance of local schools, goods and services, trip lengths for other types of trips would also likely be short. This project is thus consistent with the Sustainable Communities Strategy developed for the southern California region by the Southern California Association of Governments, which is aimed at reducing average per capita greenhouse gas emissions by reducing average vehicle miles travelled and thereby reducing total GHGs produced by automotive exhausts.

### VIII. Hazards and Hazardous Materials

Responses to the following questions include information from investigations and assessments of prior land use activities regarding potential environmental contaminants provided in a Phase I Environmental Site Assessment—conducted at the Site (AEI, August 2016). Please refer to that report for additional details, in Appendix B of this Initial Study.

Would the project:

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

*Less Than Significant Impact.* As a small-scale residential land use, this project would involve routine transport, use and disposal of minor quantities of common household hazardous materials and wastes. This could include cleaning products, possibly paints, solvents, adhesives and other chemical materials used in building maintenance and interior improvements, automotive lubricants, small combustion engine fuels and lubricants, and electronic wastes from batteries and a variety of devices that are typical of this type of land use. This level of hazardous materials and waste usage is considered acceptable in residential areas and has not been identified as a significant threat to the environment. Future households can dispose of household hazardous wastes for free at any of four disposal centers operated by the Orange County Waste and Recycling Department. There are also several Orange-County based private businesses that accept electronic waste products for re-sale and reuse or for materials recovery.





- 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?

*Less Than Significant Impact.* The Site has been cleared of all surface-level cultural and environmental features that were associated with past land uses that occurred on site. Demolition activities occurred in June 2016, in accordance with a demolition permit issued by the City of Santa Ana, who also inspected the site during and following demolition. Following is a summary of the results of the Phase I ESA that was conducted in August 2016, which determined that there is no evidence of contamination by prior land uses that would trigger additional site investigations.

### **Summary of Phase I ESA Findings**

A Phase I Environmental Site Assessment (ESA) was performed for the Project site in August 2016, by AEI Consulting, in accordance with the protocols established in ASTM Standard Practice E1527-13 and the U.S. Environmental Protection Agency Standards and Practices for All Appropriate Inquiries (40 CFR Part 312). The assessment involved research of various federal, state and local data sources concerning reports of environmental contamination and clean-up efforts, review of historical aerial photographs and local property history records regarding the land use history of the site and surroundings, a walkover of the site, and interviews with the current property owner and the manager of the previous temporary contractor storage yard business located on site. The purpose of this assessment was to determine whether there is any evidence or other indications of chemical or other physical contamination that could represent a threat to the environment and/or human health. The findings of the Phase I ESA with respect to several types of potential contamination are summarized below.

### **Recognized Environmental Conditions (REC)**

A REC is defined in ASTM Standard Practice E1527-13 as "...the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property:

- 1) Due to a release to the environment
- 2) Under conditions indicative of a release to the environment
- 3) Under conditions that pose a material threat of a future release to the environment

The investigations conducted for the Phase I ESA determined that there is no evidence of any RECs on the subject site. It was also determined that prior to the first development of the site with a single family home sometime in the mid-to-late 1940s, the land was devoted to some form of low-intensity dry farming such as grain, hay or row crops, rather than something of higher intensity such as an orchard or field crops cultivated for food products. It is not known whether any chemical applications such as pesticides, fungicides, rodenticides, etc. may have been applied to this land when it was actively farmed. It is extremely difficult to determine degradation rates of chemical applications that may have been applied, given the many variables associated with the types of chemicals used, frequency of application, when it ceased, soil characteristics, influence of later site disturbances, etc. Since no agricultural activities have occurred on site since the mid-1940s, over 70 years has passed since there may have been any application of chemical agents associated with dryland farming of the site.

There are no regulatory standards in effect that would require additional site investigations or soil testing to determine whether there is any residual contamination from those historic farming activities. Most of the site is to be developed with buildings and other impervious surfaces such as paved drives and walkways. A small portion of the site will be landscaped with ornamental plants and trees. No crop production is proposed or likely during the operating life of the proposed residential use. All water will be supplied by the City's potable water distribution system; therefore, there will be no groundwater extraction within the site. There is a negligible potential for future residents to come into contact with



any degraded levels of agricultural chemical contaminants that might have been applied over 70 years ago. The potential for an accidental release of some sort of chemical contaminants into the environment during or following construction, therefore, is considered quite remote. The potential impact is also, therefore, considered to be less than significant.

Since the site was originally developed with a single family residence, other structures were added over the years, including a garage and two rectangular storage buildings. Historical property records indicate that an asphalt maintenance business operated on site and that auto storage occurred in the two storage buildings, apparently by the land owner and resident. All of the former buildings and structures and all site improvements have been demolished and removed and there is no indication of any contamination associated with those former improvements.

#### Controlled Recognized Environmental Condition (CREC)

A CREC is defined by the ASTM Standard Practice E1527-13 as a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls. AEI did not identify evidence of CRECs during the course of this assessment.

#### Historical Recognized Environmental Condition (HREC)

A HREC is defined by the ASTM Standard Practice E1527-13 as a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls. AEI did not identify evidence of HRECs during the course of this assessment.

#### Other Environmental Considerations

These include, but are not limited to, de minimis conditions and/or environmental considerations such as the presence of ACMs, LBP, radon, mold, and lead in drinking water, which can affect the liabilities and financial obligations of the client, the health and safety of site occupants, and the value and marketability of the subject property. AEI did not identify evidence of Other Environmental Considerations during the course of this assessment.

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

*No Impact.* The nearest edge of Andrew Jackson Elementary School lies approximately 1,615 feet (0.31 mile) to the north of the Site, just north of Windsor Park. Harvey Elementary School lies approximately 3,905 feet (0.74 mile) to the east and the Gerald P. Carr Intermediate School, which is immediately north of Harvey Elementary, is approximately 4,030 feet (0.76 mile) east, along Edinger Avenue. There is a college level education facility within Centennial Park, opposite the project site, known as Centennial Education Center. The 18 townhomes would not generate hazardous emissions and would not involve handling of acutely hazardous materials, substances or wastes. Regular handling of minor quantities of common household chemical agents and related wastes would occur; however, as discussed in the response to item a), that would not result in a significant threat to the environment. This project would not affect the nearest schools with hazardous substances or wastes.





