PUBLIC REVIEW DRAFT | JUNE 2020

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Legacy at Coto

LEAD AGENCY:

County of Orange
OC Public Works, Development Services/Planning
601 North Ross Street
Santa Ana, California 92701
CEQA Contact: Kevin Shannon
714.667.1632

PREPARED BY:

VCS Environmental
30900 Rancho Viejo Road, Suite 100
San Juan Capistrano, California 92675
Contact: Dan Bott
949.489.2700

VCS Environmental
EXPERTS IN STRATEGIC SOLUTIONS

PUBLIC REVIEW DRAFT

CEQA INITIAL STUDY
PROPOSED MITIGATED NEGATIVE DECLARATION

Legacy at Coto

PLANNING APPLICATION NO. PA 20-0022
INITIAL STUDY NO. 20-0022

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June 2020

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1.0 ENVIRONMENTAL CHECKLIST

1.1 Background

1. Project Title: Legacy at Coto

2. Lead Agency Name and Address:

County of Orange
OC Public Works, Development Services/Planning
601 North Ross Street
Santa Ana, California 92701

3. Contact Person and Phone Number:

Kevin Canning, County of Orange | OC Development Services/Planning
Telephone: 714.667.8847
Email: Kevin.Canning@ocpw.ocgov.com

4. Project Location:

The project site is located within the Coto de Caza within unincorporated, Orange County. The site is located at 23333 and 23335 Avenida La Caza, Coto de Caza, California 92679. The project site is also described as Orange County Assessor's Parcel Numbers 804-231-02 and 04.

5. Project Sponsor's Name and Address:

California Grand Villages Coto Partners, LLC
23333 and 23335 Avenida La Caza
Coto de Caza, California 92679

6. General Plan Designation:

The *Orange County General Plan* designates the project site Suburban Residential (1B).

7. Zoning:

The project site is located within Planning Area 20 of the *Coto de Caza Specific Plan* and is zoned for Community Center/Commercial.

8. Description of Project:

The proposed Legacy at Coto Project (proposed project) is located within the Coto de Caza Specific Plan within unincorporated Orange County. The site is located at 23333 and 23335 Avenida La Caza. The project site consists of 3.86 acres and was the former location of the Vic Braden Tennis College. The proposed project would reuse the area where the existing tennis facilities and administrative offices are located to allow for the construction of a 101-unit active senior living project. A total of 120 onsite parking spaces and 25 offsite parking spaces at the Coto Valley Country Club would be provided for residents and visitors. Please refer to Section 3.0, *Project Description*, for a comprehensive description of the proposed project.

9. Surrounding Land Uses and Setting:

The project site is surrounded by the Coto Valley Country Club to the east, Silver Bronze Corporation (SBC) tennis courts and residential uses to the west, open space to the north, and open space and residential uses to the south. Please refer to Section 3.2, *Project Site*, for a complete description of land uses and setting.

10. Other public agencies whose approval is required:

Please refer to Section 3.6, *Project Approvals and Permitting Agencies*.

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Pursuant to Public Resources Code Section 21080.3.1 (Assembly Bill [AB] 52), the County of Orange has conducted the required outreach to the applicable Native American tribes. This process is further discussed in Section 4.18.

1.2 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" or "Less Than Significant Impact With Mitigation Incorporated," as indicated by the checklist on the following pages.

☐	Aesthetics	☐	Agriculture and Forestry	☐	Air Quality
☒	Biological Resources	☒	Cultural Resources	☐	Energy
☒	Geology and Soils	☐	Greenhouse Gas Emissions	☒	Hazards and Hazardous Materials
☒	Hydrology and Water Quality	☐	Land Use and Planning	☐	Mineral Resources
☒	Noise	☐	Population and Housing	☐	Public Services
☐	Recreation	☒	Transportation	☒	Tribal Cultural Resources
☒	Utilities and Service Systems	☐	Wildfire	☒	Mandatory Findings of Significance

1.3 Lead Agency Determination

Based on the analysis conducted in this Initial Study, the County of Orange, OC Public Works, Development Services/Planning, as the Lead Agency, has made the following determination:

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 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.	☐
I find that the proposed project has previously been analyzed as part of an earlier CEQA document (which either mitigated the project or adopted impacts pursuant to findings) adopted/certified pursuant to the State CEQA Guidelines and the County's adopted Local CEQA Guidelines. The proposed project is a component of the whole action analyzed in the previously adopted/certified CEQA document.	☐
I find that the proposed project has previously been analyzed as part of an earlier CEQA document (which either mitigated the project or adopted impacts pursuant to findings) adopted/certified pursuant to State and County CEQA Guidelines. Minor additions and/or clarifications are needed to make the previous documentation adequate to cover the project which are documented in this addendum to the earlier CEQA document (CEQA Section 15164).	☐
I find that the proposed project has previously been analyzed as part of an earlier CEQA document (which either mitigated the project or adopted impacts pursuant to findings) adopted/certified pursuant to State and County CEQA Guidelines. However, there is important new information and/or substantial changes have occurred requiring the preparation of an additional CEQA document (ND or EIR) pursuant to CEQA Guidelines Sections 15162 through 15163.	☐

Kevin Shannon — June 23, 2020

Signature — Date

Kevin Shannon, Consultant - Environmental Planner

Printed Name

1.4 Evaluation of Environmental Impacts

This section analyzes the potential environmental impacts associated with the proposed project. The issue areas evaluated in this Initial Study include:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire
- Mandatory Findings of Significance

A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

All answers must take account of the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

"Negative Declaration: Less Than Significant Impact with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

Earlier analyses may be used where an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

a) Earlier Analysis Used. Identify and state where they are available for review.

b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

c) Mitigation Measures. For effects that are "Less Than Significant Impact With Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

Supporting Information Sources: A source list should be attached, and other sources used, or individuals contacted should be cited in the discussion.

The explanation of each issue should identify:

a) The significance criteria or threshold, if any, used to evaluate each question; and

b) The mitigation measure identified, if any, to reduce a significant or potentially significant impact to a less than significant level.

The following information is provided to supplement the Evaluation of Environmental Impacts discussed above.

THRESHOLDS OF SIGNIFICANCE

Thresholds of significance are identifiable quantitative, qualitative or a performance level for a particular environmental effect. Non-compliance with a threshold means the effect will normally be determined to be significant and, conversely, compliance with a threshold means the effect will normally be less than significant (Guidelines Section 15064.7).

The County relies upon the specific questions relating to environmental impact areas listed in Appendix G of the State CEQA Guidelines to determine a level of significance.

ENVIRONMENTAL BASELINE

To adequately determine the significance of a potential environmental impact, the environmental baseline must be established. Guidelines Section 15125(a) states in pertinent part that the existing environmental setting will normally constitute the baseline physical conditions by which a lead agency will determine if an impact is significant.

Therefore, the environmental baseline for the project constitutes the existing physical conditions as they exist at the time that the environmental process commenced (July/2019).

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2.0 INTRODUCTION

The California Environmental Quality Act (CEQA) requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before taking action on those projects. Pursuant to Section 15367 of the State CEQA Guidelines, the County of Orange is the Lead Agency and has the principal responsibility of approving the proposed project. As the Lead Agency, the County of Orange is required to ensure that the proposed project complies with CEQA and that the appropriate level of CEQA documentation is prepared. Through preparation of an Initial Study as the Lead Agency, the County of Orange determines whether to prepare an Environmental Impact Report (EIR), Negative Declaration (ND) or Mitigated Negative Declaration (MND). Based on the conclusions of this Draft Initial Study, the County of Orange has recommended that the appropriate level of environmental documentation for the proposed project is an MND. This Initial Study/Mitigated Negative Declaration (IS/MND) analyzes the potential direct, indirect and cumulative effects associated with implementation of the proposed project.

2.1 Statutory Authority and Requirements

In accordance with CEQA (Public Resources Code Sections 21000-21177) and pursuant to Section 15063 of Title 14 of the California Code of Regulations (CCR), County of Orange as the Lead Agency, is required to undertake the preparation of an Initial Study to determine whether the proposed project would have a significant environmental impact. If the Lead Agency finds that there is no substantial evidence that the project, either as proposed or as modified to include the mitigation measures identified in the Initial Study, may cause a significant effect on the environment, the Lead Agency shall prepare a Negative Declaration (or Mitigated Negative Declaration) for that project. (Section 21080(c), Public Resources Code).

This Mitigated Negative Declaration, which may ultimately be adopted by the County of Orange in accordance with CEQA, is intended as an informational document undertaken to describe the potential environmental impacts of the project. However, the resulting documentation is not a policy document, and its approval and/or certification neither presupposes nor mandates any actions on the part of those agencies from whom permits, and other discretionary approvals would be required.

2.2 Purpose of the Initial Study

Section 15063 of the CEQA Guidelines identifies global disclosure requirements for inclusion in an Initial Study. Pursuant to those requirements, an Initial Study must include: (1) a description of the project, including the location of the project; (2) an identification of the environmental setting; (3) an identification of environmental effects by use of a checklist, matrix or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries; (4) a discussion of ways to mitigate significant effects identified, if any; (5) an examination of whether the project is compatible with existing zoning, plans, and other applicable land use controls; and (6) the name of the person or persons who prepared or participated in the preparation of the IS.

2.3 Incorporation by Reference

The long-range planning documents listed below were utilized during the preparation of this Initial Study. The County of Orange documents are available for review at the County of Orange, OC Public Works, Development Services/Planning. Orange County Development Services/Planning is located at 601 North Ross Street, Santa Ana, California 92701.

- County of Orange General Plan (July 2014). The *County of Orange General Plan* (County General Plan), dated July 2014, addresses unincorporated territory and affects the entire county. The County General Plan includes the required seven elements: Land Use, Transportation, Resources, Recreation, Noise, Safety, and Housing. It also includes two optional elements: Public Services and Facilities and Growth Management. The County General Plan is used for general background information on the County and is referenced throughout the document.
- The Codified Ordinances of the County of Orange. The *Codified Ordinances of the County of Orange* (County Municipal Code), Codified through Ordinance No. 16-002, enacted March 15, 2016 (Supplement No. 130), consists of codes and ordinances adopted by the County. These include standards intended to regulate land use, development, health and sanitation, water quality, public facilities, and public safety. Article 2 of the County Municipal Code includes the Comprehensive Zoning Code (County Zoning Code). The County Zoning Code is utilized to implement the General Plan and provide a guide for the growth and development of the unincorporated land within the County. The County Zoning Code contains development regulations for specified districts within the County. The County Municipal Code, containing specific rules and regulations pertaining to the County, is referenced throughout the document.
- Standard Conditions of Approval. The County of Orange Standard Conditions of Approval consists of standard conditions adopted by the County. The County Standard Conditions of Approval have been applied throughout the document, where applicable.
- The project site is located within the Coto de Caza Specific Plan. The purpose of the Specific Plan is to regulate growth and development within Coto de Caza. The Specific Plan provides the zoning for land uses within the Planned Community and contains the regulations, conditions and programs necessary for implementation of the County of Orange General Plan as applicable to the project site.

These documents, incorporated by reference, were utilized throughout this analysis as the fundamental planning documents that may apply to the project site. Background information and policy information, as well as specific adopted rules and regulations pertaining to the County of Orange were also relied upon throughout this document.

2.4 Consultations

AB52 NATIVE AMERICAN CONSULTATION

California Assembly Bill 52 (AB52) established a formal consultation process for California tribes within the CEQA process. AB52 specifies that any project may affect or cause a substantial adverse change in the significance of a tribal cultural resource would require a lead agency to "begin consultation with a California Native American tribe that is traditional and culturally affiliated with the geographic area of the proposed project. The County initiated tribal consultation for the purposes of AB52 for the proposed project on May 21, 2020. Those tribes that have requested to be listed on the County's notification list for the purposes of AB52 were notified in writing via certified mail. As part of this process, the County has provided notification to each of these listed tribes the opportunity to consult with the County regarding the proposed project.

TRAFFIC ANALYSIS SCOPING

In consultation with the Orange County Department of Public Works, six intersections were identified to be evaluated in the Initial Study/Mitigated Negative Declaration. The study area includes one intersection (Via Pajaro and Plano Trabuco Road) at the north gate, one intersection (Coto de Caza Drive and Plano Trabuco Road) at the west gate, two intersections along Coto de Caza Drive, and two intersections where Via Pajaro

intersects with Vista del Verde (west of the project) and with Via Venado (east of the project). The study intersections are all stop-controlled, either an all-way stop control (AWSC) or a two-way stop control (TWSC) as follows:

- Coto de Caza Drive & Vista Del Verde (AWSC)
- Coto de Caza Drive & Trigo Trail (TWSC)
- Coto de Caza Drive & Plano Trabuco Road (TWSC)
- Via Pajaro & Plano Trabuco Road (TWSC)
- Via Pajaro & Via Venado (AWSC)
- Vista Del Verde & Via Pajaro (AWSC)

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3.0 PROJECT DESCRIPTION

3.1 Proposed Project

The proposed project involves the construction and operation of a 101-unit active senior living residential project, known as Legacy at Coto, on the former Vic Braden Tennis College site.

3.2 Project Site

The project site is located within Coto de Caza in unincorporated Orange County; refer to Figure 3-1, *Regional Location Map*. The site is located at 23333 and 23335 Avenida La Caza. The project site consists of 3.86 acres and is currently developed and situated within a suburban setting. The site is bordered to the northwest by Via Alondra, to the southeast by Avenida La Caza, to the east by the existing Coto Valley Country Club, and to the west by existing residential homes and the Silver Bronze Corporation (SBC) tennis courts; refer to Figure 3-2, *Project Area Map*.

Topographically, the site consists of flatter areas with rolling slopes that descend to three existing drainages located west, east and south of the project site. The site is heavily landscaped with groundcover and ornamental trees. A small portion of the western end of the project site is within the 100-year flood zone. The existing conditions on the project site are shown in Figure 3-3a, *Site Photograph Locations*, and Figure 3-3b, *Existing Site Photographs*.

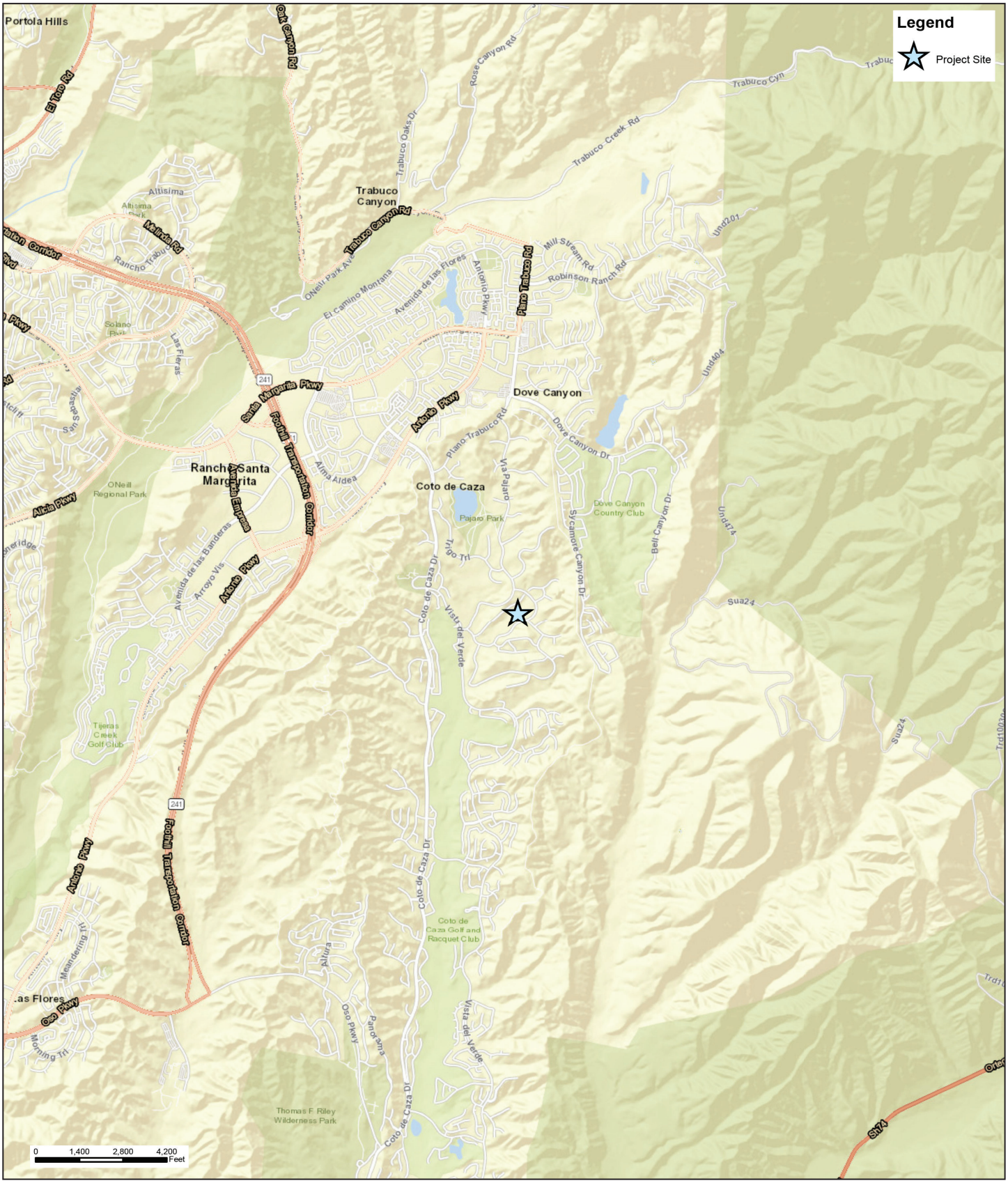
Regional access to the project site is provided by Interstate State 5 (I-5) and State Route 241 (SR-241). Local access is provided from Oso Parkway, Coto de Caza Drive and Avenida La Caza. The site was previously the Vic Braden Tennis College and the site still contains several tennis courts, office space structures, walls, fences, and associated improvements; refer to Figure 3-4, *Existing Land Uses*. Presently located on the project site is 10,780 square feet of office area, 3,500 square foot Design Center, 3,822 square foot research center, seven tennis courts and one large mechanical tennis ball pitching machine with 16 hitting lanes. The tennis college has not been in operation for over twenty years and the tennis facilities are in a degraded condition. Currently, 14,280 square feet of area is being used for office, archive storage and as a residential design center for custom homes.

The County of Orange General Plan Land Use Element designates the project site Suburban Residential (1B). In accordance with the General Plan, areas designated Suburban Residential (1B) provides for residential communities and are open to a wide range of housing types, from estates on large lots to attached dwelling units, including townhomes, condominiums and clustered arrangements. The proposed project is attached housing and would be consistent with the type of housing allowed under the General Plan Land Use Element Suburban Residential (1B) land use category.

The zoning for the project site is provided by the Coto de Caza Specific Plan. The project site is located within Planning Area 20; refer to Figure 3-5, *Development Map*, and is zoned for Community Center/ Commercial land uses. Table 3-1, *Surrounding Land Uses*, shows the existing General Plan, Zoning and existing land use surrounding Planning Area 20.

Table 3-1
Surrounding Land Uses

Direction	General Plan Designation	Zoning	Existing Land Use
North	Suburban Residential (1B)	Medium Density Residential	Open Space
East	Suburban Residential (1B)	Medium Density Residential	Coto Valley Country Club
South	Suburban Residential (1B)	Medium Density Residential	Open Space and Single-Family Residential Uses
West	Suburban Residential (1B)	Medium Density Residential	Tennis Courts and Single-Family Residential Uses



Source: Huitt-Zollars and ESRI; December 2019.