- d) 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?

*No Impact.* The subject Site is not identified in the California Department of Toxic Substances Control's "Envirostor" database of government agency-monitored sites reported to contain hazardous materials and wastes that undergoing remediation activities, were previously listed as a site of concern, or which require clean up under state and federal laws.<sup>1</sup>

- 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?

*No Impact.* The Site is not located within an area governed by an airport land use plan, and is not within two miles of a public airport.

- f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

*No Impact.* There are no private airstrips in the vicinity of the Site.

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

*No Impact.* The Site has not functioned as and is not designated as a place for any emergency response operations. The relatively small-scale residential project would not alter the alignment, capacity or function of any existing streets or highways and would not adversely affect the use of Edinger Avenue, Harbor Boulevard, S. Mohawk Drive or any other nearby routes that may be used for emergency evacuation.

- h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

*No Impact.* There are no wildlands in this fully urbanized part of Orange County.

## IX. Hydrology and Water Quality

Would the project:

- a) Violate any water quality standards or waste discharge requirements?

*No Impact.* During the construction phases, there is some potential for generation of water pollutants that might possibly be carried off site during a rain storm. This might include loose soils, liquid and solid construction materials and wastes, and accidental spills of concrete, fuels and other materials. Such impacts will be avoided through implementation of a variety of construction control measures and best management practices that will be identified in a Water Quality Management Plan (WQMP). Such measures typically include temporary erosion control mechanisms to prevent runoff of loose soils, 'good housekeeping' practices to properly store, cover, and secure all construction-related materials and wastes, and provisions to provide immediate response to contain accidental spills. Regular monitoring and reporting of construction water quality control practices will be conducted by the Contractor. With these construction control measures, there would be no violation of any water quality standards and the project would be in compliance with waste discharge standards established for General Construction Permits (GCPs) by the Santa Ana Regional Water Quality Control Board. Construction control measures in the

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<sup>1</sup> <http://www.envirostor.dtsc.ca.gov/public/mapfull.asp>. Accessed July 20, 2016.



WQMP and compliance with the terms of the GCP will be reviewed and approved by the RWQCB and the City of Santa Ana, prior to issuance of a grading permit.

The developed Site could generate non-point sources of water pollutants that are typical of residential development, involving runoff from impervious surfaces such as streets, driveways, roofs, patios, walkways. These common urban runoff sources can produce a variety of water pollutants, including Suspended Solids/Sediments, Nutrients, Pathogens, Pesticides, oil and grease, and trash and debris. Since the project's wastewater disposal system consists of sealed piped connections to the City's sanitary sewer system, there would be no discharge of sewage or any other point sources of water pollution into any waters. No Waste Discharge Permit would be required for this project.

A preliminary Water Quality Management Plan (WQMP) has been prepared by the project's consulting civil engineer to identify structural and non-structural measures to prevent water pollution problems from developed site runoff.<sup>2</sup> The WQMP is designed to comply with the urban runoff control standards for new residential construction that are set forth in the Orange County Drainage Area Management Plan (DAMP). The DAMP regulations were developed to achieve compliance with National Pollutant Discharge Elimination System standards for non-point water pollution sources, as set forth in Order No. R8-2009-0030/NPDES No. CAS618030 of the Santa Ana Regional Water Quality Control Board (RWQCB). The City of Santa Ana, along with all other local government entities in the County, enforces the DAMP water pollution prevention standards through its local development review process, in accordance with Section 18, in Article IV of the Santa Ana Municipal Code, which defines the City's water pollution control regulations.

A plan view of the main features of the WQMP is provided in Appendix C (see page 20). As shown therein, storm water runoff will be collected and conveyed by a series of area drains and street surface flow, towards curb inlets located onsite. These inlets will direct the flow into a Biotreatment Area with an underdrain, in the southwestern corner of the site, which will treat the runoff within a planted, shallow ponding area. Planting media will be selected from the DAMP Technical Guidance document, BMP Fact Sheet IN-3. An underdrain will be placed within the bioretention area to capture any overflow and direct runoff through an underground parkway drain into the City's storm drain within Edinger Avenue.

In addition to these structural design features, the WQMP identifies non-structural best management practices to be implemented by individual homeowners and the Homeowners Association. These include:

- Education for property owners and occupants
- Activity restrictions
- Common area landscape management
- Source control maintenance
- Spill contingency plan
- Common area litter control
- Internal streets and parking space sweeping
- Water efficient landscape design and irrigation system
- Street sweeping
- Common area catch basin inspection and maintenance

Construction and maintenance of the water quality control features and implementation of the best management practices identified in the WQMP would sufficiently mitigate the project's water quality

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<sup>2</sup> *Water Quality Management Plan*, 3025 W. Edinger Avenue, Cal Land Engineering, Inc. April 6, 2016. This report is provided as Appendix C to this Initial Study.



impacts, and the developed Site would not violate any water quality standards or waste discharge requirements.

- b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

*Less Than Significant Impact.* There are no operating water wells on the project Site and none evident on adjacent properties. The proposed project would receive all water from a pipeline connection to the City's water supply system. There would be no direct withdrawal of groundwater to support the water needs of this project. Site development would replace currently bare ground surface that allows direct infiltration of rain into the groundwater table with impervious surfaces, including streets, driveways, roofs, patios and walkways. This would reduce total infiltration rates, but the private yards, perimeter landscaping, and Edinger Avenue parkway landscaping would continue to allow for infiltration during rain storms and also from irrigation sprinklers. This project would have a minor and less than significant impact on the local groundwater table.

- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

*Less Than Significant Impact.* Surface runoff flows south, toward Edinger Avenue. Runoff is currently minimal, as the bare ground surface is relatively level across the site. There are no established water courses on or near the site. The proposed project includes a surface and subsurface drainage system that will convey surface runoff to the underground storm drain within Edinger Avenue. Site grading will be designed to facilitate drainage in that direction. Proposed site improvements would establish impervious surfaces over more than 80 percent of the site and would substantially reduce erosion potential compared to the current bare ground surface conditions. This project would have a minimal effect on surface drainage patterns on site and no effect on drainage patterns off site. The project would not result in any erosion or siltation effects due to alterations of existing drainage patterns.

- d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-site or off-site?

*No Impact.* As noted in the preceding response, this project would have a minimal effect on surface drainage patterns on site and no effect off site and would not convey any runoff into a natural drainage course. The volume and rate of runoff would be controlled through the proposed drainage system to ensure that the amount of runoff discharged from the developed Site would be no greater than in the present undeveloped condition. The proposed drainage system is designed to capture and convey all runoff during a 2-year storm event. During larger storm events, storm water would be ponded to specified depths and then released to outlet through area drains on the low side of the bioretention area. During storms that produce more rain than a 25-year storm event, runoff will be routed through the main driveway entrance to the curb/gutter along Edinger Avenue. The internal streets are designed to safely handle stormflows for a 50-year storm event. This project's drainage plan reduces potential flooding impacts to less than significant.

- e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

*Less Than Significant Impact.* As noted in the preceding response, the volume and rate of runoff would be controlled through the proposed drainage system to ensure that the amount of runoff discharged from the developed Site would be no greater than in the present undeveloped condition, for low flow and peak



storm events. This will ensure that the volume of Site runoff would not exceed the capacity of the City's drainage network. Please refer to the response to item a, for a description of structural and non-structural measures to filter site runoff and prevent water pollution impacts. With the project's drainage system and WQMP, there would be a less than significant impact to the City's drainage network.

- f) Otherwise substantially degrade water quality?

*No Impact.* There would be no potential sources of water pollution except for the typical urban pollutants in surface runoff from the developed site that were discussed in the earlier response to item a.

- g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

*No Impact.* No part of the project site or surrounding properties lie within a flood hazard area mapped by FEMA as part of the national Flood Insurance program.<sup>3</sup> The mapping prepared for the national Flood Insurance program classifies the site within a "Zone X", which applies to conditions where there is an approximately 0.2% annual chance of flooding, 1% annual chance of flood with depths of less than one foot or with drainage areas of less than one square mile, or areas protected by levees from a 1% annual chance of flood.

- h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

*No Impact.* As noted in the preceding response, this site is not within a flood hazard area.

- i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

*No Impact.* There are no levees or dams upstream of the Site. A channelized section of the Santa Ana River is located several hundred feet to the west of the project site, and this is built to contain 100-year flood flows within the channelized banks of the river.

- j) Inundation by seiche, tsunami, or mudflow?

*No Impact.* There are no large, open water bodies such as a water reservoir or lake near the Site, which could be subject to seiche conditions during an earthquake and threaten the Site with water inundation. The Site is located more than 20 miles inland from the Pacific Ocean and is not threatened by possibly tsunami conditions. There are no slopes or canyons on or near this flat vacant Site and thus there is no possibility of mudslides.

## X. Land Use and Planning

Would the project:

- a) Physically divide an established community?

*No Impact.* The vacant Site is located along Edinger, a two-lane arterial street in a long-established residential neighborhood. Vehicular access and utility services would occur via direct connections to Edinger Avenue and no physical modifications to any surrounding properties or other physical components of the neighborhood would be required to develop this project.

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<sup>3</sup> FEMA, Flood Insurance Rate Map 06059C0256J, effective December 3, 2009



- b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

*Less Than Significant Impact.* The project site is designated in the City of Santa Ana General Plan Land Use Element as Low Density Residential (LR-7), which is intended for development of single family homes at up to 7 dwelling units per acre. The site is zoned Two Family Residence (R-2), which sets development standards for development of multi-family residential housing, townhouses and related accessory uses, as well as private horticulture and greenhouses and child and adult day care facilities. This site, and neighboring residential land uses, are not identified for any conservation, open space, or environmental protection purposes in the Conservation and Element, the Open Space, Parks and Recreation Element, or within the City's zoning standards. With 18 proposed attached townhomes on a gross site area of 1.22 acres, this project's density is 14.75 units per acre. This project; therefore, proposes to amend the Land Use Element to Medium Density Residential (MR-15), which is intended for development of attached residential uses at up to 15 units per acre. With the proposed change in the Land Use Element designation, this project would be consistent with the Santa Ana General Plan and would not conflict with any land use planning policies or programs aimed at protecting environmental resources or mitigating adverse environmental effects. In addition to the amendment proposed by the applicant, the City is proposing to amend the land use designation of six parcels to the east (3019, 1013, 3007, 2395 and 2801 West Edinger Avenue), approximately 2.5 acres from LR-7 to MR-15. The amendments would create a block of MR-15 designated properties along Edinger Avenue.

- c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

*No Impact.* There is no habitat conservation plan, natural community conservation plan or any other type of conservation plan that governs land uses in this fully urbanized part of Santa Ana.

## XI. 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?

*No Impact.* There has been no mineral resource extraction on this site or surrounding properties in the recent past, and such activities are not known to have occurred in the distant past, as well. Development of this project would have no effect on any known mineral resources.

- 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?

*No Impact.* The City's General Plan Conservation Element does not mention any mineral resources in the City's entire planning area.