LEGACY AT COTO
Initial Study/Mitigated Negative Declaration

Regional Location Map

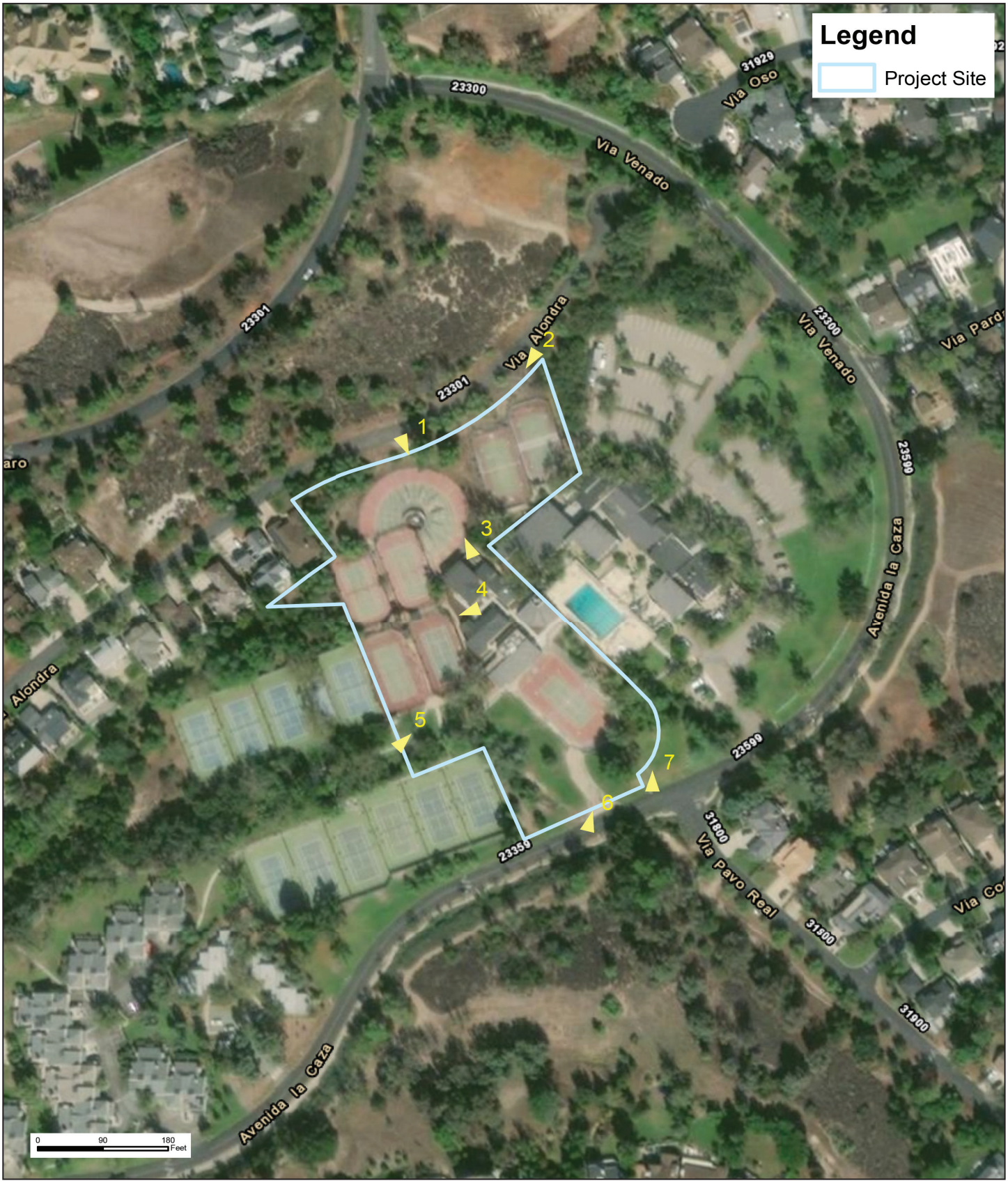
VCS Environmental

Figure 3-1

Source: Google Earth Pro; January 2020.
- approximate Project Site Boundary

LEGACY AT COTO
Initial Study/Mitigated Negative Declaration

Project Area Map



Source: ESRI and CNDDB; December 2019.

LEGACY AT COTO
Initial Study/Mitigated Negative Declaration

Site Photograph Locations

VCS Environmental

Figure 3-3a

1. View looking southeast on the north end of the property.

4. View looking west from the center of the property.

2. View looking southwest of the northeastern end of the property.

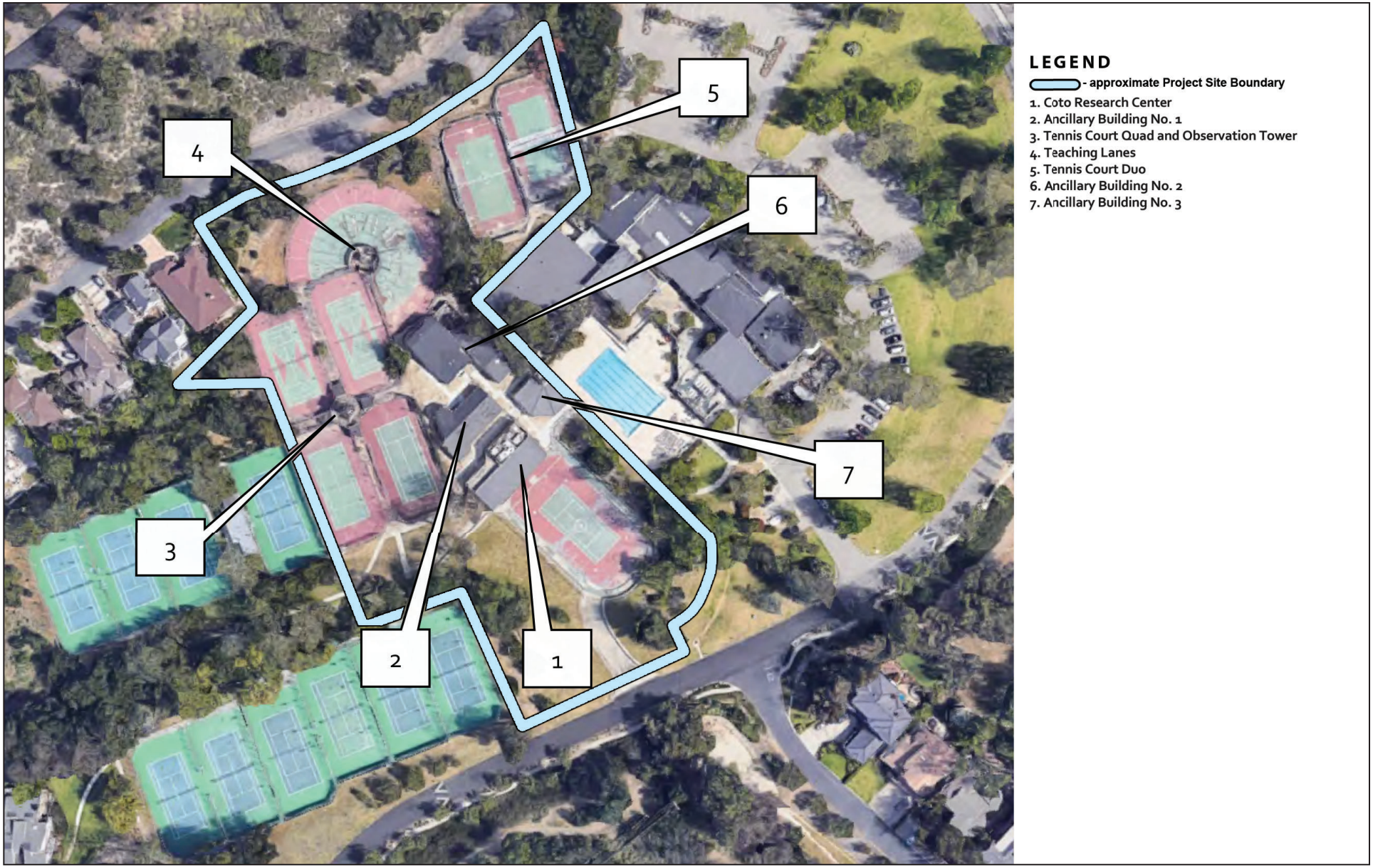
5. View looking northeast from the western boundary of the property.

3. View looking northwest from the center of the property.

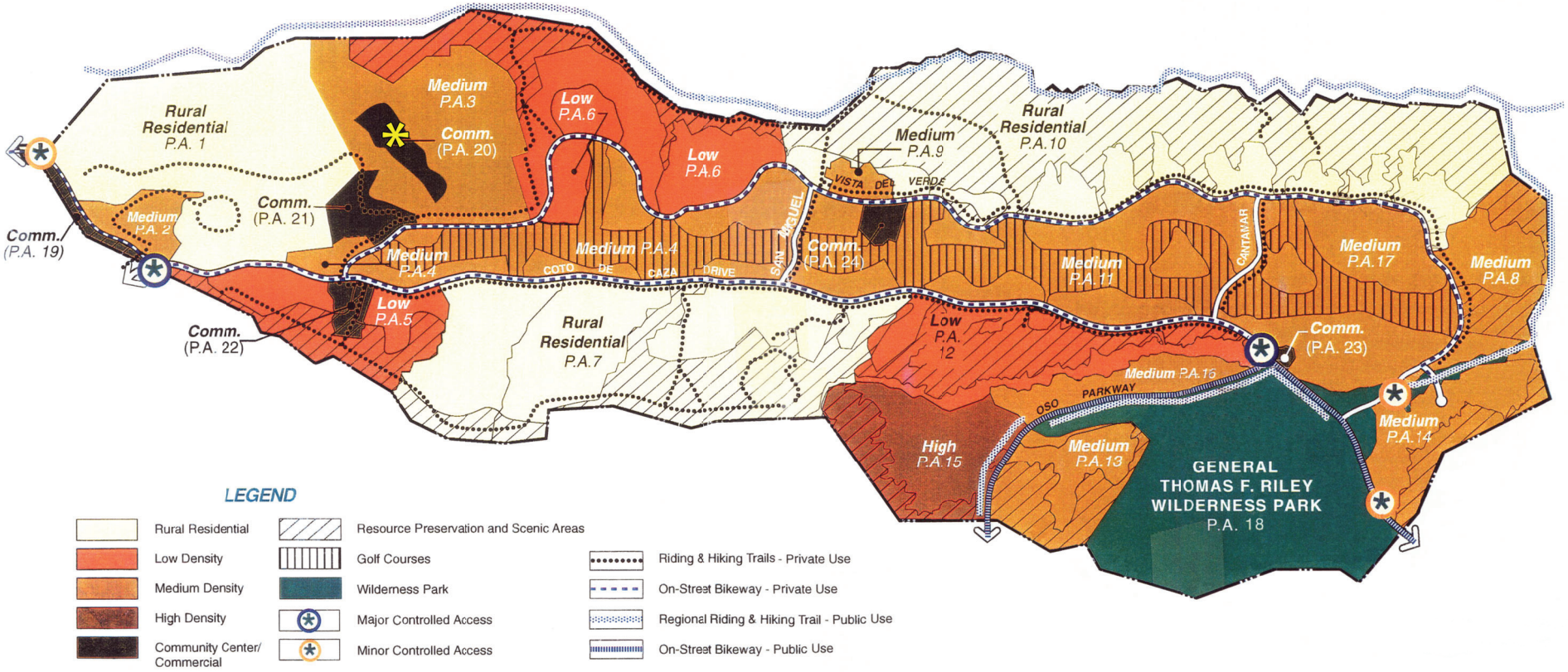
6. View looking north from the southern end of the property.

LEGACY AT COTO
Initial Study/Mitigated Negative Declaration

Existing Site Photographs



Source: Urbana Preservation & Planning, LLC; October 2019.



Source: Coto de Caza Specific Plan (Amendment 3), Exhibit 7, prepared by Planner's Annex; adopted August 8, 1995.
- Approximate Project Location

LEGACY AT COTO
Initial Study/Mitigated Negative Declaration

Development Map

VCS Environmental

Figure 3-5

In accordance with the County Zoning Code Section 7-9-142, a senior living facility may be permitted in any district, planned community, or in any specific plan area zoned for multi-family residential or commercial uses subject to the approval of a use permit. In accordance with Section 7-9-38 of the Zoning Code, senior living facilities are defined as providing care and services on a monthly basis or longer to residents aged sixty (60) years of age or older and may include: Independent living (IL) facilities that are intended for individuals who are presently able to manage an independent lifestyle, but foresee a future where more support will be necessary. IL residents are provided with assistance in the instrumental activities of daily living, such as: dining, housekeeping, security, transportation and recreation. IL dwelling units may have separate kitchens and garages. The proposed project would meet the intent of the County's Zoning Code definition of a senior living facility, in that the project would be restricted to persons 60 years of age or older and would provide assistance to meet day-to-day household and recreation needs with a wide range of services and amenities.

3.3 Project Description

The proposed project involves the development of a 101-unit active senor living residential project with a secure subterranean parking garage and related amenities. The construction of the project would require the reuse of the area where the existing tennis facilities and administrative offices are located. All existing buildings and tennis facilities on the site would be removed and the site regraded to create the subterranean parking area and building areas. In accordance with Section 7-9-142 of the County Zoning Code, the proposed project would be required to comply with the base district regulations and site development requirements. The existing zoning on the project site is Community Center/Commercial. As shown in Table 3-2, *Site Development Standards*, the proposed project would be consistent with the base zoning site requirements.

Table 3-2
Site Development Standards

Site Development Standard	Coto de Caza Specific Plan Community Center/ Commercial Requirement	Proposed Project
Building Height	40 Feet	40 Feet
Site Coverage	50 Percent	29 Percent
Front Yard Setback	20 Feet	20 Feet
Side Yard Setback	20 Feet	20 Feet
Rear Yard Setback	20 Feet	20 Feet

The proposed senior living project will consist of one building. The building would have an L-shaped configuration and consist of two stories with a maximum height of 40 feet. The total building area for the project including the subterranean parking facility would be 154,131 square feet; refer to Figure 3-6a, *Site Plan*, Figure 3-6b, *Garage Plan (Sub Grade)*, Figure 3-6c, *First Floor Plan (At Grade)*, and Figure 3-6d, *Second Floor Plan*. The Roof Plan for the project is shown in Figure 3-6e, *Roof Plan*, which reflects how the roof top mechanical equipment would be shielded from view. The residential units would be located on both floors, ranging in size from 441 square feet to 1,567 square feet, including four styles; refer to Table 3-3, *Residential Unit Mix*, Figure 3-7, *Cross Sections*, and Figures 3-8a thru 3-8c, *Unit Plans*.

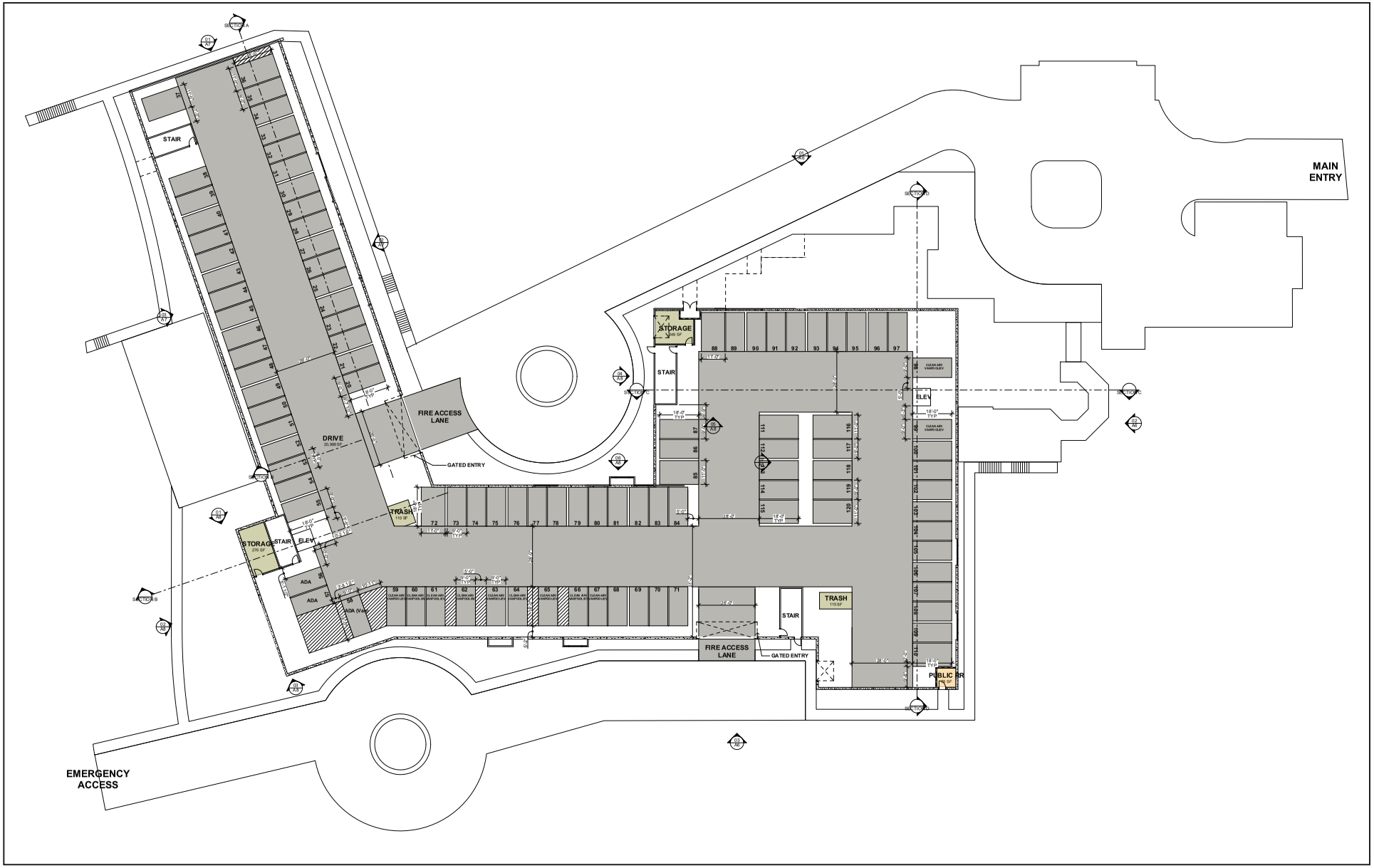
Source: Irwin Partners Architects; June 10, 2020.

LEGACY AT COTO
Initial Study/Mitigated Negative Declaration

Site Plan

VCS Environmental

Figure 3-6a



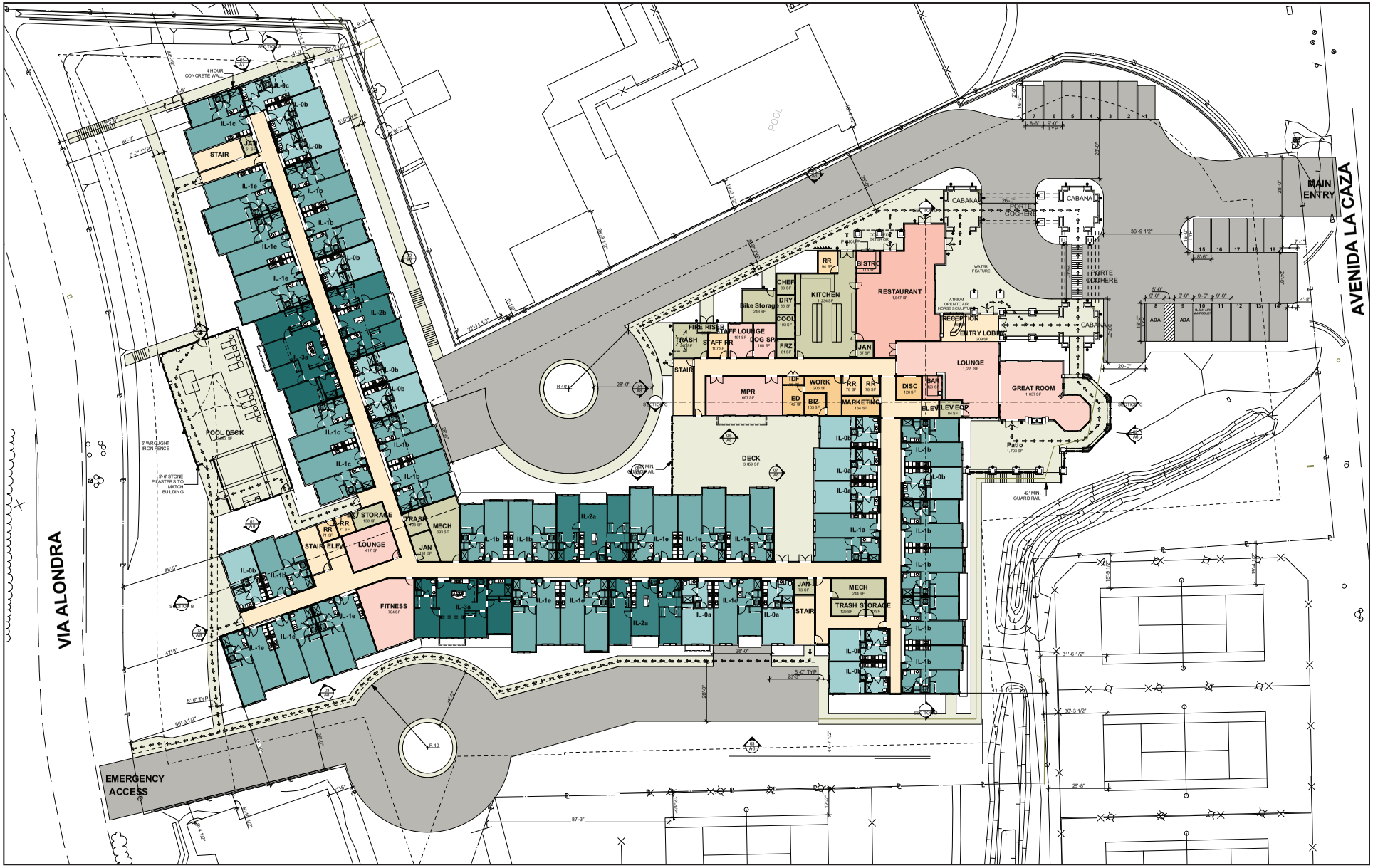
Source: Irwin Partners Architects; June 10, 2020.

LEGACY AT COTO
Initial Study/Mitigated Negative Declaration

Garage Plan (Sub Grade)

VCS Environmental

Figure 3-6b



Source: Irwin Partners Architects; April 27, 2020.