## XII Noise

Would the project result in:

- a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

*Less Than Significant with Mitigation Incorporated.* As stated in the Santa Ana General Plan Noise Element,



“The City’s goal is to minimize noise problems in areas sensitive to noise because Santa Ana is almost fully developed, the main focus of the Noise section is on remedial measures to deal with existing noise problems, prevention of new noise problems through proper arrangement of noise sensitive land uses in relationship to circulation systems and establishment of appropriate noise emission or insulation standards for the various land uses. All residential uses should be protected with sounds insulation over and above that provided by normal building construction when constructed in areas exposed to greater than 60 dB CNEL.”<sup>4</sup>

Policies to prevent and mitigate noise problems related to siting new residential development are set forth in the Noise Element of the Santa Ana General Plan, as follows:

**Table 6 - City of Santa Ana Interior and Exterior Noise Standards**

Land Use Categories	Examples of Permitted Uses	Interior Noise Standard <sup>1</sup>	Exterior Noise Standard <sup>2</sup>
Residential	Single family, duplex, multi-family	45 <sup>2</sup>	65
Institutional	Hospital, school classroom/playground	45	65
	Church, library	45	--
Open Space	Parks	--	65

Notes:

\*Noise standard expressed as dB(A) CNEL, a weighted 24-hour average noise level.

1: Interior areas (to include, but not limited to): bedrooms, bathrooms, kitchens, living rooms, dining rooms, closets, corridors/hallways, private offices, and conference rooms.

2: Exterior areas shall mean: private yards of single family homes, park picnic areas, school playgrounds, and common areas. Private open space, such as atriums on balconies, shall be excluded from exterior areas, provided sufficient common area is included within the project.

3: Interior noise level requirements contemplate a closed window condition. Mechanical ventilation system or other means of natural ventilation shall be provided per Chapter 12, Section 1305 of the Uniform Building Code.

Source: Santa Ana General Plan Noise Element, Table 1, page 9.

The above standards and guidelines represent an appreciation that higher intensity land uses bring with them higher noise levels simply because more people are using these areas. Maintaining low noise levels will help to ensure that housing is kept well-maintained and keeps value over time, reducing municipal expenditures and maintaining revenues.

The primary ambient noise source affecting this site and the neighboring residential uses is roadway noise. Edinger Avenue is a major east-west, 4-lane arterial that carries traffic from adjoining local streets and intersecting collector streets through the middle of the city and to the State Route 55 freeway, on the eastern edge of the city. As such, there is substantial daily vehicular traffic and associated roadway noise along this street route, including the immediate vicinity of the project site. Twenty-four hour roadway noise levels along Edinger Avenue in this area are anticipated to be above 65 dBA CNEL, based on analysis conducted for the City’s Noise Element in the early 1980s (see Exhibit 5 – Transportation Noise Sources in the Noise Element). As noted in Table 6, the Noise Element generally discourages siting of homes within areas exposed to traffic noise in excess of 65 dBA CNEL, unless appropriate acoustical control measures are incorporated into the site and/or building design. Traffic levels and associated roadway noise are higher during AM and PM peak hours, and lower the rest of the day as traffic volumes decline, with lowest levels overnight when traffic volumes are lowest and a quiet environment is most important. The effects of Edinger Avenue traffic noise at the project site would decline with distance from the street, so that the middle and back row of homes would have a lower roadway noise exposure than those that would front onto the street. Proposed building setbacks along Edinger Avenue are comparable

<sup>4</sup> Santa Ana General Plan Noise Element. Adopted September 20, 1982 and as amended through February 2, 2009.





to the setbacks of buildings on adjoining properties along Edinger Avenue, and also similar to the setbacks of existing apartments with yards abutting Edinger Avenue located a few hundred feet to the east of the project site.

Compliance with current building energy efficiency standards established in the City's Building Code and the California Green Building Code will also provide effective wall and roof insulation that will reduce the impact of exterior noise within the interior of each home. Furthermore, all proposed homes must demonstrate as part of the building permit process that interior living spaces would not be exposed to noise levels above 45 dBA. This may require acoustical design measures such as window placement, higher Sound Transmission Class Rating, added wall and roof insulation, and possibly mechanical ventilation systems to allow for closing of windows and doors etc. to ensure that interior noise levels are within the standard. Given required compliance with these existing regulatory standards, interior noise exposure impacts would be less than significant.

The two private front yards facing Edinger Avenue, and possibly other private yards within the other six homes to be located in the front (southern) part of the site might be exposed to vehicular noise levels above 65 dBA for those temporary periods of time when people are utilizing those outdoor spaces. This could represent a significant noise exposure impact, based on the City's noise/land use compatibility standards identified in Table 6. This potential impact will be avoided through implementation of Mitigation Measure N-1, below, involving installation of appropriate sound attenuation measures, if needed, to reduce the noise level to less than 65 dB(A). This is expected to be accomplished through construction of an appropriate noise barrier such as a solid wall, which could be comprised of a variety of materials, including clear plexiglass, if views to the common area or street are desired.

Noise sources from the fully developed site would include automobile traffic and passive outdoor recreation and property maintenance activities. A doubling of roadway traffic volumes is typically required to generate a noticeable increase in noise levels of 3 dBA. The approximately 120 new trips per day<sup>5</sup> added by this project would represent an increase of less than one-half percent of the current average daily traffic volume along the adjacent section of Edinger Avenue.<sup>6</sup> This minor increase in traffic attributable to the proposed project would, therefore, have a negligible and less than significant impact on roadway noise levels along Edinger Avenue or other routes taken by residents departing and arriving at the site. The proposed common open spaces and private yards would be used by project residents for passive activities, typically in small groups of one or more households. There are no proposed recreation facilities such as a pool or clubhouse that could host any active recreation facilities; therefore, this project would not attract trips or activities from large groups that could generate substantial noise levels. Noise from the developed project site would be similar to and compatible with noise generated at neighboring residential uses and would not result in significant increases in noise levels or violation of any standards governing exposure of land uses to significant noise sources.

#### Mitigation Measure N-1: Ensure Acceptable Exterior Noise Levels in Private Yards

Prior to issuance of any building permits, the Developer shall demonstrate, to the satisfaction of the City Building Official, that exterior noise exposure within the eight private yards to be located in the southern part of the site will be less than 65 dB(A) CNEL.

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<sup>5</sup> Project daily trip generation calculated by CalEEMod software in the Air Quality/GHG report prepared for this Initial Study, based on research conducted by the Institute of Traffic Engineers "Trip Generation," 8<sup>th</sup> Edition, 2008.