LEGACY AT COTO
Initial Study/Mitigated Negative Declaration

First Floor Plan (At Grade)

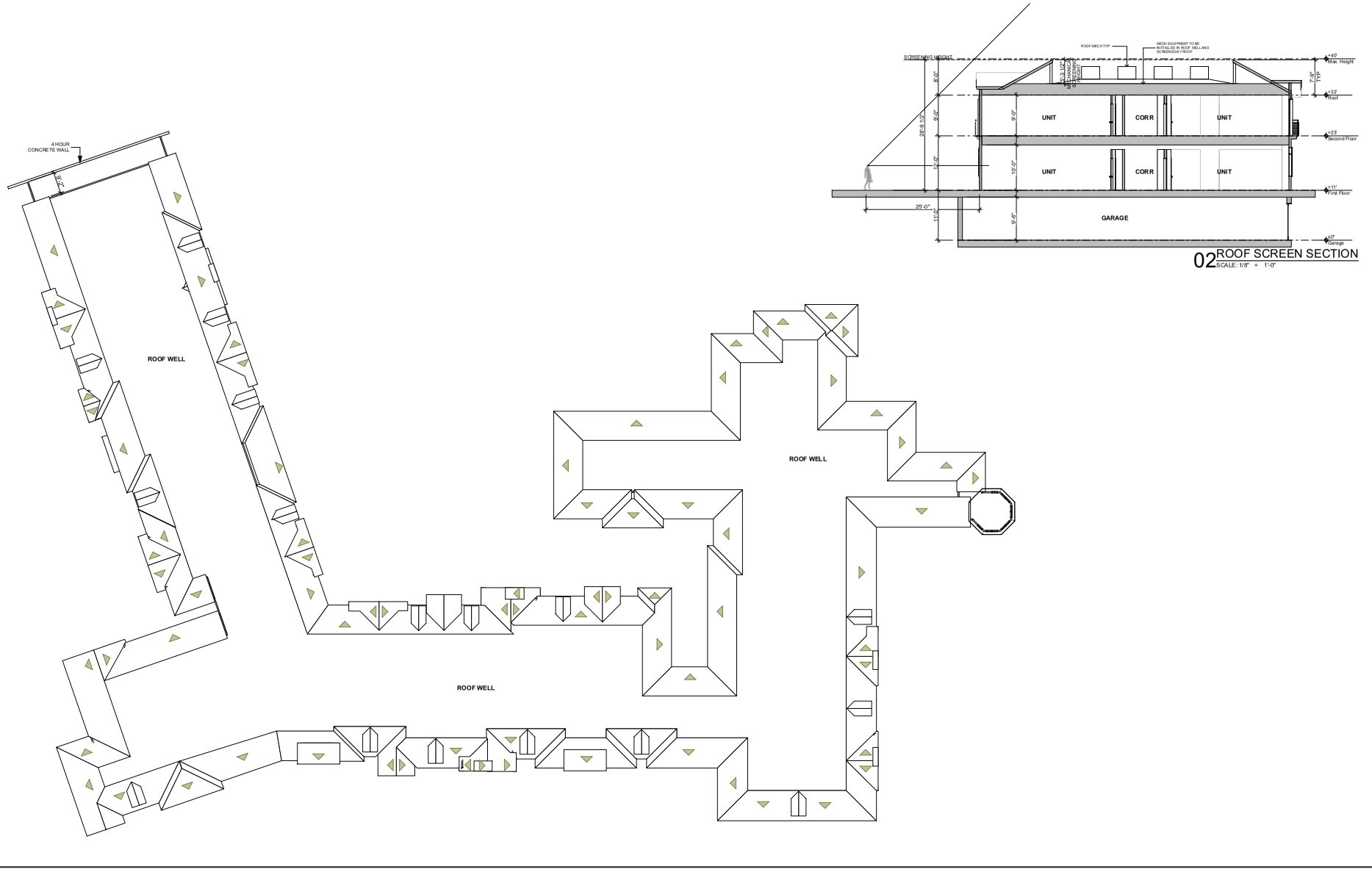
Source: Irwin Partners Architects; April 27, 2020.

LEGACY AT COTO
Initial Study/Mitigated Negative Declaration

Second Floor Plan

VCS Environmental

Figure 3-6d



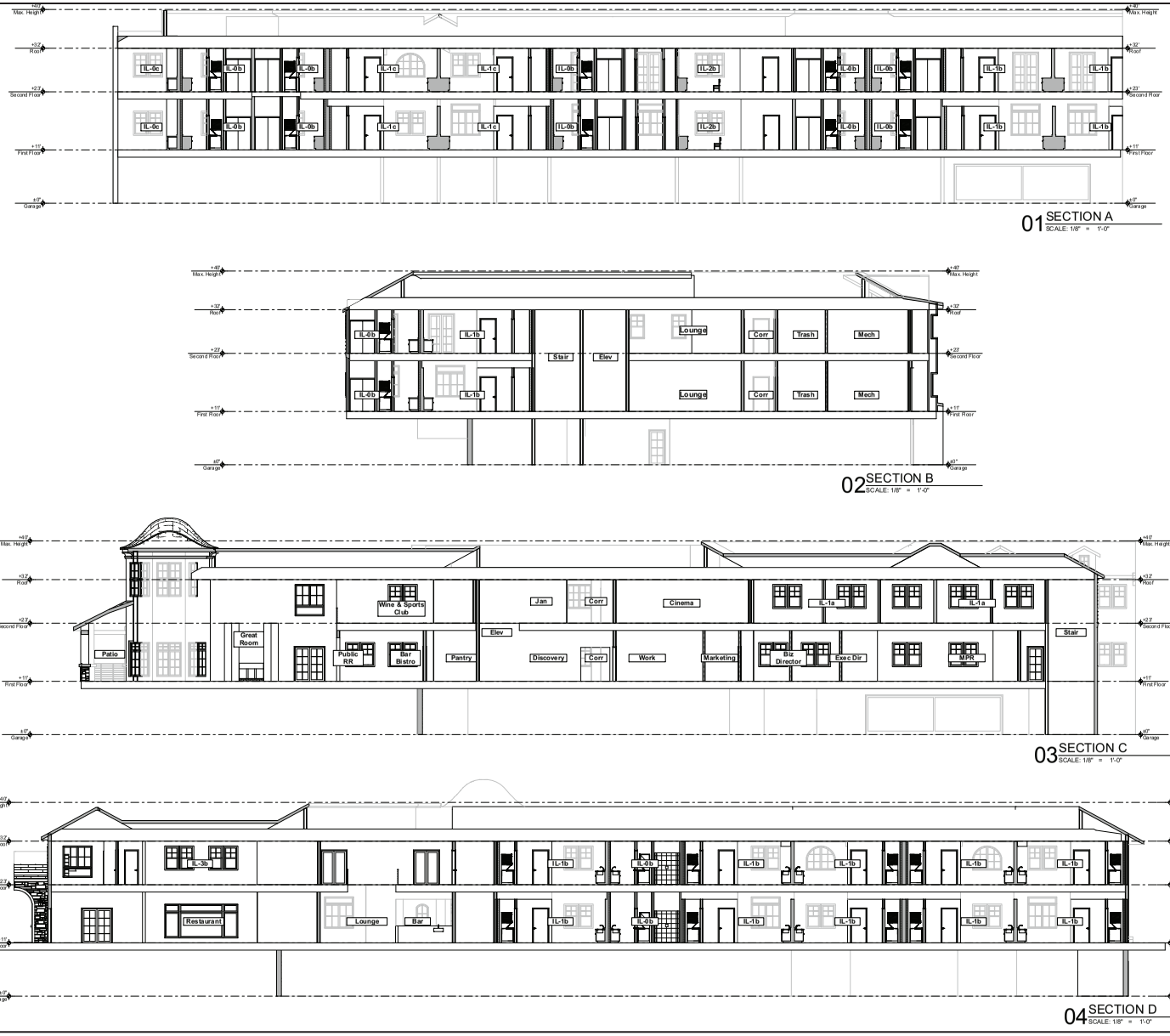
Source: Irwin Partners Architects; June 10, 2020.

LEGACY AT COTO
Initial Study/Mitigated Negative Declaration

Roof Plan

VCS Environmental

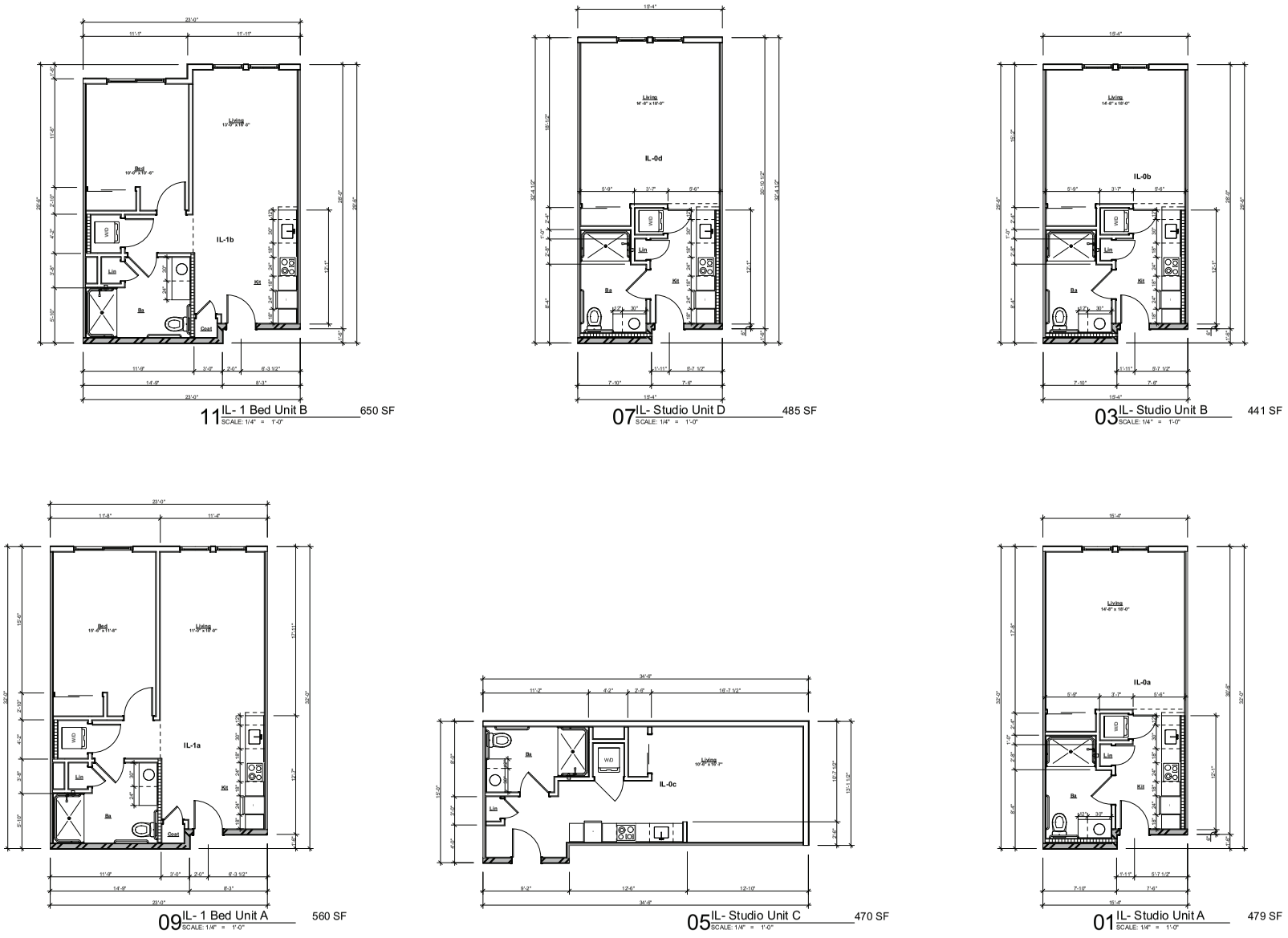
Figure 3-6e



Source: Irwin Partners Architects; April 27, 2020.

LEGACY AT COTO
Initial Study/Mitigated Negative Declaration

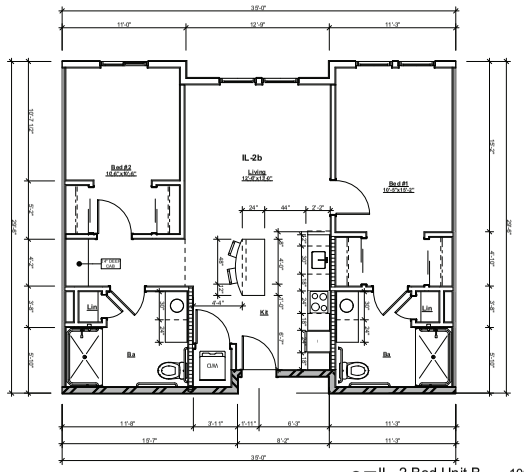
Cross Sections



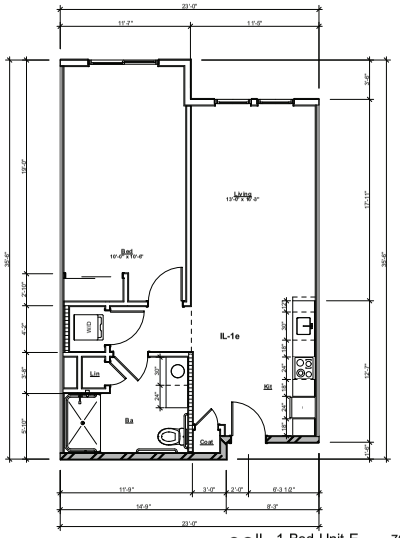
Source: Irwin Partners Architects; April 27, 2020.

LEGACY AT COTO
Initial Study/Mitigated Negative Declaration

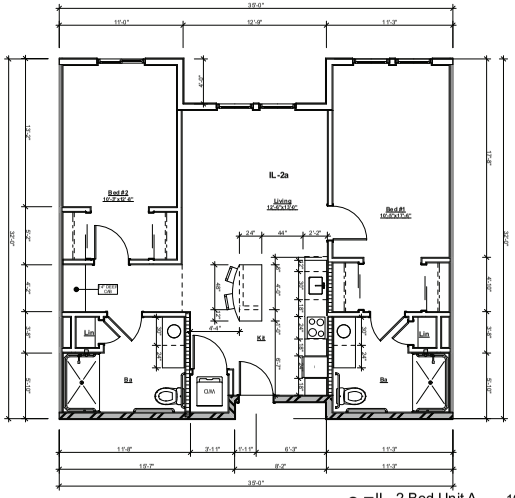
Unit Plans



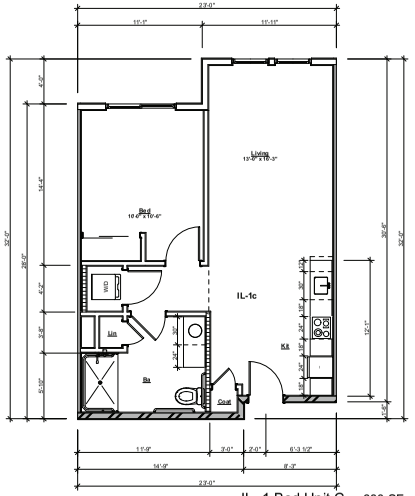
07 IL- 2 Bed Unit B 1002 SF
SCALE: 1/4" = 1'-0"



03 IL- 1 Bed Unit E 765 SF
SCALE: 1/4" = 1'-0"



05 IL- 2 Bed Unit A 1057 SF
SCALE: 1/4" = 1'-0"



01 IL- 1 Bed Unit C 680 SF
SCALE: 1/4" = 1'-0"

Source: Irwin Partners Architects; April 27, 2020.

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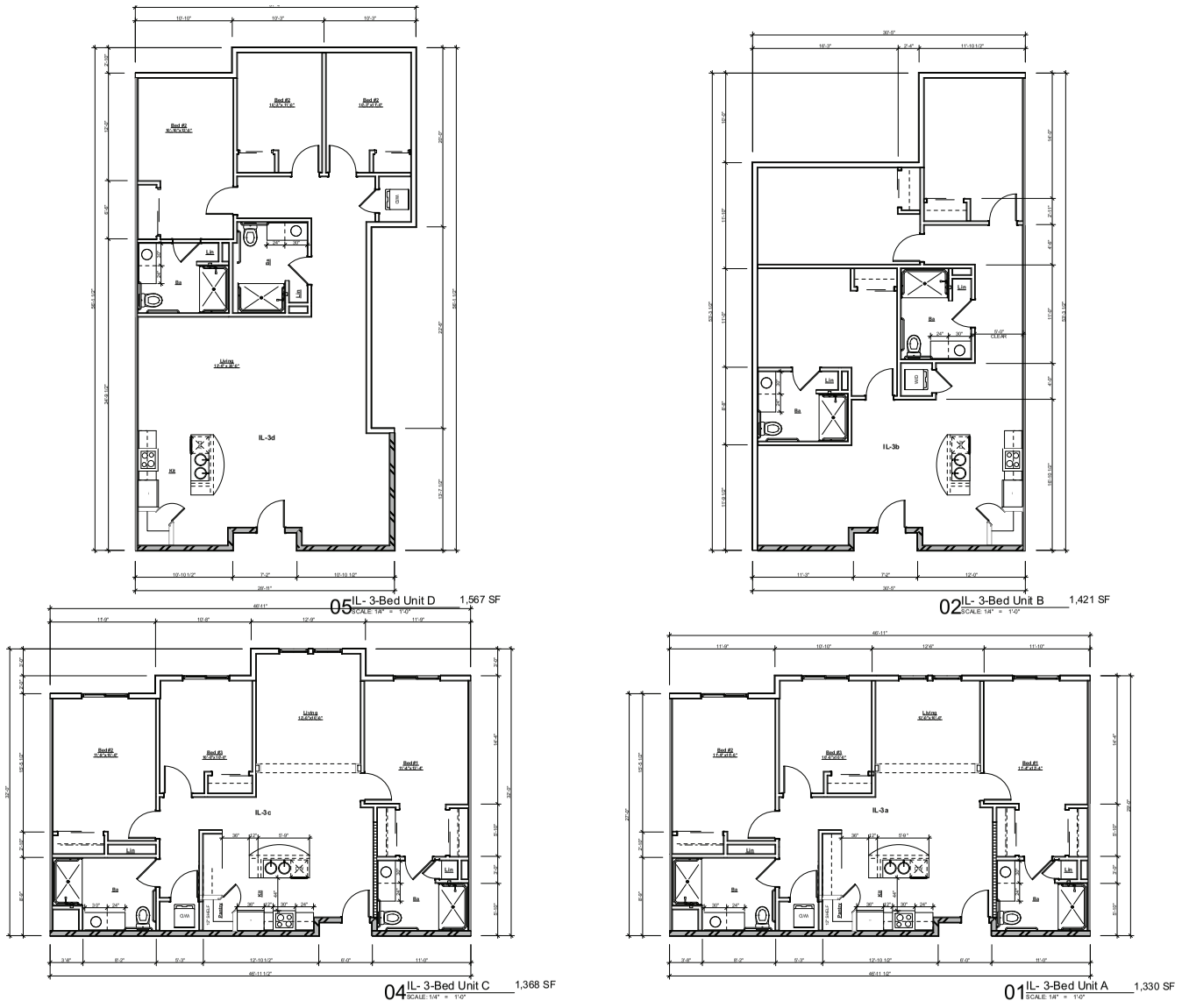
Unit Plans



Source: Irwin Partners Architects; April 27, 2020.

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Unit Plans

Table 3-3
Residential Unit Mix

Residential Unit Type	Quantity	Unit Size Square Feet
Studio	8	479
Studio	15	441
Studio	2	470
Studio	6	485
1 Bedroom	2	724
1 Bedroom	20	650
1 Bedroom	14	680
1 Bedroom	22	765
2 Bedroom	4	1,057
2 Bedroom	2	1,002
3 Bedroom	2	1,330
3 Bedroom	1	1,421
3 Bedroom	2	1,368
3 Bedroom	1	1,567
Total	**101**	

To meet the day-to-day household and recreation needs of residents, several general amenities and services will be provided. The building will have staffing and 24-hour onsite security. The residents will be provided with both gourmet restaurant food and basic bistro food, room service and housekeeping services weekly as part of the rent. Through concierge services, residents can arrange for the chauffeur-driven Legacy at Coto cars to take them to appointments, shopping and events and other personal needs. Descriptions of other special amenities are provided below, and the size of the onsite amenities are shown in Table 3-4, *List of Amenities*.

- Bistro – Small dining venue with a light food menu, primarily serving breakfast and lunch. It has indoor/outdoor seating and is open to both Legacy at Coto and Coto de Caza residents. Because of its central location to existing residential uses, it is anticipated that the majority of people would walk to the bistro, minimizing vehicular traffic in the area. This Bistro will also have a provisions wall, selling staples like milk, butter, eggs, etc. to Coto residents.
- Bar – Small seating area serving drinks to Legacy at Coto residents. It is planned to be a place for small gatherings to socialize.
- Dog Spa – For Legacy at Coto residents as a place to self-bathe their pets. It is adjacent to the Bistro for convenience and for residents to enjoy a meal or snack while their dog dries.
- Fitness Center – Small room for Legacy at Coto residents to exercise and have fitness classes to maintain their physical well-being. An area that can be used for massage is also included.
- Restaurant – Will provide dining and meals for Legacy at Coto residents. This will be a full-service dining experience with gourmet meals.
- Movie Cinema – Small room for Legacy at Coto residents to watch movies on a large screen.
- Lounge – Small gathering space for Legacy at Coto residents to meet, relax and play games.

- Wine and Sports Club – A place for Legacy at Coto residents to go for a glass of beer or wine tasting. Indoor seating overlooking the Great Room. A place to watch specials and sporting events.
- Swimming Pool and Spa – Pool and sun deck with food service and beverages from the Bistro and bar, respectively.
- Onsite Trails – There are two walking paths that extend across the entire property from east to west and from west to east on both the north and south sides of the property, respectively. These paths provide a connection for the Coto Village neighborhood residents from Via Alondra to Avenida La Caza to the onsite Village Bistro. There are additional walking paths from north to south from the privately owned Coto Clubhouse property to the privately owned tennis courts on the Coto Valley Country Club adjacent to the property and to the onsite landscape meditation garden. These trails will be constructed of natural decomposed granite surface and occur within the newly landscaped yard areas of the property.
- Meditation Garden – This is a private landscaped area on the south side of the property providing a nice quiet buffer from the Via Alondra residential area. This is passive recreation area for senior residents of the Legacy at Coto community to relax and reflect.
- Amenity Services – A wide of variety of amenity services would available to residents, including housekeeping, concierge, 24-hour security, secure and safe parking and chauffeur driven transportation.

Table 3-4
List of Amenities

Amenity	Square Feet
Bistro	113
Bistro Outdoor Seating Area	270
Bar	123
Dog Spa	168
Fitness Center (First Floor)	704
Great Room	1,037
Lounge (First Floor)	1,638
Restaurant	1,847
Boutique Movie Cinema	615
Fitness Center (Second Floor)	704
Lounge (Second Floor)	540
Wine and Sports Club	1,378
Amenity Services	N/A
- Housekeeping	N/A
- Concierge	N/A
- 24-Hour Security	N/A
- Secure and Safe Parking Structure	N/A
- Chauffeur-Driven Transportation	N/A
Abbreviation: N/A – Not Applicable	

CIRCULATION AND PARKING

The primary access to the site would be a fire safety compliant private driveway accessed from Avenida La Caza on the southern site boundary. The private driveway would provide direct access to the subterranean parking structure as well as access to surface parking areas. The entrance to the subterranean garage would be through gated access. Secondary emergency access to the project would be provided from Via Alondra on the north site boundary. This secondary emergency access drive would be gated and would only be available for emergency vehicular access for fire safety purposes. No resident drop-off or passenger staging would be permitted. Presently, there is not a connection between Via Alondra and Via Venado. As an offsite improvement for the project, a restricted access emergency vehicle connection from Via Alondra to Via Venado would be provided only for fire safety purposes. The access would be controlled by a cable or chain and would be removed during an emergency.

All of the required parking for the project would be self-contained and would be provided by a combination of surface parking and a secure subterranean parking garage. As shown in Figure 3-6a, *Site Plan*, a total of 120 onsite parking spaces would be provided for residents and visitors; refer to Table 3-5, *Parking Provisions*. This includes five ADA spaces, one ADA Van space, seven compact spaces, 12 EV Ready surface parking spaces near the entrance of the building and 95 subterranean parking structure spaces. Additionally, 25 offsite parking spaces would also be available at the Coto Valley Country Club.

Table 3-5
Parking Provisions

Parking Types	Quantity
Parking Based on Type of Users	
Resident	101
Employee/Staff	19
Total	120
Parking Based on Type of Parking Stalls	
American with Disabilities Act (ADA)	2
American with Disabilities Act (ADA) Electric Vehicle (EV)	3
American with Disabilities Act (ADA) Van	1
Compact (C)	7
Electric Vehicle (EV)	12
Standard Parking (P)	95
Total	120
Note: An additional 25 parking spaces are provided at the adjacent Coto Valley Country Club site, for a total for 145 parking spaces available for the project's use.	

ARCHITECTURAL TREATMENT

The Legacy at Coto design has been envisioned as an equestrian manor to reflect the Coto de Caza heritage. The proposed architectural style of the Legacy at Coto building is French Country. As shown in Figures 3-9a thru 3-9c, *Exterior Elevations*, the building has several elements that reflect French Country design, including an entry porte-cochère embellished with lattice trim and cut openings, octagon tower, bell shaped roof with cast eves reflecting a high-quality architecture design. The building elevations have natural materials, stone, wood and stucco in varying patterns to create interest on all sides. Landscape planter beds and vines are proposed to enhance the building with flora color.

Source: Irwin Partners Architects; April 27, 2020.

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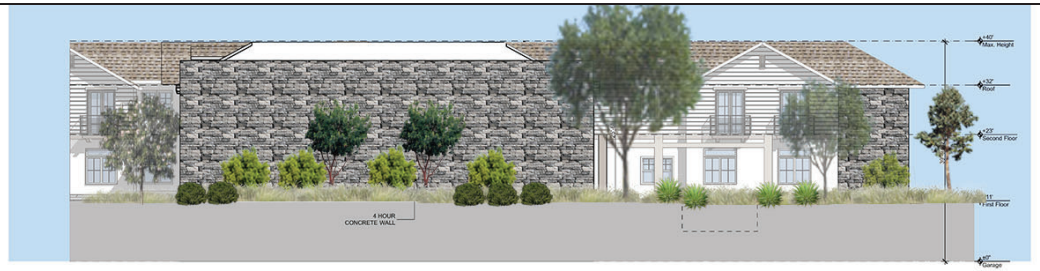
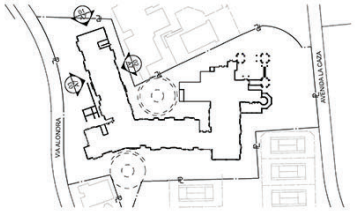
Exterior Elevations



01 EXT A
SCALE: 1/8" = 1'-0"

02 EXT B
SCALE: 1/8" = 1'-0"

03 EXT C
SCALE: 1/8" = 1'-0"



Source: Irwin Partners Architects; April 27, 2020.

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Exterior Elevations

Source: Irwin Partners Architects; April 27, 2020.

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Exterior Elevations

Fencing and Walls

As shown in Figure 3-6a, *Site Plan*, a five-foot wrought iron fencing is proposed around the pool deck area. The fencing would include plaster stone columns and painted precast concrete caps to match the exterior of the building. A retaining wall system would extend along the eastern boundary of the site, ranging in height from one foot to six feet, eight inches; refer to Figure 3-10, *Retaining Wall Plan*.

Lighting

There will be a mix of pole lighting, ceiling lights, wall lights and bollard lighting. Examples of the type of lighting that would be used is shown in Figure 3-11, *Typical Examples of Lighting Features*. In accordance with County standards, all exterior lighting would be confined to the project site to avoid spill-over lighting on adjoining properties.

Signage

A single monument sign is proposed at the entrance of the project along Avenida La Caza; refer to Figure 3-6a, *Site Plan*. The design of the monument will be consistent with the paint and material pallet that will be used for the exterior of the building.

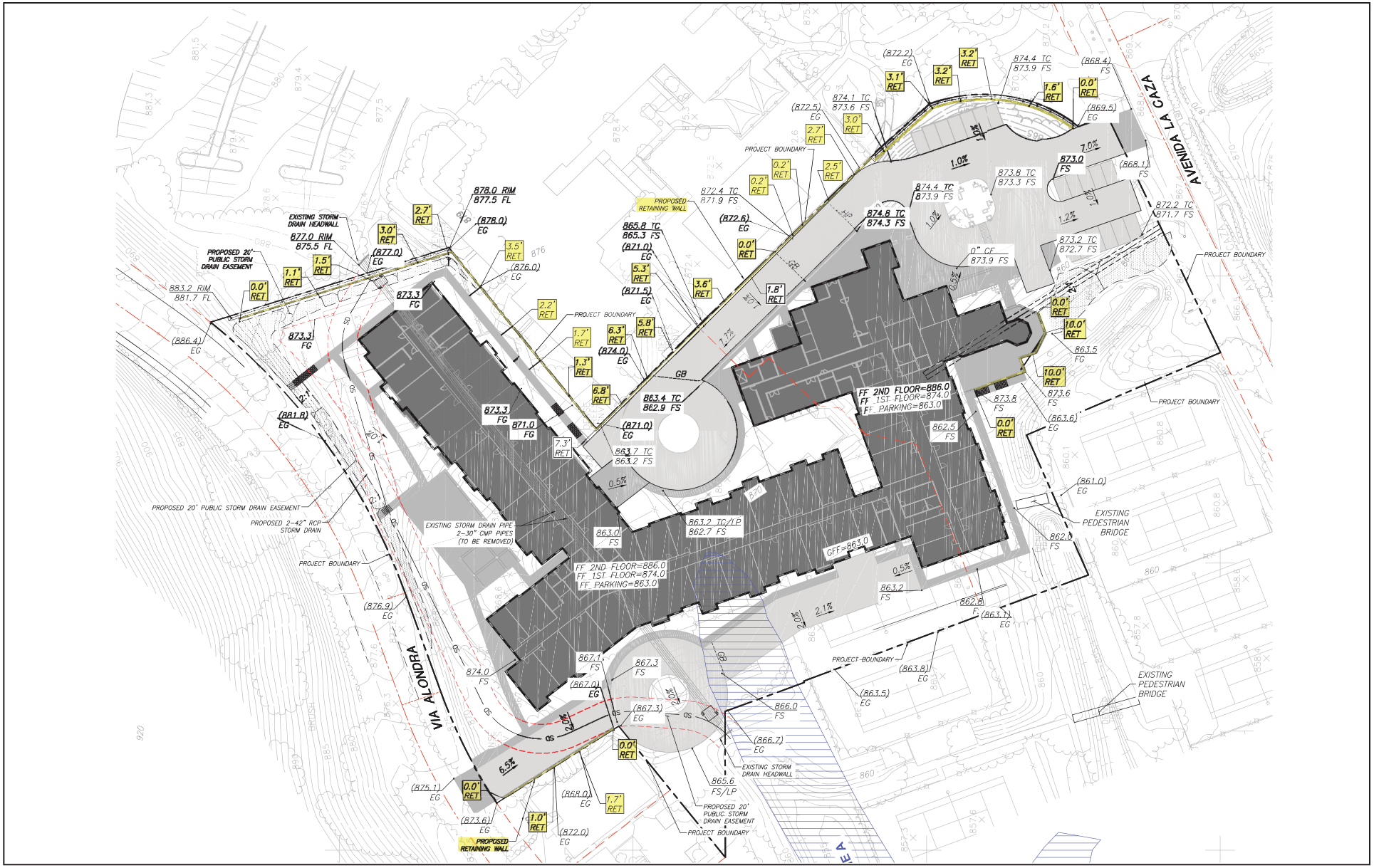
LANDSCAPE TREATMENT

The project proposes a landscape setback around the perimeter of the site to create a buffer to adjacent land uses; refer to Figure 3-12, *Conceptual Landscape Plan*. The setback area would incorporate a combination of trees, shrubs along the existing arroyo, which would soften views and reduce the visual presence of the building along Avenida La Caza by creating a park-like setting around the project site. Along Via Alondra, a heavy landscaped setback with trees, shrubs and a decomposed granite trail would be provided to complement existing open space and landscaping provided in the project area. Based on approved Conceptual Landscape Plan, a detailed planting plan would be prepared that would identify locations and quantities where specific plant materials would be installed. The planting plan would comply with MELWO and the County's Landscape Ordinance.

Current landscaping, which includes undesirable vegetation according to the Orange County Fire Authority (OCFA) guidelines, will be replaced with fire resistive vegetation including the use of succulent plants, thereby minimizing the possibility of fire on the property. An existing riparian corridor located on the project site would be preserved and incorporated into the landscape plan; refer to Figure 3-12. A decomposed granite pedestrian trail would weave through the open space area providing an additional open space amenity for residents.

Walking Paths

There are two walking paths that are proposed to extend across the entire property from east to west and from west to east on both the north and south sides of the property. The paths would be constructed of a natural decomposed granite surface and weave around landscaping, the arroyo wash and would provide seating areas for viewing. These paths would also provide a connection for the Coto Village neighborhood residents from Via Alondra to Avenida La Caza to the onsite Village Bistro. Additionally, there are walking paths from north to south from the privately owned Coto Clubhouse property to the privately owned tennis courts on the Coto Valley Country Club adjacent to the property and to the onsite landscape meditation garden.



Source: Huitt-Zollars; June 12, 2020.

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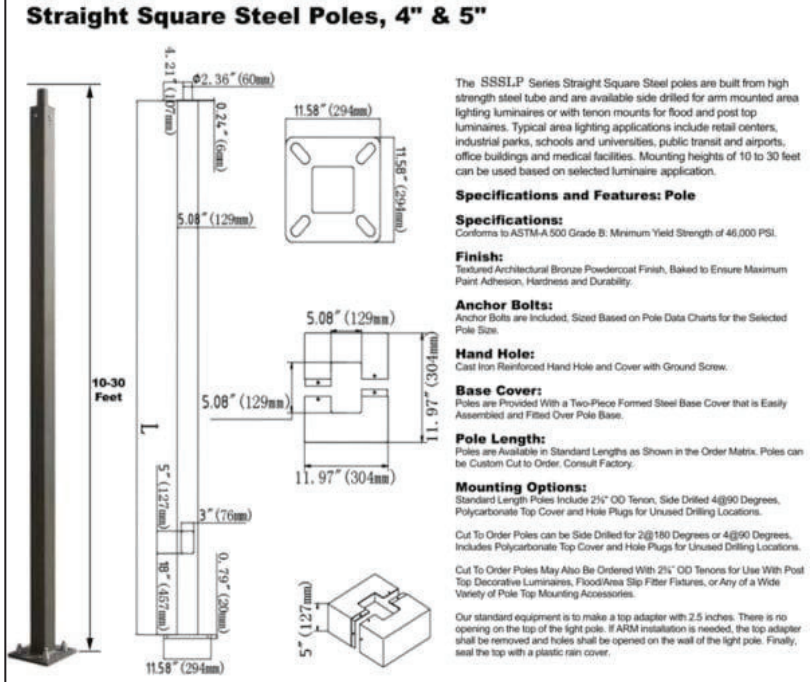
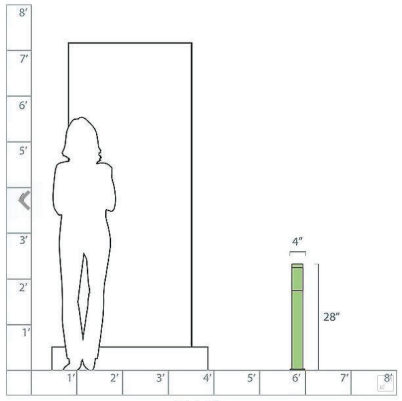
Retaining Wall Plan

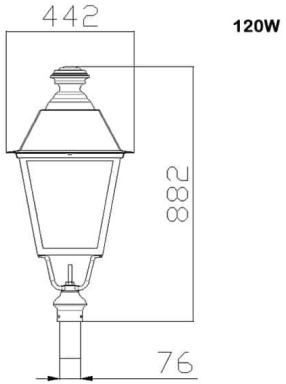


Outdoor Bronze Aluminum Parking Lot Light Pole



Bollard Height Reference

LED Post Lantern Light



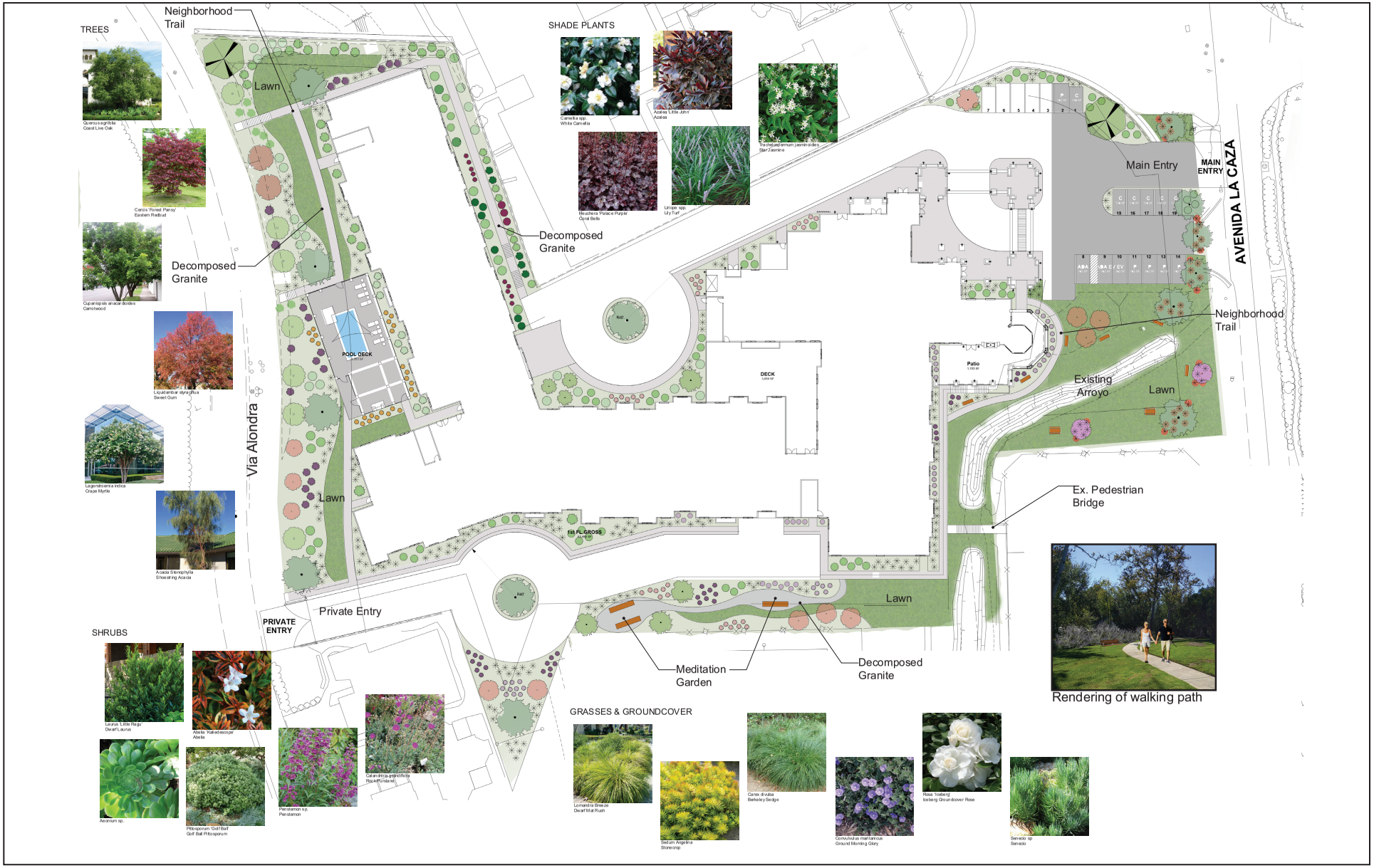
120W

LED Post Lantern Light Spec

Round Column Outdoor LED Bollard

Park Court Light Outdoor Lantern

Source: Irwin Partners Architects; June 10, 2020.



Source: Julie Friedrichsen Design; April 28, 2020.

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Conceptual Landscape Plan

VCS Environmental

Figure 3-12

INFRASTRUCTURE

Drainage Plan

The project site currently drains southerly and westerly to existing offsite drainage channels. A new onsite underground storm drain would be constructed to better manage existing offsite flows through the project site; refer to Figure 3-13, *Preliminary Drainage Plan*. There would be no change to the offsite conditions. The proposed storm drain outfall location would be approximately in the same location as the existing storm drain outfall. Onsite drainage would be collected and treated and mitigated per current County of Orange requirements and would include onsite treatment of low flows and an underground storage gallery to detain and mitigate larger stormwater runoff volumes and flow rates.

Water Service

Water service to the project site would be provided by the Santa Margarita Water District. New lateral pipelines would be constructed on the project site that would tie into existing eight-inch pipelines located along Avenida La Caza and Via Alondra.

Sewer Service

Sewer service would be provided by the Santa Margarita Water District. New lateral pipelines would be constructed on the project site that would tie into existing eight-inch sewer lines located along Avenida La Caza.

Utility Service Systems

Table 3-6, *Utility Providers*, shows the current utility providers for the project.