<sup>6</sup> Average daily traffic volume along Edinger Avenue, between the Santa Ana River and Fairview Road, was 25,328 in 2015. Communication with Victor Chaidez, City of Santa Ana Public Works Agency, July 20, 2016.





- b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

*No Impact.* There are currently no sources of groundborne noise or vibration on or near the Site. During project construction, common construction machinery would be utilized for grading, site preparation and home construction. No pile-driving or other types of high vibratory machinery would be involved. No impacts due to groundborne noise or vibration sources would occur during construction. The developed residential site would support typical indoors and outdoors activities that are associated with single-family residences and would not generate groundborne noise or vibration.

- c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

*Less Than Significant Impact.* As discussed in the earlier response to item a), the noise from outdoor recreation, property maintenance and automobile traffic associated with the developed residential project would be minor, and similar to noise sources that already occur in this area. The project's noise would add a less than significant level of noise to ambient noise levels.

- d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

*Less Than Significant Impact.* Construction activities associated with this project would temporarily increase noise levels during the active construction work day. Noise levels would vary with the type of construction activity and range of machinery in use at a particular time. Noise levels are typically higher for larger horsepower machinery such as earth-moving equipment, and noise from other machinery such as electrically powered saws and paint compressors is also likely to be noticeable off site. Homes located along the Site's eastern, southern and western boundaries would be closest to construction activities and thus most exposed to construction noise.

Construction noise levels would be typical of noise levels for residential construction of this type and would occur only during the active work day. City Municipal Code Section 18-314 exempts construction activities from noise controls, as long as the work is conducted Monday-Saturday, between 7:00 a.m. and 8:00 p.m. Construction noise is prohibited on Sundays or federal holidays. These time periods are considered acceptable as this is when people are typically active and more tolerant of noise, as opposed to night hours when a quiet environment is preferred. No other restrictions on construction noise have been adopted. Compliance with the City's Municipal Code restrictions on construction time frames would reduce temporary construction noise impacts to less than significant.

- 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 expose people residing or working in the project area to excessive noise levels?

*No Impact.* The Site is not within two miles of any public airport or within any area governed by an airport land use plan. Noise from aircraft flyovers is not a problem in this area.

- f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

*No Impact.* There are no private airstrips in the vicinity of the Site.



### XIII. 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)?

*Less Than Significant Impact.* If each of the 18 homes were to be occupied by an average of 3.5 persons, a total of 63 people would live on the developed site. This would represent an increase in the January 2016 citywide population (342,930)<sup>7</sup> of 0.02%. The new population on site would also represent approximately 4% of the projected citywide population growth between 2015-2020.<sup>8</sup> This would be a nominal and less than significant increase in the City's residential population. The project infrastructure would be sized for the needs of this project, and would not provide capacity for or any extensions to other properties that could induce additional development outside of this Site.

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

*No Impact.* The Site has been cleared of all previous land uses, including the previous single-family home. There is no housing on this vacant site.

- c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

*No Impact.* As noted in the preceding response, no people are living on this vacant site.

### XIV. 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?

*Less Than Significant Impact.* The vacant Site is located in a fully urbanized part of Santa Ana that is adequately served by up to 10 existing fire stations within Santa Ana that are operated by the Orange County Fire Authority. There are six OCFA stations within less than 3.5 miles of the project site. Santa Ana Fire Station 77, located at 501 N. Newhope Street, is only 0.92 mile from the Site, at the corner of Warner Avenue and South Greenville Street. While there could be a minor increase in potential demand for fire suppression and emergency response due to the proposed 18-home development, no new fire station facilities or additions to existing facilities would be required to maintain adequate fire protection services after this project is built. Project-related impacts would be less than significant.

Police protection?

*Less Than Significant Impact.* The vacant Site is located in a fully urbanized part of Santa Ana that is adequately served by the City's existing police department resources. The Santa Ana Police Department headquarters is located only 3.5 miles from the Site (via main streets), in the downtown Civic Center. A police substation is also located 1.17 miles away, at 3750 W. McFadden Avenue. While there could be a minor increase in potential demand for police department response due to the proposed 18-home development, no new police station facilities or additions to existing facilities

<sup>7</sup> California Department of Finance, *City Population Rankings*, January 1, 2016

<sup>8</sup> Total population increase of 1,676 forecast for 2015-2020 in the *City of Santa Ana 2015 Urban Water Management Plan, Final Draft*. Arcadis U.S. Inc., April 2016.



would be required to maintain adequate police protection services after this project is built. Project-related impacts would be less than significant.

#### Schools?

*Less Than Significant Impact.* The Santa Ana Unified School District (“District”) provides public education services for school age children in this neighborhood. Andrew Jackson Elementary School is the nearest elementary campus, located at 1143 S. Nakoma Drive. Carr Intermediate School is the nearest intermediate campus, located at 2120 W. Edinger Avenue. Godinez Fundamental High School is the nearest high school campus, located at 1143 S. Nakoma Drive. Future households on site may include one or more school age children who would attend local elementary, middle, and/or high schools. The numbers of school age children and their grade level distribution would fluctuate regularly over time. The incremental impact of these students on those school facilities would be less than significant and would be offset through payment of mandatory development impact fees to the District, prior to the issuance of building permits for each new home. Those fees are collected by the District to help pay for additional facilities in response to growth throughout the District. Payment of these mandatory school district fees is sufficient mitigation for the project’s impact on school facilities, pursuant to California Senate Bill 50 (Leroy F. Greene School Facilities Act of 1998).

#### Parks?

*Less Than Significant Impact.* Future residents of the developed site may occasionally visit one or more of the public parks found in in Santa Ana and neighboring areas, for a variety of active and passive recreational activities. The two nearest parks are Centennial Regional Park, located directly opposite the project site on the south side of Edinger Avenue, and Windsor Park, a neighborhood park located approximately 0.2 mile north of the project site (0.37 mile by streets), with vehicular access from La Verne Avenue. The occasional park usage by the residents of the developed site would not result in adverse physical impacts to the parks or have a significant effect on the City’s parks and recreation programs.

#### Other public facilities?

*Less Than Significant Impact.* Future residents of the developed site may occasionally visit other public facilities such as public libraries, senior centers, pools, hospitals, etc. All of these facilities are intended to serve local residents and the added population from this project, estimated at just over 60 people, would have a less than significant impact on those facilities. This project would not result in a need to construct new types of ‘other’ public facilities.

## XV. 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?

*Less Than Significant Impact.* As discussed in the previous response to Item XIV., this project would not result in adverse physical impacts due to increased use of any parks or recreation facilities.

- 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?

*Less Than Significant Impact.* Common open spaces comprised of landscaping and walkways, along with private yards, are proposed to provide for passive recreation opportunities exclusively for the project residents. This would have no independent environmental effects not already accounted for in the analyses in the rest of this Initial Study. The City’s existing parks and recreation facilities, which include two parks in the immediate vicinity, are sufficient to absorb the incremental impact of an 18-home



neighborhood in this fully urbanized part of Santa Ana. The project would not necessitate construction of any additional parks or other recreation facilities outside of the site.

## XVI. Transportation/Traffic

Would the project:

- a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

*Less Than Significant Impact.* A traffic impact analysis was prepared for this project by Kunzman Associates (February 2017-See Appendix D of this Initial Study), to assess impacts at the adjacent intersection of S. Mohawk Drive and Edinger Avenue, and at the two project driveways. That study estimated that the project would generate approximately 105 daily trips, with 8 trips in the AM peak hour and 9 trips in the PM peak hour. The study also examined the combined effects of the project's traffic with other traffic anticipated due to additional ambient growth conditions and other development projects under review by the City in this area. It was determined that these cumulative levels of traffic would not result in significant level of service impacts at S. Mohawk Drive/Edinger Avenue, or at either of the project drive entrances. Each of these intersections would continue to operate at acceptable LOS D conditions.

Dedication of eight feet of right-of-way along the Edinger Avenue frontage is being required by the City, to achieve the full 60-foot right-of-way standard for this major arterial. This dedication will facilitate potential future widening of this street segment, if at some future time the City determines this is needed to maintain adequate traffic circulation in this area. The existing sidewalk along the Edinger Avenue frontage will be retained in place. There would be no impact to any other pedestrian paths. There is currently no bus stop along the site frontage; therefore, there would be no impact to any local transit stops. There is currently no bicycle lane along either side of Edinger Avenue in this area; however, the City's Bikeway Master Plan identifies a Class II bike lane along Edinger Avenue, throughout its entire route within the city, including the adjacent segment.<sup>9</sup> The City may elect to stripe a bike lane along the project site frontage and adjoining street frontages at some time in the future. This project would not constrain such future action and would not affect the City's current or planned bicycle network.

- b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

*Less Than Significant Impact.* The Orange County Congestion Management network is comprised of the freeways, highways and major arterial routes throughout the county. Only the segment of Edinger Avenue in the eastern edge of Santa Ana is part of the CMP network. The adjacent segment is not. This project's traffic would not have a direct impact on the CMP network; therefore, an analysis of impacts in accordance with CMP criteria is not required.

- c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

*No Impact.* The proposed three-story, approximately 34.5-foot-high homes would be well below any air traffic space, and this project would have no physical effect on air traffic patterns. Frequency of air travel and choice of airports for such travel by future residents cannot be predicted; however, with only 18

<sup>9</sup> Santa Ana General Plan Circulation Element, Exhibit 2, Bikeway Master Plan.



homes and a total population of roughly 60 people, this project would not result in a significant increase in air travel.

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

*Less Than Significant Impact.* Because of the site's proximity to the intersection of S. Mohawk Drive and Edinger Avenue, and the absence of a raised center median to restrict left-turning movements into or out of the site, there is a concern regarding potential conflicts between opposing traffic movements involving project residents entering and leaving the site and passing motorists. To minimize such conflicts, the City has directed the Applicant to provide a painted center median within the adjacent section of Edinger Avenue, from the Mohawk Drive/Edinger Avenue intersection, east to the end of the existing dedicated left-turn lane, which is roughly the eastern limits of the subject site. Left-turns into/out of the western project drive entrance would be prohibited. The painted/tapered median in Edinger Avenue would improve the functionality of the westbound left-turn approach at S. Mohawk Drive/Edinger Avenue, while preventing potential conflicts resulting from left-turn movements into or out of the western project drive entrance. Full access would be allowed at the eastern project driveway, including left-turns in/out of the site. The proposed plans include this painted center median.

The proposed project would be a gated community. A turnaround area is available before the gate to allow drivers to exit without entering the gate. The entry gate is located approximately 61 feet from the edge of the property, which would allow for stacking of three vehicles. This is expected to provide sufficient short-term storage of automobiles waiting to enter at the same time, without a queue into the nearest Edinger Avenue travel lane. If more than three automobiles should approach the entrance gate at the same time, there is space available for additional auto storage along the westbound Edinger Avenue curb, without obstructing moving traffic in the nearest travel lane.

Both proposed drive approaches provide a 15-foot by 15-foot sight distance triangle, as required by the City's Public Works Department standards, to ensure adequate driver visibility of approaching traffic, when exiting the site. On-street parking along the Edinger Avenue frontage is prohibited, so there would be no visual obstructions for existing motorists due to parked automobiles.

- e) Result in inadequate emergency access?

*No Impact.* The 24-foot internal roadway widths are adequate and meet minimum requirements for access by fire engines and crews. Project residents and emergency vehicles could enter/exit at either of the two drive approaches. This project would have no effect on emergency access to any surrounding properties and would not impair access by emergency vehicles traveling along adjacent and nearby streets.