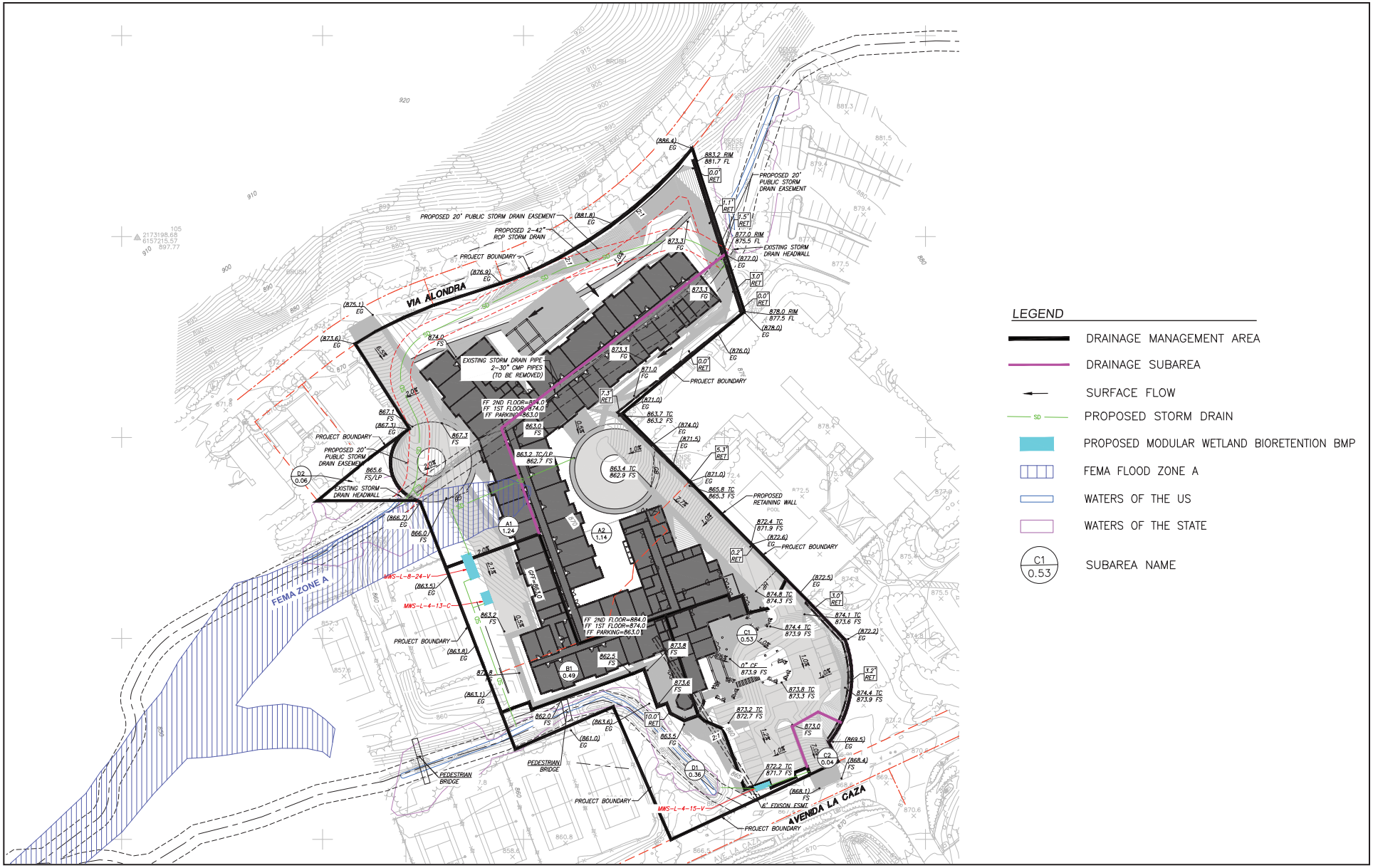
Table 3-6
Utility Providers

Provider	Utility
Cox Cable	Internet, HDTV, Telephone
San Diego Gas Electric	Electricity Service
Southern California Gas Company	Natural Gas Service

PUBLIC SERVICES

Fire Protection Services

Orange County Fire Authority (OCFA) would provide fire protection, emergency medical services and rescue services for the proposed project. As shown in Table 3-7, *Fire Protection and Emergency Services*, the project site is within proximity to several fire stations. The project has been designed to comply with OCFA fire safety requirements. As part of the design for the proposed project has prepared Fuel Modification Plan and a Fire Safety Plan, which have been submitted to Orange County Fire Authority for approval.



Source: Huitt-Zollars; February 24, 2020.

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Preliminary Drainage Plan

VCS Environmental

Figure 3-13

Table 3-7
Fire Protection and Emergency Services

Fire Station Location	Distance to Project Site
Fire Station 40 25082 Vista Del Verde, Coto de Caza, CA 92679	1.6 miles
Fire Station 45 30131 Aventura, Rancho Margarita, CA 92688	1.8 miles
Fire Station 18 30942 Trabuco Canyon Road, Trabuco Canyon, CA 92679	2.5 miles
Fire Station 31 22426 Olympiad Road, Mission Viejo, CA 92692	3.6 miles
Fire Station 56 58 Station Way, Ladera Ranch, CA 92694	4.7 miles

FUEL MODIFICATION PLAN

The Fuel Modification Plan is a vegetation management code that requires landscaped areas adjacent to new buildings be dedicated for permanent vegetation management activities. The Fuel Modification Plan program brings fire-safe landscaping and construction features together to improve community safety and reduce property loss during wildfire emergencies .The Fuel Modification Plan for the proposed project proposes a 20-foot Zone A Non-Combustible Zone that is only allowed for non-combustible construction and a 0 to153-foot Zone B Wet Zone extending from Zone A, that would consist of permanently irrigated fully landscaped drought tolerant, deep rooted high moisture plant material. Additionally, a Restricted Plant Zone is proposed for the portion of the project adjoining Via Alondra. Within this area, groupings of trees would be prohibited, and only individual trees spaced 30 feet apart would be allowed. Understory of existing Oak Trees are required to be cleared and maintained.

FIRE MASTER PLAN

Fire Master Plans are general guidelines pertaining to the creation and maintenance of fire department access roadways, access walkways to and around buildings, and hydrant quantity and placement as required by the 2019 California Fire and Building Codes (CFC and CBC) and as amended by local ordinance. Fire Master Plans demonstrate the effectiveness of emergency response and firefighting operations are directly related to the proper installation and maintenance of fire access roadways, the proper sitting of hydrants, adequate water supply, and access to structures. The information contained within the Fire Master Plan is intended to assist the applicant in attaining compliance and to ensure that privately owned roadways that are necessary for emergency response purposes would be available for use at all times. Issues addressed in the Fire Master Plan include:

- Fire access roadway design
- Fire lane identification
- Premises identification
- Fire lane obstructions
- Access for residential development
- Alternative engineered fire access systems
- Access requirements in wildfire risk areas
- Hydrant quantity, spacing, placement, and identification
- Water availability and fire flow

- Access to structures
- Access during construction
- Fire Safe Regulations for State Responsibility Areas (SRA) and Very High Fire Hazard Severity Zones in Local Responsibility Areas (LRA)

EMERGENCY RESPONSE AND EVACUATION

Emergency responses and evacuation procedures would be the responsibility of the Orange County Fire Authority and the Orange County Sherriff's Department. Under the California Standardized Incident Command System (ICS), evacuation is a law enforcement function. The Orange County Sheriff's Department would be in charge of evacuating neighborhoods in the event of a fire that threatens homes. These evacuations would be decided within the Incident Command structure in consultation with the fire department, law enforcement, public works, and local government liaisons in order to establish when and where they would occur. Under the Ready Set Go program instituted in Orange County, citizens are encouraged to evacuate prior to an evacuation recommendation, advisory or order. Prior to issuance of occupancy permits, the applicant would work with the Orange County Sheriff's Department and the Orange County Fire Authority to confirm the standard for triggering voluntary evacuations and would establish a predecessor trigger for the Legacy at Coto project that would be approved by the County of Orange. To ensure safe evacuation from Coto de Caza an evacuation plan for Legacy residents has been prepared. A special monetary fund would be established to charter buses from a charter bus company to evacuate residents in the event of an emergency. The use of the buses would be funded by the project and all residents would be required to be bused in the event an emergency occurs. An adequate number of buses would be provided to ensure seating for all residents. Additionally, the funds would be used to house residents at local hotels until any danger passes. Additional safety qualified staff would also be provided during red flag warning days to assist residents. Fire drills would be practiced twice a year to ensure all residents and staff are well trained on the procedure. The early evacuation of residents would reduce the overall of amounts of vehicles on road and potential traffic congestion would help to reduce the overall community-wide response times to evacuate Coto de Caza if necessary.

Police Services

Police services for the proposed project would be provided by the Orange County Sheriff's Department. Coto de Caza is located within the Sheriff's Department Southeast Operation Division. The Southeast Operations Division deploys 65 patrol cars during each 24-hour period, with 168 sworn peace officers. The Southeast Operation Division is stationed at 20202 Windrow Drive, Lake Forest, California 92630, approximately 5.5 miles from the project site. The closest substation is located at 22112 El Paseo, Rancho Santa Margarita, California 92688, approximately 1.6 miles from the project site.

School Services

The project site is within the Capistrano Unified School District. The proposed project is a senior living facility and would not generate a need for school services.

Solid Waste Disposal

Coto de Caza currently contracts with CR&R Incorporated Environmental Services for solid waste and recycling collection services for residential and commercial waste. Prima Deshecha Sanitary Landfill is primarily responsible for waste generated from Coto de Caza along with a small amount that is sent to the Frank R. Bowerman Sanitary Landfill.

3.4 Project Design Features

The following are project design features that have been incorporated into the project.

SITE DESIGN FEATURES

- The project proposes a landscape setback around the perimeter of the site to create a buffer to adjacent land uses. The setback area would incorporate a combination of trees and shrubs along an existing arroyo, which would soften views and reduce the visual presence of the project along Avenida La Caza, creating a park-like setting around the project site.
- The project would be situated below grade along Via Alondra which would reduce the visual height at street level and would be comparable with heights of other existing residential structures in the project area.
- A heavy landscaped setback with trees, shrubs and a decomposed granite trail would be provided between Via Alondra and the project to complement existing open space and landscaping provided in the project area.

LAND USE COMPATIBILITY FEATURES

- A self-contained underground parking facility would be provided, which would help avoid nuisance noises typically associated with large open surface parking areas.
- All rooftop mounted HVAC equipment will be fully shielded or enclosed from the line of sight of adjacent residential uses. The shielding/parapet wall should be at least as high as the equipment and not less than six feet tall.
- All pool/spa equipment and mechanical pumps will be fully shielded from the line of sight of any adjacent residential property or onsite residential unit or enclosed within an equipment room.
- No outdoor music, audio equipment, sound amplifying equipment, or performance of live music will be permitted at the outdoor patio areas and pool deck on the project site.
- The secondary access to the project off of Via Alondra would be gated and shall be restricted to emergencies only. No resident drop-off or passenger staging would be permitted.
- All vehicles accessing the site, including trucks associated with deliveries and trash pick-up, will access the project site via Avenida La Caza.
- No truck loading/unloading activities or idling shall be allowed on the Via Alondra access.
- Delivery, loading/unloading activity, and trash pick-up hours will be limited to daytime (7:00 AM – 6:00 PM) hours only.
- Engine idling time for all delivery vehicles and moving trucks will be limited to five minutes or less. Signage will be posted in the designated loading areas to enforce the idling restrictions.

NOISE CONTROL FEATURES

- The project will be required to incorporate building construction techniques, such as the use of double paned windows and insulated doors that achieve the minimum interior noise standard of 45 dBA CNEL for all residential units. This would include compliance with California Title 24 building insulation requirements for exterior walls, windows roofs and common separating assemblies (e.g., floor/ceiling assemblies and demising walls).

- Party wall and floor-ceiling assembly designs must provide a minimum Sound Transmission Class (STC) of 50, based on lab tests. Field tested assemblies must provide a minimum noise isolation class (NIC) of 45.
- Floor-ceiling assembly designs must provide for a minimum impact insulation class (IIC) of 50, based on lab tests. Field tested assemblies must provide a minimum FIIC of 45.
- Entry doors from interior corridors must provide an STC of 26 or more.
- Penetrations or openings in sound rated assemblies must be treated to maintain required ratings.
- All exterior windows, doors, and sliding glass doors shall have a positive seal.

Construction Design Features

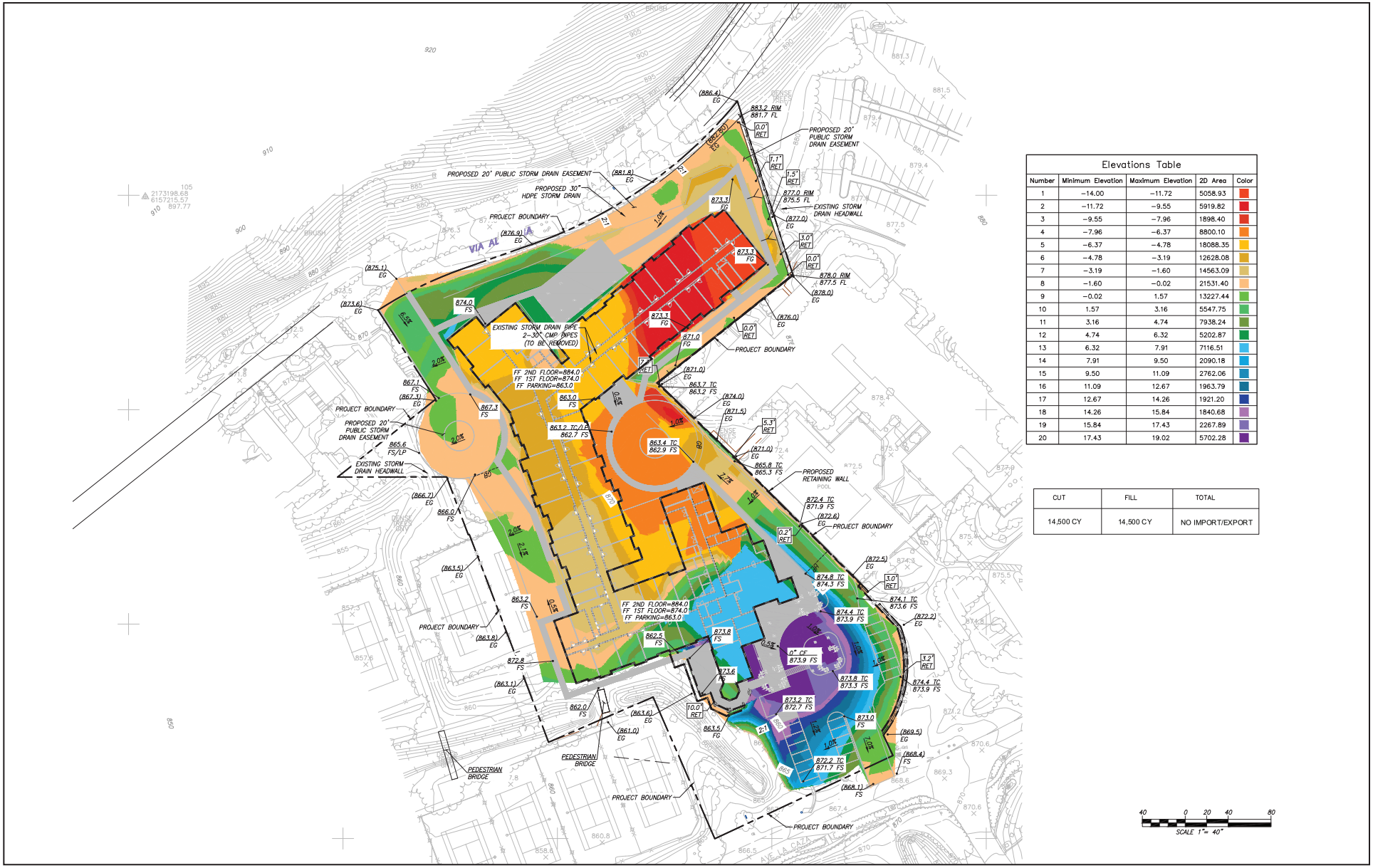
- Construction-related noise activities shall comply with the requirements set forth in the County of Orange Municipal Code Section 4-6-7.
- Construction, repair, demolition, remodeling, will be limited 7:00 AM to 8:00 PM M-F, reduced to 7:00 AM to 5:00 PM October 31 to March 1 (winter), 8:00 AM TO 4:00 PM Saturday's and no construction on official Holiday's.

3.5 Project Phasing Construction

CONSTRUCTION

The proposed project would be constructed in one construction phase. The initial construction activities would involve the removal of existing vegetation, buildings and infrastructure and clearing of the site, followed by rough grading to create a building area. Based on the Tree Inventory (Appendix B2) prepared by Certified Arborist Dane S. Shota, approximately 93 trees would be removed from the project site, two-thirds are non-native trees and over 50 percent of the trees have minor to major to extreme health problems. The landscape plan proposes to plant approximately 50 trees of varying species. As shown on Figure 3-14, *Conceptual Grading Plan*, the grading would be balanced onsite with no importing or exporting of earth materials.

The project is anticipated to be under construction from April 15, 2021, when clearing and grading would be initiated, until Fourth Quarter 2022 (approximately 18 to 20 months). The duration for each stage of construction is estimated in Table 3-8, *Summary of Construction Activities*. Material laydown areas, construction equipment staging, and employee parking will all be provided onsite as shown in Figure 3-15, *Construction Staging Plan*. The sequence of construction phases that typically occur would be clearing and site grading, drainage improvements and utilities, horizontal building foundation and vertical building construction then site concrete work and paving, landscape installation and final inspections. The number and types of equipment to be used would vary on a daily basis based on the stage of construction. Typical construction equipment that would be used include concrete/industrial saws, dozers, tractors/ loaders/backhoes, graders, excavators, cranes, forklifts, welders, cement and mortar mixers, pavers and paving equipment, rollers, and, air compressors. A summary of the construction phases for the proposed project is shown in Table 3-8.



Elevations Table

Number	Minimum Elevation	Maximum Elevation	2D Area	Color
1	−14.00	−11.72	5058.93	
2	−11.72	−9.55	5919.82	
3	−9.55	−7.96	1898.40	
4	−7.96	−6.37	8800.10	
5	−6.37	−4.78	18088.35	
6	−4.78	−3.19	12628.08	
7	−3.19	−1.60	14563.09	
8	−1.60	−0.02	21531.40	
9	−0.02	1.57	13227.44	
10	1.57	3.16	5547.75	
11	3.16	4.74	7938.24	
12	4.74	6.32	5202.87	
13	6.32	7.91	7116.51	
14	7.91	9.50	2090.18	
15	9.50	11.09	2762.06	
16	11.09	12.67	1963.79	
17	12.67	14.26	1921.20	
18	14.26	15.84	1840.68	
19	15.84	17.43	2267.89	
20	17.43	19.02	5702.28	

CUT	FILL	TOTAL
14,500 CY	14,500 CY	NO IMPORT/EXPORT

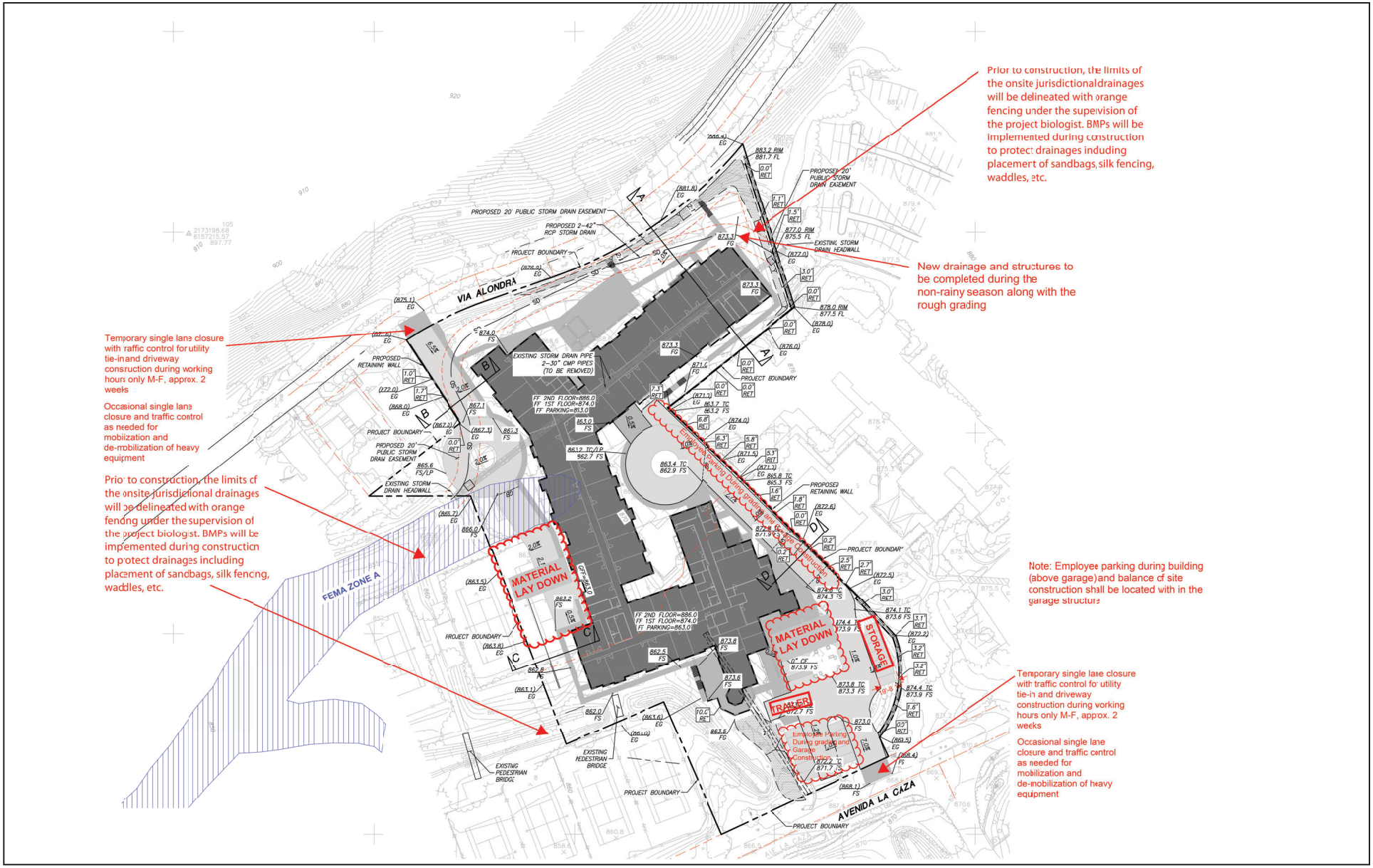
Source: Huitt-Zollars; February 18, 2020.

LEGACY AT COTO
Initial Study/Mitigated Negative Declaration

Conceptual Grading Plan

VCS Environmental

Figure 3-14



Source: Huitt-Zollars; February 24, 2020.

LEGACY AT COTO
Initial Study/Mitigated Negative Declaration
Construction Staging Plan

VCS Environmental

Figure 3-15

Table 3-8
Summary of Construction Activities

Construction Activity	Total Construction Days
Clearing/Site Grading	35
Drainage and Structures	30
Off-Site Utilities and Improvements	60
Construct Garage Structure	75
Framing, Mechanical and Roofing	105
Exterior and interior Finishes	100
Paving/Concrete/Landscaping	24

OCCUPANCY

An estimated time following completion of construction when occupancy would begin would be as follows:

- Pre-Leasing: A minimum of a 12-month pre-opening timeline for this project.
- Licensing: The California Department of Social Services (DSS) is prioritizing the licensure of New Development projects. Below is a general timeline of the licensure process:
  - Begin preparing the license application approximately five months prior to anticipated opening date.
  - Submit the license application no more than four months and no less than three months prior to anticipated opening date.
  - Application is received by DSS and a pending license number is issued approximately 30 days after submission.
  - Initial application is reviewed by DSS and they provide a letter of any corrections that are needed.
  - DSS schedules a virtual interview (Component II) with the Administrator.
  - Fire Clearance and a temporary certificate of occupancy (TCO)/certificate of occupancy CO is received – the fire authority signs off on form STD 850 and submits it to DSS.
  - DSS schedules and conducts the pre-licensing inspection.
  - Once the pre-licensing inspection is passed, DSS conducts a final application review (takes approximately two weeks, depending on the workload of the department).
  - The license is issued, and residents are permitted to move-in.

3.6 Project Approvals/Permitting

The IS/MND is intended to provide environmental review for full implementation of the project, including all discretionary actions and ministerial permits associated with it. The County of Orange is the Lead Agency with approval authority over the project. Below is listing of permits and approvals required for the project.

COUNTY APPROVALS AND PERMITS

- Adoption of a Final Mitigated Negative Declaration
- Approval of Conditional Use Permit
- Approval of Site Development Permit
- Water Quality Management Plan pursuant to South County OC MS4 Permit Order No. R9-2013-0001/NPDES No. CAS019266 of the San Diego Regional Water Quality Control Board. Order No. R9-2015-0001
- Grading Permit
- Building Permit
- Landscape Planting Plan Approval
- Irrigation System Improvement Plan Approval
- Fire Master Plan, Fire Suppression and Fire Alarm Permits
- Plumbing, Electrical, Structural Permits
- Water Quality Management Plan
- Preparation of Detour Access Plans

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4.0 ENVIRONMENTAL ANALYSIS

A Mitigated Negative Declaration has been prepared for the proposed project because the Initial Study concluded that the proposed Legacy at Coto project would not result in significant unavoidable environmental impacts once mitigation measures are implemented. The following Sections 4.1 through 4.21, provide a discussion of the potential project impacts as identified in the Initial Study/Mitigated Negative Declaration (IS/MND). Explanations are provided within each corresponding impact category in this analysis.

4.1 Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

ENVIRONMENTAL ANALYSIS

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

No Impact: For purposes of determining significance under CEQA, a scenic vista is defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public and is generally designated by public agencies to provide for their preservation. The project site is currently developed with existing buildings and tennis facilities and surrounded by existing developed land uses. According to the Resource Element of the General Plan, the project site is not designated as a scenic vista. Additionally, as shown on Figure 4.1-1, *Major Open Space Areas*, there are no open space scenic areas near the project site and the project site does not provide any views of any County designated scenic vistas. No impact to scenic vistas would occur. No mitigation is required.

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

No Impact: The State Scenic Highway Program was established by the California Department of Transportation (Caltrans) to preserve and protect scenic highway corridors from change that would diminish the aesthetic value of lands adjacent to State Highways. Highways may be designated as scenic

depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. According to Caltrans, there are no designated or eligible State scenic highways within the viewshed of the proposed project. Therefore, no impacts to scenic resources along a State scenic highway would occur. No mitigation is required.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

No Impact: The relevant regulations for the scenic quality of the proposed project would be the Coto de Caza Specific Plan. The Specific Plan designates the project site for Community Center/Commercial land uses and identifies specific development guidelines and site development standards to guide development. The proposed project is consistent with the site development standards established for Community Center/Commercial uses. Additionally, the proposed project has been designed to meet the following design guidelines established for Community Center/Commercial land uses.

- The arrangement of structures and facilities should encourage enough mass and scale to identify their presence as major elements within the community. Architectural of smaller commercial facilities should stress intimate settings with a rural character.

To illustrate visual presence of the proposed project, computer generated visual simulations have been created which depict before and after project conditions. As shown in Figure 4.1-2a, *Visual Simulation – Entry from Avenida La Caza and Via Pavo Real*, and Figure 4.1-2b, *Visual Simulation – Via Alondra*, the proposed project has been designed at scale, mass and height that does not conflict with the existing aesthetic environment. Additionally, Figure 4.1-2c, *Visual Simulation – Village Bistro*, shows a visual simulation of the proposed bistro.

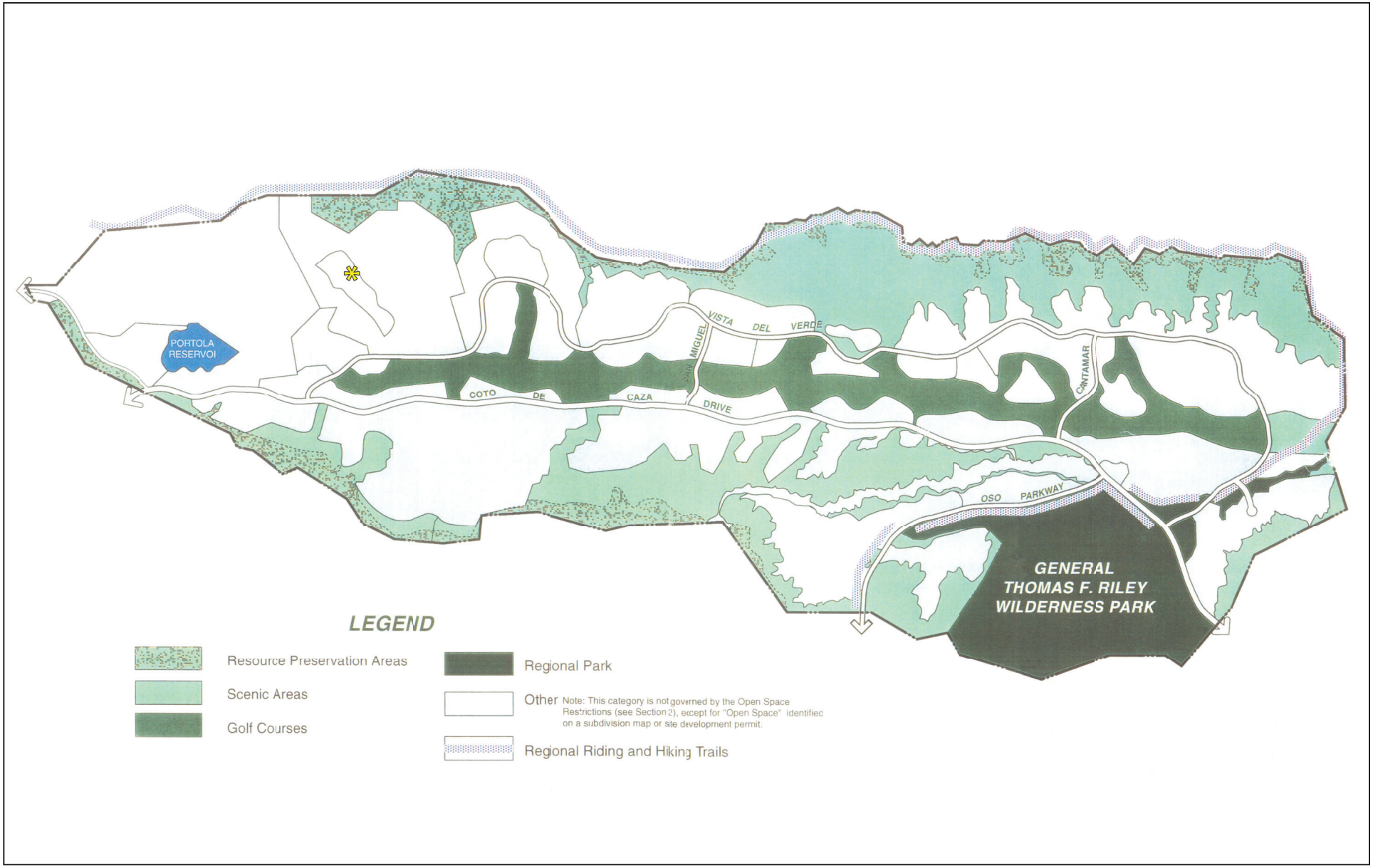
- Architectural accents such as cupolas, windvanes, windmills and towers which relate to the existing architectural and environmental character of Coto de Caza are encouraged in these areas.

The proposed project has been designed to complement existing country-like architectural character reflected throughout Coto de Caza. Architectural accents incorporated into the design of the project include porte-cochère embellished with lattice trim and cut openings, octagon tower, bell shaped roof with cast eaves and building elevations with natural materials. Additionally, landscape planter beds and vines are proposed to enhance the building with flora color. Softscape elements such as decomposed granite trails provided along pedestrian paths further accent the country-like design.

- Onsite circulation systems and public spaces such as arcades, courtyards, patios and porches should be designed to encourage interaction and pedestrian travel.

The design of the proposed project incorporates both indoor and outdoor gathering areas to encourage social interaction. Within the residential building, there are activity rooms, cinema, fitness center, restaurant, lounge sports bar and a wine club. The building also includes an outdoor patio and deck areas. A landscaped pedestrian trail extends around the perimeter of the building allowing for outdoor social interactions. A private landscape meditation garden is provided for relaxation.

- Community Center/Commercial planning areas should be connected with community-wide circulation routes and open space/recreation systems.



Source: Coto de Caza Specific Plan (Amendment 3), Exhibit 3, prepared by Planner's Annex; adopted August 8, 1995.
- Approximate Project Location

LEGACY AT COTO
Initial Study/Mitigated Negative Declaration

Major Open Space Areas

Existing Condition

Proposed Improvements

Source: Visual Impact Group, March 2020.

LEGACY AT COTO
Initial Study/Mitigated Negative Declaration

Visual Simulation – Entry from Avenida La Caza and Via Pavo Real

Existing Condition

Proposed Improvements

Source: Visual Impact Group, March 2020.

LEGACY AT COTO
Initial Study/Mitigated Negative Declaration

Visual Simulation – Via Alondra

Source: Visual Impact Group, March 2020.

LEGACY AT COTO
Initial Study/Mitigated Negative Declaration

Visual Simulation – Village Bistro

The proposed project retains the existing circulation system currently provided within the Coto de Caza planning area. The proposed project includes both indoor and outdoor recreation amenities and is within walking distance to existing recreation facilities and community pedestrian walking paths.

Implementation of the proposed project would not conflict with the design guidelines and site development standards provided in the Coto de Caza Specific Plan. In compliance with the design guidelines and site development standards, the proposed project would not degrade the quality of the existing aesthetic setting. No impacts would occur regarding compliance with regulations governing scenic quality. No mitigation is required.

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: The project area is currently developed with urbanized land uses that provide various levels of nighttime lighting. The construction activities for the proposed project would be limited to the following daylight hours, 7:00 AM to 7:00 PM M-F, reduced to 7:00 AM to 5:00 PM October 31 to March 1 (winter) and 8:00 AM TO 4:00 PM Saturday's. Therefore, no temporary nighttime construction lighting impacts would occur. The operation of the proposed project would have onsite security lighting around the building and parking areas. The proposed lighting would be like the type and level of existing lighting provided in the project area. The proposed project would be required to implement Standard Condition LG01 which would ensure that all exterior lighting would be confined to the property and avoid spillover lighting (i.e., light trespass) impacts to adjoining properties. With implementation of Standard Condition LG01, the proposed project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area and potential impacts would be less than significant. No mitigation is required.

STANDARD CONDITIONS OF APPROVAL

Standard Condition LG01: Prior to issuance of any Building Permit, the applicant shall demonstrate that all exterior lighting has been designed and located so that all direct rays are confined to the property in a manner meeting the approvals of the Director, OC Development Services/Planning, or designee.

MITIGATION MEASURES

No Mitigation Measures are required.

REFERENCES

California Department of Transportation, *California Scenic Highway Mapping System*, accessed November 2019.

County of Orange, *Codified Ordinances of the County of Orange*, codified through Ordinance No. 16-002, enacted, March 15, 2016. (Supplement No. 130).

County of Orange, *County of Orange General Plan*, July 2014.

County of Orange, *Standard Conditions of Approval*.

Planner's Annex, *Coto de Caza Specific Plan (Amendment 3)*, adopted August 8, 1995.

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4.2 Agricultural and Forestry Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

ENVIRONMENTAL ANALYSIS

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact: The State of California Farmland Mapping and Monitoring Program indicates that there is no Prime Farmland, Unique Farmland or Farmland of Statewide Importance on the project site. Additionally, the County's Resource Element of the General Plan does not identify any agricultural lands on the project site or surrounding area. Therefore, no impacts to Prime Farmland, Unique Farmland or Farmland of Statewide Importance would occur. No mitigation is required.

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

No Impact: The project site is zoned for Community Center/Commercial land uses and the development of the site would not conflict with any lands zoned for agriculture uses. According to the property title, the project site is not under a Williamson Contract. Implementation of the proposed project would have no impact regarding potential conflicts with existing agriculture zoning or Williamson Act contracts on the property. No mitigation is required.

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

No Impact: The proposed project would be consistent with the project site's existing zoning and would not cause a rezone of lands that are zoned for forest land or timberland. Therefore, no impacts to forest land, timberland or lands zoned for timberland would occur. No mitigation is required.

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

No Impact: There are no existing forest lands or timberland resources on the property and the project site is not zoned for timberland production. Implementation of the proposed project would not result in the loss of forest land. No mitigation is required.

e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact: The project site and surrounding properties do not contain farmland or timberland resources. The construction and operation of the proposed project would be confined to the project site and would not cause any onsite or offsite conversion of farmland or forest land to non-agriculture uses or non-forest uses. No mitigation is required.

STANDARD CONDITIONS OF APPROVAL

No Standard Conditions of Approval are required.

MITIGATION MEASURES

No Mitigation Measures are required.

REFERENCES

County of Orange, *Codified Ordinances of the County of Orange*, codified through Ordinance No. 16-002, enacted, March 15, 2016. (Supplement No. 130).

County of Orange, *County of Orange General Plan, Resources Element*, July 2014.

State of California Department of Conservation, *Farmland Mapping and Monitoring Program*, accessed November 2019.

4.3 Air Quality

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d. Result in other emissions such as those leading to odors adversely affecting a substantial number of people?	☐	☐	☒	☐

ENVIRONMENTAL ANALYSIS

The following analysis is based on an Air Quality and Greenhouse Gas Study prepared by Vista Environmental in January 2020. The report is presented in Appendix A, *Air Quality, Energy, and Greenhouse Gas Emissions Impact Analysis.*

Background

Air pollutants are generally classified as either criteria pollutants or non-criteria pollutants. Federal ambient air quality standards have been established for criteria pollutants, whereas no ambient standards have been established for non-criteria pollutants. For some criteria pollutants, separate standards have been set for different periods. Most standards have been set to protect public health. For some pollutants, standards have been based on other values (such as protection of crops, protection of materials, or avoidance of nuisance conditions).

CRITERIA POLLUTANTS AND OZONE PRECURSORS

The criteria pollutants consist of ozone, NO_X, CO, SO_X, lead (Pb), and particulate matter (PM). The ozone precursors consist of NO_X and VOC. These pollutants can harm your health and the environment, and cause property damage. The Environmental Protection Agency (EPA) calls these pollutants "criteria" air pollutants because it regulates them by developing human health based and/or environmentally based criteria for setting permissible levels. The following provides descriptions of each of the criteria pollutants and ozone precursors.

Nitrogen Oxides: Nitrogen Oxides (NO_X) is the generic term for a group of highly reactive gases which contain nitrogen and oxygen. While most NO_X are colorless and odorless, concentrations of NO_2 can often be seen as a reddish-brown layer over many urban areas. NO_X form when fuel is burned at high temperatures, as in a combustion process. The primary manmade sources of NO_X are motor vehicles, electric utilities, and other industrial, commercial, and residential sources that burn fuel. NO_X reacts with other pollutants to form, ground-level ozone, nitrate particles, acid aerosols, as well as NO_2, which causes

respiratory problems. NO_X and the pollutants formed from NO_X can be transported over long distances, following the patterns of prevailing winds.

Ozone: Ozone (O_3) is not usually emitted directly into the air but in the vicinity of ground-level and is created by a chemical reaction between NO_X and volatile organic compounds (VOC) in the presence of sunlight. Motor vehicle exhaust, industrial emissions, gasoline vapors, chemical solvents as well as natural sources emit NO_X and VOC that help form ozone. Ground-level ozone is the primary constituent of smog. Sunlight and hot weather cause ground-level ozone to form with the greatest concentrations usually occurring downwind from urban areas. Ozone is subsequently considered a regional pollutant. Ground-level ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and can cause substantial damage to vegetation and other materials. Because NO_X and VOC are ozone precursors, the health effects associated with ozone are also indirect health effects associated with significant levels of NO_X and VOC emissions.

Carbon Monoxide: Carbon monoxide (CO) is a colorless, odorless gas that is formed when carbon in fuel is not burned completely. It is a component of motor vehicle exhaust, which contributes approximately 56 percent of all CO emissions nationwide. In cities, 85 to 95 percent of all CO emissions may come from motor vehicle exhaust. Other sources of CO emissions include industrial processes (such as metals processing and chemical manufacturing), residential wood burning, and natural sources such as forest fires. Woodstoves, gas stoves, cigarette smoke, and unvented gas and kerosene space heaters are indoor sources of CO. Since CO concentrations are strongly associated with motor vehicle emissions, high CO concentrations generally occur in the immediate vicinity of roadways with high traffic volumes and traffic congestion, active parking lots, and in automobile tunnels. Areas adjacent to heavily traveled and congested intersections are particularly susceptible to high CO concentrations. High levels of CO can affect even healthy people. People who breathe high levels of CO can develop vision problems, reduced ability to work or learn, reduced manual dexterity, and difficulty performing complex tasks. At extremely high levels, CO is poisonous and can cause death.

Sulfur Oxides: Sulfur Oxide (SO_X) gases are formed when fuel containing sulfur, such as coal and oil is burned, as well as from the refining of gasoline. SO_X dissolves easily in water vapor to form acid and interacts with other gases and particles in the air to form sulfates and other products that can be harmful to people and the environment.

Lead: Lead (Pb) is a metal found naturally in the environment as well as manufactured products. The major sources of lead emissions have historically been vehicles and industrial sources. Due to the phase out of leaded gasoline, metal processing is now the primary source of lead emissions to the air. High levels of lead in the air are typically only found near lead smelters, waste incinerators, utilities, and lead-acid battery manufacturers. Exposure of fetuses, infants and children to low levels of Pb can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased lead levels are associated with increased blood pressure.

Particulate Matter: Particle matter (PM) is the term for a mixture of solid particles and liquid droplets found in the air. PM is made up of a number of components including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles. The size of particles is directly linked to their potential for causing health problems. Particles that are less than 10 micrometers in diameter (PM_{10}), also known as *Respirable Particulate Matter,* are the particles that generally pass through the throat and nose and enter the lungs. Once inhaled, these particles can affect the heart and lungs and cause serious health effects. Particles that are less than 2.5 micrometers in diameter ($PM_{2.5}$) that are also known as *Fine Particulate*

Matter have been designated as a subset of PM_{10} due to their increased negative health impacts and its ability to remain suspended in the air longer and travel further.