- f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

*No Impact.* Since the proposed project involves for-sale housing at market rates, the future householders are likely to have sufficient incomes to rely on private automobiles for most of their transportation needs, with little demand for bus or other transit services. Bicycle trips would likely be for occasional recreational purposes, for the most part. There are currently no bike lanes along this section of Edinger Avenue; however, as noted earlier, the City's Bikeway Master Plan designates a Class II bike lane along Edinger Avenue, throughout its route through the city, including the segment adjacent to the project site. This project would not constrain any future decisions by the City to stripe a bike lane along the adjacent segment of Edinger Avenue, on either side of the street. Residents will probably walk and/or bicycle to the nearby Centennial Regional Park and the nearby Windsor Park, and may also walk and/or bicycle to local schools following existing sidewalks along adjacent and nearby streets. No alterations to existing streets, sidewalks, bus stops, or bicycle lanes are proposed or required for this project. This project would not affect the performance levels of transit, bicycle or pedestrian systems or facilities and would not





conflict with or impede implementation of any of the City's plans or programs to enhance and expand such alternative modes of travel.

## **XVII. 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

*No Impact.* The project site is vacant and is not listed in or eligible for listing in the California Register of Historical Resources and has not been identified as a locally important historic resource. There is no evidence of any past cultural improvements that would be classified as a historical resource as defined in Public Resources Code section 5020.1(k). Further, pursuant to Public Resources Code Section 21080.3.1, the City contacted 18 Native American Tribes identified by the California Native American Heritage Commission to provide notice of this project and this CEQA process, to determine if any tribal interests have concerns about possible impacts to tribal cultural resources. None of the tribes responded to this notice and it is concluded that there are no tribal cultural resources that could be affected by this project.

- 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.

*No Impact.* Please refer to the preceding response.

## **XVIII. Utilities and Service Systems**

Would the project:

- a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

*No Impact.* The new homes would generate wastewater that is comprised of the same constituents typically found in residential wastewater streams. This project's wastewater would not require any unique types of treatment processes and all of the sewage generated by the project would be discharged into the City's wastewater collection system for conveyance to the Orange County Sanitation District's wastewater treatment facilities.

- b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

*Less Than Significant Impact.* The project's infrastructure includes underground pipeline "lateral" connections to the City's existing 12-inch water main and 8-inch sewer main within the adjacent segment of Edinger Avenue. City staff have indicated that the existing mains are functioning properly and that no new or expanded off-site water or sewer improvements are anticipated to be required for this project.<sup>10</sup>

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<sup>10</sup> Mr. Rudy Rosas, Senior Civil Engineer, City of Santa Public Works Agency, telephone communication, August 2, 2016.



- c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

*Less Than Significant Impact.* The project's storm drainage system would convey runoff through a new parkway drain that would extend from the project site to the City's local storm drain within the adjacent section of Edinger Avenue. The proposed on-site drainage system is designed to ensure that the volume of developed Site peak runoff does not exceed the amount of runoff under the predevelopment condition. As a result, no modifications to the City's existing storm drain network would be required.

- d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

*Less Than Significant Impact.* The City's current water supply sources include groundwater from the Lower Santa Ana River Groundwater Basin (70%), imported water from Metropolitan Water District (29.2%) and recycled water (0.8%).<sup>11</sup> This water supply mix is expected to remain nearly the same through 2040. All of the project's water demand, including potable water, fire suppression and irrigation, would be provided by the City of Santa Ana's water system. Total water demand associated with the proposed 18 three-story townhomes would likely be higher than historic levels associated with the previous land uses, which included a single family residence and garage structures. (No data on past water usage was available to confirm this.) The project's water consumption would be reduced through compliance with the City's Water Conservation Ordinance No. 41-1500, which establishes standards for water efficient selection of low water demand landscaping materials and design of highly efficient irrigation systems. All homes would also be required to install a number of water-saving plumbing fixtures, in accordance with the City's Building Code standards.

The City's 2015 Urban Water Management Plan (UWMP)<sup>12</sup> has anticipated slow, incremental increases in water demand due to further growth citywide (projected 0.5% total population growth and 0.06% increase in total water demand through 2020) and the proposed project represents a small proportion of anticipated growth during this time frame, i.e. approximately four percent of the total population growth forecast. The UWMP identifies sufficient water supply resources to meet the needs of current water consumers and to meet projected increased water demand in the near-term and over the long term, during normal rainfall years and during single dry and multiple dry years. Per capita rates of water use have declined in recent years, and are anticipated to continue to decline, due to the City's efforts to comply with the provisions of SBx-7-7 (Water Conservation Act of 2009), which requires reduction in urban water use of 20% by 2020 (compared to a 2005 baseline). The City has already met its interim 2015 and projected 2020 target reductions for water conservation, and this has been achieved through higher efficiencies in landscape irrigation, interior plumbing fixtures and periodic restrictions on wasteful water practices during drought conditions. This project's water demands would not require any additional water supply entitlements or development of any new water resources.

- e) 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?

*Less Than Significant Impact.* The 18 new homes would generate domestic sewage that would be conveyed to Orange County Sanitation District wastewater treatment facilities in Fountain Valley. OCSD currently treats more than 92 million gallons of wastewater per day at their treatment plant.<sup>13</sup> This project's additional wastewater load would be a minor and less than significant addition to the amount of wastewater treated by OCSD. No new treatment facilities or expansion of existing facilities would be

<sup>11</sup> City of Santa Ana 2015 Urban Water Management Plan, Final Draft. Arcadis U.S. Inc., April 2016.

<sup>12</sup> Ibid.

<sup>13</sup> OCSD/012209/OCSD General Info.cdr. Access online July 29, 2016 at <http://www.ocsd.com/Home/ShowDocument?id=10685>.





required to handle the additional wastewater from this project. To respond to the cumulative effects of growth throughout the OCSD service area, this project, like all new development projects within the OCSD service area, must pay a “connection fee” to OCSD to help pay for upgrades to OCSD’s regional treatment and collection system facilities, over time, as they are needed to handle additional loads over time. Payment of this fee would offset this project’s incremental impact on the OCSD wastewater collection and treatment system.

- f) Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?