Volatile Organic Compounds: Hydrocarbons are organic gases that are formed from hydrogen and carbon and sometimes other elements. Hydrocarbons that contribute to the formation of O_3 are referred to and regulated as volatile organic compounds (VOCs), also referred to as reactive organic gases. Combustion engine exhaust, oil refineries, and fossil-fueled power plants are the sources of hydrocarbons. Other sources of hydrocarbons include evaporation from petroleum fuels, solvents, dry cleaning solutions, and paint. VOCs are not classified as a criteria pollutant since VOCs by themselves are not a known source of adverse health effects. The primary health effects of VOCs result from the formation of O_3 and its related health effects. High levels of VOCs in the atmosphere can interfere with oxygen intake by reducing the amount of available oxygen through displacement. Carcinogenic forms of hydrocarbons, such as benzene, are considered toxic air contaminants (TACs). There are no separate health standards for VOCs as a group.

OTHER POLLUTANTS OF CONCERN

Toxic Air Contaminants: In addition to the above-listed criteria pollutants, toxic air contaminants (TACs) are another group of pollutants of concern. TACs is a term that is defined under the California Clean Air Act and consists of the same substances that are defined as Hazardous Air Pollutants (HAPs) in the Federal Clean Air Act. There are over 700 hundred different types of TACs with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Cars and trucks release at least 40 different toxic air contaminants. The most important of these TACs, in terms of health risk, are diesel particulates, benzene, formaldehyde, 1,3-butadiene, and acetaldehyde. Public exposure to TACs can result from emissions from normal operations as well as from accidental releases. Health effects of TACs include cancer.

Asbestos: Asbestos is listed as a TAC by the California Air Resources Board (CARB) and as a HAP by the United States Environmental Protection Agency (EPA). Asbestos occurs naturally in mineral formations and crushing or breaking these rocks, through construction or other means, can release asbestiform fibers into the air. Asbestos emissions can result from the sale or use of asbestos-containing materials, road surfacing with such materials, grading activities, and surface mining. The risk of disease is dependent upon the intensity and duration of exposure. When inhaled, asbestos fibers may remain in the lungs and with time may be linked to such diseases as asbestosis, lung cancer, and mesothelioma.

Regulatory Setting

The project area is located in the South Coast Air Basin (SoCAB). The SoCAB includes Orange County in its entirety and the non-desert portions of Los Angeles, San Bernardino, and Riverside Counties. Air pollutants are regulated at the national, state and air basin level. Each agency has a different level of regulatory responsibility. The EPA regulates at the national level. The California Air Resources Board (ARB) regulates at the state level and the South Coast Air Quality Management District (SCAQMD) regulates at the air basin level.

FEDERAL REGULATION

The EPA handles global, international, national and interstate air pollution issues and policies. The EPA sets national vehicle and stationary source emission standards, oversees approval of all State Implementation Plans, conducts research, and provides guidance in air pollution programs and sets National Ambient Air Quality Standards (NAAQS), also known as federal standards. There are six common air pollutants, called criteria air pollutants, which were identified resulting from provisions of the Clean Air Act of 1970. The six

criteria pollutants are Ozone, Particulate Matter (PM_{10} and $PM_{2.5}$), Nitrogen Dioxide, Carbon Monoxide, Lead and Sulfur Dioxide. The NAAQS were set to protect public health, including that of sensitive individuals.

STATE REGULATION

The ARB also administers California Ambient Air Quality Standards (CAAQS), for the ten air pollutants designated in the California Clean Air Act (CCAA). The ten state air pollutants include the six national criteria pollutants and visibility reducing particulates, hydrogen sulfide, sulfates and vinyl chloride.

As part of its enforcement responsibilities, the EPA requires each state with federal nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the national standards. The SIP must integrate federal, state, and local components and regulations to identify specific measures to reduce pollution, using a combination of performance standards and market-based programs within the timeframe identified in the SIP. The CARB defines attainment as the category given to an area with no violations in the past three years. The SoCAB has been designated by the EPA for the national standards as a non-attainment area for ozone and $PM_{2.5}$ and partial non-attainment for lead. Currently, the SoCAB is in attainment with the national ambient air quality standards for CO, PM_{10}, SO_2, and NO_2.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD)

The project site is located within the South Coast Air Basin (under the jurisdiction of the SCAQMD). The SCAQMD is required to monitor air pollutant levels to ensure that air quality standards are met and, if they are not met, to develop strategies to meet the standards. Depending on whether the standards are met or exceeded, the local air basin is classified as being in "attainment" or "non-attainment." The Basin in which the project site is located, is a non-attainment area for the federal ozone, $PM_{2.5}$ and lead standards, and the state ozone, PM_{10} and $PM_{2.5}$ standards. The Basin is in attainment for federal standards for PM_{10}, nitrogen dioxide, carbon monoxide and sulfur dioxide. The Basin is also in attainment for the state standards for CO, nitrogen dioxide, sulfur dioxide, lead and sulfates.

SCAQMD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emission sources, and enforces such measures through educational programs or fines, when necessary. SCAQMD is directly responsible for reducing emissions from stationary, mobile, and indirect sources. It has responded to this requirement by preparing a sequence of AQMPs. The *Final 2016 Air Quality Management Plan* (2016 AQMP) was adopted by the SCAQMD Board on March 3, 2016 and was adopted by CARB on March 23, 2017 for inclusion into the California State Implementation Plan (SIP). The 2016 AQMP was prepared in order to meet the following standards:

- 8-hour Ozone (75 ppb) by 2032
- Annual $PM_{2.5}$ (12 µg/m^3) by 2021-2025
- 8-hour Ozone (80 ppb) by 2024 (updated from the 2007 and 2012 AQMPs)
- 1-hour Ozone (120 ppb) by 2023 (updated from the 2012 AQMP)
- 24-hour $PM_{2.5}$ (35 µg/m^3) by 2019 (updated from the 2012 AQMP)

The SCAQMD intends that by providing this guidance, the air quality impacts of plans and development proposals will be analyzed accurately and consistently throughout the SoCAB, and adverse impacts will be minimized. The following lists the SCAQMD rules that are applicable but not limited to residential development projects in the SoCAB.

Rule 402 Nuisance: Rule 402 prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other material which causes injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or

safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. Compliance with Rule 402 will reduce local air quality and odor impacts to nearby sensitive receptors.

Rule 403 Fugitive Dust: Rule 403 governs emissions of fugitive dust during construction activities and requires that no person shall cause or allow the emissions of fugitive dust such that dust remains visible in the atmosphere beyond the property line or the dust emission exceeds 20 percent opacity, if the dust is from the operation of a motorized vehicle. Compliance with this rule is achieved through application of standard Best Available Control Measures, which includes but is not limited to the measures below. Compliance with these rules would reduce local air quality impacts to nearby sensitive receptors.

- Utilize either a pad of washed gravel 50 feet long, 100 feet of paved surface, a wheel shaker, or a wheel washing device to remove material from vehicle tires and undercarriages before leaving the project site.
- Do not allow any track out of material to extend more than 25 feet onto a public roadway and remove all track out at the end of each workday.
- Water all exposed areas on active sites at least three times per day and pre-water all areas prior to clearing and soil moving activities.
- Apply nontoxic chemical stabilizers according to manufacturer specifications to all construction areas that will remain inactive for 10 days or longer.
- Pre-water all material to be exported prior to loading, and either cover all loads or maintain at least two feet of freeboard in accordance with the requirements of California Vehicle Code Section 23114.
- Replant all disturbed area as soon as practical.
- Suspend all grading activities when wind speeds (including wind gusts) exceed 25 miles per hour.
- Restrict traffic speeds on all unpaved roads to 15 miles per hour or less.

Rules 1108 and 1108.1 Cutback and Emulsified Asphalt: Rules 1108 and 1108.1 govern the sale, use, and manufacturing of asphalt and limits the VOC content in asphalt. This rule regulates the VOC contents of asphalt used during construction as well as any on-going maintenance during operations. Therefore, all asphalt used during construction and operation of the proposed project must comply with SCAQMD Rules 1108 and 1108.1.

Rule 1113 Architectural Coatings: Rule 1113 governs the sale, use, and manufacturing of architectural coatings and limits the VOC content in sealers, coatings, paints and solvents. This rule regulates the VOC contents of paints available during construction. Therefore, all paints and solvents used during construction and operation of the proposed project must comply with SCAQMD Rule 1113.

Rule 1143 Paint Thinners: Rule 1143 governs the sale, use, and manufacturing of paint thinners and multi-purpose solvents that are used in thinning of coating materials, cleaning of coating application equipment, and other solvent cleaning operations. This rule regulates the VOC content of solvents used during construction. Solvents used during construction and operation of the proposed project must comply with SCAQMD Rule 1143.

LOCAL JURISDICTIONS

Local jurisdictions, such as the County of Orange, have the authority and responsibility to reduce air pollution through its police power and decision-making authority. Specifically, the County is responsible for the assessment and mitigation of air emissions resulting from its land use decisions. The County is also responsible for the implementation of transportation control measures as outlined in the AQMPs. Examples of such measures include bus turnouts, energy-efficient streetlights, and synchronized traffic signals. In accordance with CEQA requirements and the CEQA review process, the County assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation. In accordance with the CEQA requirements, the County does not, however, have the expertise to develop plans, programs, procedures, and methodologies to ensure that air quality within the County and region will meet federal and state standards. Instead, the County relies on the expertise of the SCAQMD and utilizes the SCAQMD CEQA Handbook as the guidance document for the environmental review of plans and development proposals within its jurisdiction.

PROJECT IMPACTS

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

Less Than Significant Impact: The California Environmental Quality Act (CEQA) requires a discussion of any inconsistencies between a proposed project and applicable General Plans and regional plans (CEQA Guidelines Section 15125). The regional plan that applies to the proposed project includes the SCAQMD 2016 AQMP. Therefore, this section discusses any potential inconsistencies of the proposed project with the 2016 AQMP. The purpose of this discussion is to set forth the issues regarding consistency with the assumptions and objectives of the AQMP and discuss whether the proposed project would interfere with the region's ability to comply with Federal and State air quality standards. If the decision-makers determine that the proposed project is inconsistent, the lead agency may consider project modifications or inclusion of mitigation to eliminate the inconsistency.

The SCAQMD CEQA Handbook states that "New or amended General Plan Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP." Strict consistency with all aspects of the plan is usually not required. A proposed project should be considered to be consistent with the AQMP if it furthers one or more policies and does not obstruct other policies. The SCAQMD CEQA Handbook identifies two key indicators of consistency:

1) Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

2) Whether the project will exceed the assumptions in the AQMP, or increments based on the year of project buildout and phase.

Both of these criteria are evaluated in the following sections.

CRITERION 1 – INCREASE IN THE FREQUENCY OR SEVERITY OF VIOLATIONS

Based on the air quality modeling analysis contained in this report, short-term regional construction air emissions would not result in significant impacts based on SCAQMD regional thresholds of significance or local thresholds of significance. The ongoing operation of the proposed project would generate air pollutant emissions that are inconsequential on a regional basis and would not result in significant impacts based on SCAQMD thresholds of significance. The analysis for long-term local air quality impacts showed that local

pollutant concentrations would not be projected to exceed the air quality standards. Therefore, a less than significant long-term impact would occur, and no mitigation would be required. Therefore, based on the information provided above, the proposed project would be consistent with the first criterion.

CRITERION 2 – EXCEED ASSUMPTIONS IN THE 2016 AQMP

Consistency with the 2016 AQMP assumptions is determined by performing an analysis of the proposed project with the assumptions in the 2016 AQMP. The emphasis of this criterion is to ensure the analyses conducted for the proposed project are based on the same forecasts as the AQMP. The AQMP is developed through use of the planning forecasts provided for the regional transportation and land use network within Southern California. The long-range planning is required by federal and state requirements placed and is updated every four years by the Southern California Association of Governments. Local governments are required to use these plans as the basis of their plans for the purpose of consistency with applicable regional plans under CEQA. For this project, the County of Orange General Plan's Land Use Plan defines the assumptions that are represented in AQMP. The project site is currently designated as Suburban Residential (1B) in the General Plan and is zoned as Community Center/Commercial by the Coto de Caza Specific Plan. The proposed active senior living facility is an allowed use in the Suburban Residential (1B) land use designation and Community Center/Commercial zoning designation. Therefore, the proposed project is consistent with the current land use designation and zoning and would not exceed the AQMP assumptions for the project site and is found to be consistent with the AQMP for the second criterion. Based on the above, the proposed project would not result in an inconsistency with the SCAQMD 2016 AQMP. Therefore, a less than significant impact would occur in relation to implementation of the AQMP. No mitigation is required.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less Than Significant Impact: The following section calculates the potential air emissions associated with the construction and operations of the proposed project and compares the emissions to the SCAQMD standards.

CONSTRUCTION-RELATED REGIONAL EMISSIONS

The construction activities for the proposed project include demolition and grading of the project site, building construction and application of architectural coatings to the proposed active senior living facility, and paving of the proposed parking lot and onsite roads. The construction emissions have been analyzed for both regional and local air quality impacts.

The construction-related criteria pollutant emissions from the proposed project for each phase of construction activities are shown below in Table 4.3-1, *Construction-Related Regional Criteria Pollutant Emissions*. Since it is possible that building construction, paving, and architectural coating activities may occur concurrently towards the end of the building construction phase. Table 4.3-1 shows the combined regional criteria pollutant emissions from year 2021 building construction, paving and architectural coating phases of construction. Table 4.3-1 also shows that none of the analyzed criteria pollutants would exceed the regional emissions thresholds during either demolition, grading, or the combined building construction, paving and architectural coatings phases. Therefore, a less than significant regional air quality impact would occur from construction of the proposed project. No mitigation is required.

Table 4.3-1
Construction-Related Regional Criteria Pollutant Emissions

Activity	Pollutant Emissions (pounds/day)					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Demolition[1]						
Onsite	3.31	33.20	21.75	0.04	4.09	1.91
Offsite	0.28	7.62	2.46	0.02	0.67	0.20
Total	***3.59***	***40.82***	***24.21***	***0.06***	***4.76***	***2.11***
Grading[1]						
Onsite	2.43	26.39	16.05	0.03	4.22	2.69
Offsite	0.12	2.06	1.00	0.01	0.30	0.09
Total	***2.55***	***28.45***	***17.05***	***0.04***	***4.52***	***2.78***
Building Construction (Year 2020)						
Onsite	2.12	19.19	16.85	0.03	1.12	1.05
Offsite	0.51	2.46	3.92	0.02	1.23	0.36
Total	***2.63***	***21.65***	***20.77***	***0.05***	***2.35***	***1.41***
Combined Building Construction (Year 2021), Paving and Architectural Coatings						
Onsite	38.67	29.80	30.66	0.05	1.63	1.52
Offsite	0.64	2.31	4.85	0.02	1.58	0.47
Total	***39.31***	***32.11***	***35.51***	***0.07***	***3.21***	***1.99***
Maximum Daily Construction Emissions	**39.31**	**40.82**	**35.51**	**0.07**	**4.76**	**2.78**
SCAQMD Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
[1] Demolition and Grading based on adherence to fugitive dust suppression requirements from SCAQMD Rule 403.
[2] Onsite emissions from equipment not operated on public roads.
[3] Offsite emissions from vehicles operating on public roads.
Source: *The Legacy at Coto Senior Living Residential Project Air Quality, Energy, and Greenhouse Gas Emissions Impact Analysis* prepared by Vista Environmental, January 29, 2020.

CONSTRUCTION-RELATED LOCAL IMPACTS

Construction-related air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the SoCAB. The local air quality emissions from construction were analyzed through utilizing the methodology described in *Localized Significance Threshold Methodology* (LST Methodology), prepared by SCAQMD, and revised October 2009. The LST Methodology found the primary criteria pollutant emissions of concern are NO_X, CO, PM_{10}, and $PM_{2.5}$.

Table 4.3-2, *Operational Regional Criteria Pollutant Emissions*, shows the onsite emissions for the different construction activities and the calculated localized emissions thresholds. The data provided in Table 4.3-2 shows that none of the analyzed criteria pollutants would exceed the local emissions thresholds during either demolition, grading, or the combined building construction, paving, and architectural coatings phases. Therefore, a less than significant local air quality impact would occur from construction of the proposed project. No mitigation is required.

Table 4.3-2
Operational Regional Criteria Pollutant Emissions

Activity	Pollutant Emissions (pounds/day)					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Area Sources[1]	2.67	0.10	9.10	0.00	0.05	0.05
Energy Usage[2]	0.04	0.35	0.15	0.00	0.03	0.03
Mobile Sources[3]	0.56	2.22	6.99	0.03	2.43	0.66
Total Emissions	**3.27**	**2.67**	**16.24**	**0.03**	**2.51**	**0.74**
SCAQMD Operational Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
[1] Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.
[2] Energy usage consist of emissions from natural gas usage.
[3] Mobile sources consist of emissions from vehicles and road dust.
Source: *The Legacy at Coto Senior Living Residential Project Air Quality, Energy, and Greenhouse Gas Emissions Impact Analysis* prepared by Vista Environmental, January 29, 2020.

OPERATIONAL-RELATED REGIONAL EMISSIONS

Table 4.3-2 above, shows that the primary source of operational air emissions would be created from mobile source emissions that would be generated throughout the SoCAB. The SoCAB has been designated by EPA for the national standards as a non-attainment area for ozone, $PM_{2.5}$, and partial non-attainment for lead. In addition, PM_{10} has been designated by the State as non-attainment. It should be noted that VOC and NO_X are ozone precursors, as such, they have been considered as non-attainment pollutants. The SoCAB has been designated by EPA for the national standards as a non-attainment area for ozone, $PM_{2.5}$, and partial non-attainment for lead. In addition, PM_{10} has been designated by the State as non-attainment. The project contribution to each criteria pollutant in the South Coast Air Basin is shown in Table 4.3-3, *Project's Contribution to Criteria Pollutants in the South Coast Air Basin*. As shown in Table 4.3-3, the project would increase criteria pollutant emissions by as much as 0.0008 percent for PM_{10} in the South Coast Air Basin. Due to these nominal increases in the SoCAB-wide criteria pollutant emissions, no increases in days of non-attainment would occur from operation of the proposed project. Potential impacts would be less than significant. No mitigation is required.

Table 4.3-3
Project's Contribution to Criteria Pollutants in the South Coast Air Basin

Emissions Source	Pollutant Emissions (pounds/day)					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Project Emissions[1]	3.27	2.67	16.24	0.03	2.51	0.74
Total Emissions in SoCAB[2]	1,000,000	1,044,000	4,246,000	36,000	322,000	132,000
Project's Percent of Air Emissions	**0.0003%**	**0.0003%**	**0.0004%**	**0.0001%**	**0.0008%**	**0.0006%**
SCAQMD Operational Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
[1] From the project's total operational emissions shown above in Table 4.3-2.
[2] VOC, NOx, CO, SO_2 and PM2.5 from 2016 AQMP and PM10 from the California Almanac of Emissions and Air Quality 2013 Edition.
Source: *The Legacy at Coto Senior Living Residential Project Air Quality, Energy, and Greenhouse Gas Emissions Impact Analysis* prepared by Vista Environmental, January 29, 2020.

OPERATIONS RELATED LOCAL AIR QUALITY IMPACTS

Project-related air emissions from onsite sources such as architectural coatings, landscaping equipment, and onsite usage of natural gas appliances may have the potential to create emissions areas that exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the SoCAB. The local air quality emissions from onsite operations were analyzed using the SCAQMD's Mass Rate LST Look-up Tables and the methodology described in LST Methodology. The Look-up Tables were developed by the SCAQMD in order to readily determine if the daily emissions of CO, NO_X, PM_{10}, and $PM_{2.5}$ from the proposed project could result in a significant impact to the local air quality. Table 4.3-4, *Operations Related to Local Criteria Pollutant Emissions*, shows the onsite emissions from energy usage, and vehicles operating in the immediate vicinity of the project site and the calculated emissions thresholds. The data provided in Table 4.3-4 shows that the on-going operations of the proposed project would not exceed the local NO_X, CO, PM_{10} and $PM_{2.5}$ thresholds of significance. Therefore, the on-going operations of the proposed project would create a less than significant operations-related impact to local air quality due to onsite emissions and no mitigation would be required. Therefore, the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant. No mitigation is required.

Table 4.3-4
Operations Related to Local Criteria Pollutant Emissions

Onsite Emission Source	Pollutant Emissions (pounds/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Area Sources	0.10	9.10	0.05	0.05
Energy Usage	0.35	0.15	0.03	0.03
Onsite Vehicle Emissions[1]	0.28	0.87	0.30	0.08
Total Emissions	**0.73**	**10.12**	**0.38**	**0.16**
SCAQMD Local Operational Thresholds[2]	**197**	**1,804**	**3**	**2**
Exceeds Threshold?	**No**	**No**	**No**	**No**

Notes:
[1] Onsite vehicle emissions based on 1/8 of the gross vehicular emissions, which is the estimated portion of vehicle emissions occurring within a quarter mile of the project site.
[2] The nearest offsite sensitive receptors are single-family homes located adjacent to the west side of the project site. According to SCAQMD methodology, all receptors closer than 25 meters are based on the 25-meter threshold.
Source: *The Legacy at Coto Senior Living Residential Project Air Quality, Energy, and Greenhouse Gas Emissions Impact Analysis* prepared by Vista Environmental, January 29, 2020.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact: The discussion below also includes an analysis of the potential impacts from toxic air contaminant emissions generated from the construction and operation of the proposed project. The nearest sensitive receptors to the project site are single-family homes located adjacent to the west side of the project site.