*Less Than Significant Impact.* The 18 new homes would generate a variety of typical household solid and liquid wastes that would be disposed of at a landfill, waste transfer station or other disposal facility permitted to accept municipal wastes. Trash, recyclable wastes and green wastes from the site would be collected by the City’s residential trash disposal service company (Waste Management) and trucked to disposal sites that typically receive waste from Santa Ana’s trash pick-up service. Because it is least expensive to take trash to the nearest disposal facilities, it is presumed that the trash requiring landfill disposal would be taken to one or all of the three Class II landfills operated by the County of Orange Waste & Recycling Department. These are the Frank R. Bowerman Landfill, in Irvine, the Olinda Landfill in Brea, and the Prima Deshecha Landfill, in San Juan Capistrano.

Olinda Landfill is permitted to accept up to 8,000 tons of trash a day. It opened in 1960 and it has not been determined when its full capacity will be reached and closure is required. The Prima Deshecha Landfill is permitted to accept up to 4,000 tons of refuse per day, and is expected to accept trash until 2067. The Frank R. Bowerman Landfill is permitted to accept 11,500 tons of refuse per day and is expected to continue to accept trash until 2053. Through its Regional Landfill Options for Orange County (REOOC), the County plans for waste management and disposal needs throughout Orange County, for the next 40 years. This planning process is intended to ensure sufficient landfill and other waste disposal facilities are ensured for all parts of the county. This relatively small development project would not have a significant impact on the County’s landfill capacity.

- g) Comply with federal, state, and local statutes and regulations related to solid waste?

*No Impact.* The City of Santa Ana continues to exceed the solid waste reduction and landfill diversion targets established by the California Integrated Waste Management Act of 1989. In the 2014 reporting year, the City diverted 68% of total municipal solid wastes from landfill disposal.<sup>14</sup>

Pursuant to the mandatory provisions of the California Green Building Code Standards, at least 50% of all non-hazardous construction waste materials must be recycled and/or salvaged. Future residents of the developed site would dispose of their household trash, recyclable wastes and green wastes in two fully enclosed community trash storage areas to be located in the northwestern and northeastern corners of site. The trash would be collected from the storage areas and taken to licensed/permitted municipal solid waste disposal facilities by Waste Management trucks, as part of the citywide residential trash disposal program. There are several commercial facilities within Santa Ana that handle recyclable wastes that project residents can also take their recyclable waste materials to. No permits or other regulatory approvals are required to handle or dispose of the household wastes that would be generated by this project. This project would not conflict with any federal, state or local regulations pertaining to waste management and disposal.

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<sup>14</sup> <http://www.ci.santa-ana.ca.us/green/recyclingprograms.asp>. Accessed on line July 29, 2016.



#### XVIV. Mandatory Findings of Significance

- a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

*Less Than Significant Impact.* No significant impacts have been identified for this project, with respect to any of the topics discussed in Sections I thru XVII of this Initial Study. There is no habitat on this vacant, previously disturbed Site to support any fish or sensitive wildlife species, or any sensitive plants or natural communities. There are no cultural features on the Site and there is no indication from investigations of the Site's land use history that this Site might contain prehistorical resources. There would be no impacts to any important historic or prehistoric resources. The proposed homes would be compatible with the scale and character of surrounding residential land uses. Implementation of the proposed project would not degrade the quality of the environment.

- b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

*Less Than Significant Impact.* Other proposed projects that are currently under review, under construction, or in plan check were identified on the City Planning Department's April 2018 "Cumulative Projects List."<sup>15</sup> This database identifies 40 single and multi-family residential projects, totaling 5,624 housing units. In addition, there are 27 different commercial projects totaling 223,027 square feet, along with a bus terminal maintenance building, four church or other religious facilities, 531,197 square feet of office space, 152,597 square feet of hotel space, 419 senior living units, 48 residential care units, 2,665 square feet of industrial space, 159,097 square feet of school facilities, 56,712 square feet of indoor sports facilities, a water pump and an Elk's Lodge. Please refer to Appendix E, for a list of these project locations and descriptions of their land use characteristics. No other projects are proposed in the vicinity of the project site.

Since construction impacts are highly localized and affect primarily the adjacent land uses, construction impacts at the project site would have little, if any, interaction with construction at other development sites and no adverse cumulative construction impacts involving this project are anticipated.

Over the long-term operating life of the Project's 18 homes, the permanent environmental effects associated with this residential development would contribute to cumulative impacts from all of the other development proposals in the city. This would include increased vehicular traffic, increased energy and water consumption, increased solid waste and wastewater generation, use of public services and facilities, noise, outdoor lighting, direct and indirect emissions of air pollutants, etc. Given the spatial separation between the various project sites, there would be little, if any, direct interaction between their physical impacts. All of these projects have been or are being reviewed by the City of Santa Ana for compliance with local planning and zoning regulations and to ensure that site-specific environmental impacts are minimized. Long-term cumulative effects of the proposed project and other pending development projects in Santa Ana are being addressed through a variety of existing local and regional planning programs designed to protect environmental quality, conserve important natural resources, provide sufficient water supplies, handle solid and liquid wastes, reduce and prevent water and air pollution, manage traffic congestion, etc., improve building energy efficiencies, etc. The City is currently updating its General Plan, to establish goals, policies, objectives and action strategies to guide growth and implement a vision

<sup>15</sup> City of Santa Ana Environmental Cumulative Development Project List, April 3, 2018.



for community character over the next 20+ years. This General Plan Update will address the cumulative and long -range impacts of all of the new development projects currently under review or under construction, as well as forecasts of additional growth in that long range planning period.

This project’s impacts would not be cumulatively considerable and would not conflict with any of these existing comprehensive services programs or require enactment of any new ones.

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

*Less Than Significant Impact.* There would be some adverse, but less than significant, impacts to people involving emissions of common air pollutants during construction and over the long-term operating life of the project and less than significant increases in local noise levels during construction and over the operating life of the project. There would be no significant impacts to local parks and recreation resources, or to any public services or facilities. A Phase I Environmental Site Assessment conducted for this site determined that there are no “Recognized Environmental Conditions” indicating known or potential contamination from hazardous wastes or substances. This project would not result in any significant adverse effects on human beings, on-site or off-site.