CONSTRUCTION-RELATED SENSITIVE RECEPTOR IMPACTS

The construction activities for the proposed project would include demolition and grading of the project site, building construction and application of architectural coatings to the proposed active senior living facility, and paving of the proposed parking lot and onsite roads. Construction activities may expose sensitive receptors to substantial pollutant concentrations of localized criteria pollutant concentrations and from toxic air contaminant emissions created from onsite construction equipment.

Local Criteria Pollutant Impacts from Construction

The local air quality impacts from construction of the proposed project has been analyzed and found that the construction of the proposed project would not exceed the local NO_X, CO, PM_{10} and $PM_{2.5}$ thresholds of significance. Therefore, construction of the proposed project would create a less than significant construction-related impact to local air quality and no mitigation would be required. No mitigation is required.

Toxic Air Contaminants Impacts from Construction

The greatest potential for toxic air contaminant emissions would be related to diesel particulate matter (DPM) emissions associated with heavy equipment operations during construction of the proposed project. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of "individual cancer risk". "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of toxic air contaminants over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. It should be noted that the most current cancer risk assessment methodology recommends analyzing a 30-year exposure period for the nearby sensitive receptors (OEHHA, 2015).

Up to 10 pieces of heavy-duty construction equipment could operate concurrently. The construction equipment would operate at varying distances to the nearby sensitive receptors, and the short-term construction schedule, the proposed project would not result in a long-term (i.e., 30 or 70 years) substantial source of toxic air contaminant emissions and corresponding individual cancer risk. In addition, California Code of Regulations Title 13 regulates emissions from off-road diesel equipment in California. This regulation limits idling of equipment to no more than five minutes, requires equipment operators to label each piece of equipment and provide annual reports to CARB of their fleet's usage and emissions. This regulation also requires systematic upgrading of the emission Tier level of each fleet, and currently no commercial operator is allowed to purchase Tier 0 or Tier 1 equipment and by January 2023, no commercial operator is allowed to purchase Tier 2 equipment. In addition to the purchase restrictions, equipment operators need to meet fleet average emissions targets that become more stringent each year between years 2014 and 2023. As of January 2019, 25 percent or more of all contractors' equipment fleets must be Tier 2 or higher. The fleet average emission requirements provided in Section 2449 of the California Code of Regulations pertaining to requirements for in-use off-road diesel-fueled fleets, have reduced off-road diesel equipment emissions by approximately 30 percent between the year 2014 and year 2020. Therefore, through adherence to current state regulations, including Section 2449, less than significant short-term toxic air contaminant impacts would occur during construction of the proposed project. As such, construction of the proposed project would result in a less than significant exposure of sensitive receptors to substantial pollutant concentrations. No mitigation is required.

OPERATIONS-RELATED SENSITIVE RECEPTOR IMPACTS

The on-going operations of the proposed project may expose sensitive receptors to substantial pollutant concentrations of local CO emission impacts from the project-generated vehicular trips and from the potential local air quality impacts from onsite operations. The following analyzes the vehicular CO emissions, local criteria pollutant impacts from onsite operations, and toxic air contaminant impacts.

Local CO Hotspot Impacts from Project-Generated Vehicle Trips

CO is the pollutant of major concern along roadways because the most notable source of CO is motor vehicles. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network and are used as an indicator of potential impacts to sensitive receptors. Local air quality

impacts can be assessed by comparing future without and with project CO levels to the State and Federal CO standards of 20 ppm over one hour or nine ppm over eight hours. With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the SoCAB and in the state have steadily declined. In 2007, the SoCAB was designated in attainment for CO under both the CAAQS and NAAQS. SCAQMD conducted a CO hot spot analysis for attainment at the busiest intersections in Los Angeles[1] during the peak morning and afternoon periods and did not predict a violation of CO standards. Since the nearby intersections to the proposed project are much smaller with less traffic than what was analyzed by the SCAQMD, no local CO Hotspot would be created from the proposed project and no CO Hotspot modeling was performed. Therefore, operation of the proposed project would result in a less than significant exposure of offsite sensitive receptors to substantial pollutant concentrations. No mitigation is required.

Local Criteria Pollutant Impacts from Onsite Operations

The local air quality impacts from the operation of the proposed project would occur from onsite sources such as architectural coatings, landscaping equipment, and onsite usage of natural gas appliances. The analysis found that the operation of the proposed project would not exceed the local NO_x, CO, PM_{10} and $PM_{2.5}$ thresholds of significance. Therefore, the on-going operations of the proposed project would create a less than significant operations-related impact to local air quality due to onsite emissions and no mitigation is required.

OPERATIONS-RELATED TOXIC AIR CONTAMINANT IMPACTS

Particulate matter (PM) from diesel exhaust is the predominant TAC in most areas and according to *The California Almanac of Emissions and Air Quality 2013 Edition*, prepared by CARB, about 80 percent of the outdoor TAC cancer risk is from diesel exhaust. Some chemicals in diesel exhaust, such as benzene and formaldehyde have been listed as carcinogens by State Proposition 65 and the Federal Hazardous Air Pollutants Program. It is anticipated that the proposed project could generate up to seven diesel truck trips. Due to the limited number of diesel truck trips that are anticipated to be generated by the proposed project, a less than significant TAC impact would occur during the on-going operations of the proposed project and no mitigation would be required. Therefore, operation of the proposed project would result in a less than significant exposure of sensitive receptors to substantial pollutant concentrations. No mitigation is required.

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

Less Than Significant Impact: Generally, the impact of an odor results from a variety of factors such as frequency, duration, offensiveness, location, and sensory perception. The frequency is a measure of how often an individual is exposed to an odor in the ambient environment. The intensity refers to an individual's or group's perception of the odor strength or concentration. The duration of an odor refers to the elapsed time over which an odor is experienced. The offensiveness of the odor is the subjective rating of the pleasantness or unpleasantness of an odor. The location accounts for the type of area in which a potentially affected person lives, works, or visits; the type of activity in which he or she is engaged; and the sensitivity of the impacted receptor.

[1] The four intersections analyzed by the SCAQMD were: Long Beach Boulevard and Imperial Highway; Wilshire Boulevard and Veteran Avenue; Sunset Boulevard and Highland Avenue; and La Cienega Boulevard and Century Boulevard. The busiest intersection evaluated (Wilshire and Veteran) had a daily traffic volume of approximately 100,000 vehicles per day with LOS E in the morning and LOS F in the evening peak hour.

Sensory perception has four major components: detectability, intensity, character, and hedonic tone. The detection (or threshold) of an odor is based on a panel of responses to the odor. There are two types of thresholds: the odor detection threshold and the recognition threshold. The detection threshold is the lowest concentration of an odor that will elicit a response in a percentage of the people that live and work in the immediate vicinity of the project site and is typically presented as the mean (or 50 percent of the population). The recognition threshold is the minimum concentration that is recognized as having a characteristic odor quality, this is typically represented by recognition by 50 percent of the population. The intensity refers to the perceived strength of the odor. The odor character is what the substance smells like. The hedonic tone is a judgment of the pleasantness or unpleasantness of the odor. The hedonic tone varies in subjective experience, frequency, odor character, odor intensity, and duration. Potential odor impacts have been analyzed separately for construction and operations below.

CONSTRUCTION-RELATED ODOR IMPACTS

Potential sources that may emit odors during construction activities include the application of coatings such as asphalt pavement, paints and solvents and from emissions from diesel equipment. The objectionable odors that may be produced during the construction process would be temporary and would not likely be noticeable for extended periods of time beyond the project site's boundaries. Due to the transitory nature of construction odors, a less than significant odor impact would occur, and no mitigation is required.

OPERATIONS-RELATED ODOR IMPACTS

The proposed project would consist of the development of an active senior living facility. Potential sources that may emit odors during the on-going operations of the proposed project would primarily occur from the trash storage areas. Pursuant to County regulations, permanent trash enclosures that protect trash bins from rain as well as limit air circulation would be required for the trash storage areas. Due to the distance of the nearest receptors from the project site and through compliance with SCAQMD's Rule 402 and County trash storage regulations, no significant impact related to odors would occur during the on-going operations of the proposed project. Therefore, a less than significant impact would occur, and no mitigation is required.

STANDARD CONDITIONS OF APPROVAL

Condition of Approval 4.3-1: Prior to issuance of any Grading Permit, the Director, OC Development Services, or designee shall confirm that the project stipulates that, in compliance with SCAQMD Rule 402 and Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or other dust prevention measures, as specified in the SCAQMD's Rules and Regulations. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance offsite that are applicable to the project. Implementation of the following measures would reduce short-term fugitive dust impacts on nearby sensitive receptors:

- All active portions of the construction site shall be watered every three hours during daily construction activities and when dust is observed migrating from the project site to prevent excessive amounts of dust;
- Pave or apply water every three hours during daily construction activities or apply nontoxic soil stabilizers on all unpaved access roads, parking areas, and staging areas. More frequent watering shall occur if dust is observed migrating from the site during site disturbance;
- Any onsite stockpiles of debris, dirt, or other dusty material shall be enclosed, covered, or watered twice daily, or non-toxic soil binders shall be applied;

- All grading and excavation operations shall be suspended when wind speeds exceed 25 miles per hour;
- Disturbed areas shall be replaced with ground cover or paved immediately after construction is completed in the affected area;
- Gravel bed trackout aprons (three inches deep, 25 feet long, 12 feet wide per lane and edged by rock berm or row of stakes) shall be installed to reduce mud/dirt trackout from unpaved truck exit routes;
- Onsite vehicle speed shall be limited to 15 miles per hour;
- Visible dust beyond the property line which emanates from the project shall be prevented to the maximum extent feasible;
- All material transported offsite shall be either sufficiently watered or securely covered to prevent excessive amounts of dust prior to departing the job site;
- Reroute construction trucks away from congested streets or sensitive receptor areas;
- Track-out devices shall be used at all construction site access points; and
- All delivery truck tires shall be watered down and/or scraped down prior to departing the job site.

MITIGATION MEASURES

No Mitigation Measures are required.

REFERENCES

County of Orange, *County of Orange General Plan,* September 13, 2005.

County of Orange, *County of Orange Zoning Code,* June 2005.

County of Orange, *Standard Conditions of Approval*.

Vista Environmental, *Air Quality, Energy, and Greenhouse Gas Emissions Impact Analysis - The Legacy at Coto Senior Living Residential Project*, January 29, 2020.

4.4 Biological Resources

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

ENVIRONMENTAL ANALYSIS

The following analysis is based on a Biological Resources Assessment prepared by VCS Environmental in January 2020 and is presented in Appendix B1. Also, a Tree Inventory was prepared by Dane S. Shota Certified Arborist in February 2020 and is presented in Appendix B2.

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less Than Significant Impact With Mitigation Incorporated: The project site was previously used as a tennis training facility, which consisted of tennis courts and a hitting lane practice facility as well as structures that were used for indoor classroom instruction and administrative offices. The construction and

use of these previous uses have left the majority of the project site in a disturbed/developed condition. VCS Environmental (VCS) prepared a Biological Resources Assessment to determine the potential for any candidate, sensitive, or special status species to occur within the project site. Additionally, VCS conducted a review of the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB). The CNDDB contains a collection of observed special status species observations within California. VCS noted all CNDDB occurrences within a two-mile radius of the project; refer to Figure 4.4-1, *California Natural Diversity Database (CNDDB) Occurrences*. Table 4.4-1, *Special Status Species List*, summarizes the findings for potential special status species to occur within the project site.

Table 4.4-1
Special Status Species List

Species	Federal	State	CA Rare Plant Rank	Habitat	Potential Occurrence
Plants					
Asplenium vespertinum (western spleenwort)	None	None	4.2	Moist, shady, rocky places, such as the shadows beneath cliff overhangs. Habitats include chaparral, cismontane woodland, and coastal scrub. Elevation: 180 - 1000 meters Blooming period: February - June	Low; Project site lacks suitable habitat.
Atriplex coulteri (Coulter's saltbrush)	None	None	1B.2	It is native to coastal southern California and northern Baja California, where it is quite rare. It grows in areas of saline and alkaline soils, such as ocean bluffs. Elevation: 3 - 460 meters Blooming period: March - October	Low; Project site lacks suitable habitat.
Brodiaea filifolia (Thread-leaved brodiaea)	None	None	1B.1	Found in chaparral (openings), cismontane woodland, and coastal scrub, playas, valley and foothill grassland, vernal pools. Requires very heavy clay soils. Elevation: 25 - 1120 meters Blooming period: March - June	Low; Project site lacks suitable habitat, including a lack of heavy clay soils.
Calochortus weedii var. *intermedius* (Intermediate mariposa lily)	Forest Service Sensitive	None	1B.2	Perennial bulbiferous herb endemic to southern California. Found in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland habitats, especially on the Channel Islands and in the Santa Monica Mountains. Elevation: 15 - 700 meters Blooming period: (Feb)March - June	Low; Project site lacks suitable habitat. The understory in the woodland onsite is maintained/disturbed.
Caulanthus simulans (Payson's jewelflower)	Forest Service Sensitive	None	4.2	Sandy, granitic habitats in chaparral and coastal scrub. Elevation: 90 - 2200 meters Blooming period: (Feb)March - May(Jun)	Low; Project site lacks suitable habitat.

Species	Federal	State	CA Rare Plant Rank	Habitat	Potential Occurrence
Centromadia parryi ssp. *australis* (southern tarplant)	None	None	1B.1	Found in vernally wet areas such as edges of marshes and vernal pools, at edges of roads and trails, and in other areas of compacted, poorly drained, or alkaline soils where competition from other plants is limited, often due to disturbance. In California, known only from Santa Barbara, Ventura, Los Angeles, Orange and San Diego Counties. Also occurs in Mexico.	Low; Project site lacks suitable habitat.
Clinopodium chandleri (San Miguel savory)	BLM Sensitive Forest Service Sensitive	None	1B.2	Perennial shrub native to California and Baja California. Habitat includes rocky, gabbroic or metavolcanic substrates, chaparral, cismontane woodland, coastal scrub, riparian woodland, and valley and foothill grassland. Tends to grow in rocky slopes. Elevation: 120 - 1075 meters Blooming Period: March - July	Low; Project site lacks suitable habitat. The understory in the woodland onsite is maintained/disturbed. Likely would have been observed onsite during the survey.
Convolvulus simulans (small-flowered morning-glory)	None	None	4.2	Annual herb native to California and Baja California. Habitat includes clay and serpentinite seeps, chaparral (openings), coastal scrub, and valley and foothill grassland. Rare in southern California. Threatened by development and vehicles. Elevation: 30 - 740 meters Blooming Period: March - July	Low; Project site lacks suitable habitat.
Deinandra paniculata (San Diego tarplant [paniculate tarplant])	None	None	4.2	Occurs as a dominant or co-dominant plant in the herbaceous layer of grasslands, forblands, openings of coastal sage scrub and oak woodland. Elevation: 25 - 950 meters Blooming period: (Mar)April - November(Dec)	Low; Project site lacks suitable habitat. Has a longer blooming period and likely would have been observed onsite during the survey.
Dichondra occidentalis (Western dichondra)	None	None	4.2	Perennial rhizomatous herb found in the understory of chaparral, other shaded areas below 1,800 feet and rock outcroppings, often after fire. Elevation: 50 - 500 meters Blooming period: (Jan)March - July	Low; Project site lacks suitable habitat. The understory in the woodland onsite is maintained/disturbed.

Species	Federal	State	CA Rare Plant Rank	Habitat	Potential Occurrence
Dudleya multicaulis (many-stemmed dudleya)	BLM Sensitive Forest Service Sensitive	None	1B.2	Many-stemmed dudleya is often associated with clay soils in barrens, rocky places, and ridgelines as well as thinly vegetated openings in chaparral, coastal sage scrub, and southern needlegrass grasslands on clay soils.	Low; Project site lacks suitable habitat.
Dudleya viscida (sticky-leaved dudleya)	Forest Service Sensitive	None	1b.2	Perennial herb endemic to California. Occurs in rocky habitats including coastal bluff scrub, chaparral, cismontane woodland, and coastal scrub. Elevation: 10 - 550 meters Blooming Period: May - June	Low; Project site lacks suitable habitat.
Horkelia cuneata var. *puberula* (mesa horkelia)	Forest Service Sensitive	None	1B.1	Perennial herb native and endemic to California. Occurs in sandy or gravelly habitat within chaparral, cismontane woodland and coastal scrub. Elevation: 70 - 810 meters Blooming Period: February - July(Sep)	Low; Project site lacks suitable habitat.
Imperata brevifolia (California satintail)	Forest Service Sensitive	None	2B.1	Occurs in mesic habitats; chaparral, coastal scrub, Mojavean desert scrub, alkali meadows, and riparian scrub habitat. Elevation: 0 - 1215 meters Blooming Period: September - May	Low; Project site lacks suitable habitat.
Nama stenocarpa (mud nama)	None	None	2B.2	Annual/perennial herb occurring in marsh and swamp habitat of lake margins and riverbanks. Elevation: 5 - 500 meters Blooming Period: January - July	Low; Project site lacks suitable habitat.
Nolina cismontane (chaparral nolina)	None	None	1B.2	Perennial evergreen shrub within rocky (sandstone or gabbro) habitats in chaparral and coastal scrub. Elevation: 140 - 1275 meters Blooming Period: (Mar)May - July	Low; Project site lacks suitable habitat.
Pseudognaphalium leucocephalum (white rabbit tobacco)	None	None	2B.2	Perennial herb native to southwestern United States. Sandy or gravelly substrate. Chaparral, cismontane woodland, coastal scrub, riparian woodland. Elevation: 0 - 2100 meters Blooming Period: (Jul)August - November(Dec)	Low; Project site lacks suitable habitat. The understory in the woodland onsite is maintained/disturbed. Likely would have been observed onsite during the survey.

Species	Federal	State	CA Rare Plant Rank	Habitat	Potential Occurrence
Quercus dumosa (Nuttall's scrub oak)	Forest Service Sensitive	None	1B.1	Typically occurs in closed-cone coniferous forest, chaparral, and coastal scrub. Occurs generally on sandy soils near the coast, sometimes on clay loam. Elevation: 15 - 400 meters Blooming period: February - April(May-Aug)	Low; Project site lacks suitable habitat. The understory in the woodland onsite is maintained/disturbed. Likely would have been observed onsite during the survey.
Romneya coulteri (Coulter's matilija poppy)	None	None	4.2	This poppy is native to southern California and Baja California, where it grows in dry canyons in chaparral and coastal sage scrub plant communities, sometimes in areas recently burned. It is a popular ornamental plant, kept for its large, showy flowers. Elevation: 20 - 1200 meters Blooming period: March - July(Aug)	Low; Project site lacks suitable habitat.
Sidalcea neomexicana (salt spring checkerbloom)	Forest Service Sensitive	None	2B.2	It can be found in a diverse number of habitat types including chaparral and coastal sage scrub, Yellow Pine Forest, and riparian zones, creosote bush scrub, and alkali flats and other salty substrates. Elevation: 15 - 1530 meters Blooming period: March - June	Low; Project site lacks suitable habitat.
Tetracoccus dioicus (Parry's tetracoccus)	BLM Sensitive Forest Service Sensitive	None	1B.2	A perennial deciduous shrub typically found in chaparral and coastal scrub on stony, decomposed gabbro soil. Elevation: 165 - 1000 meters Blooming period: April - May	Low; Project site lacks suitable habitat.
Invertebrates					
Bombus crotchii (Crotch bumble bee)	None	None	None	Uncommon species of coastal California east towards the Sierras; select food plan genera include: *Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, Eriogonum.*	Low; Project site lacks suitable habitat.
Streptocephalus woottoni (Riverside fairy shrimp)	Endangered	None	None	S. woottoni is restricted to deep (greater than 12-inches in depth) seasonal vernal pools, vernal pool like ephemeral ponds, and stock ponds and other human modified depressions.	Low; Project site lacks suitable habitat.
Fish					
Gila orcutti (arroyo chub)	Forest Service Sensitive	CDFW Species of Special Concern	None	Cool to warm (10 - 24°C) streams, most common in slow flowing or backwater areas with sand or mud substrate.	Low; Project site lacks suitable habitat.

Species	Federal	State	CA Rare Plant Rank	Habitat	Potential Occurrence
Amphibians					
Spea hammondii (western spadefoot toad)	BLM Sensitive	CDFW Species of Special Concern	None	Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Rainpools which do not contain bullfrogs, fish, or crayfish are necessary for breeding.	Low; Project site lacks suitable habitat.
Taricha torosa (Coastal Range newt)	None	CDFW Species of Special Concern	None	The species can be found in coastal areas and coastal range mountains in oak forests, woodlands, or rolling grasslands. In the terrestrial phase they live in moist to dry habitats under woody or leafy debris, in rock crevices, and in animal burrows. In the aquatic phase they are found in ponds, reservoirs, lakes and slow-moving streams.	Low-Moderate; marginally suitable habitat exists within wooded areas on the perimeter of the Project site adjacent to areas of contiguous oak woodland habitat.
Reptiles					
Aspidoscelis tigris (coastal whiptail)	None	CDFW Species of Special Concern	None	Found in a variety of ecosystems, primarily hot and dry open areas with sparse foliage - chaparral, woodland, and riparian areas. Generally, avoids areas of dense grass and thick shrubby growth. Requires warm and sunny areas for basking, friable soil for burrow construction and foraging, open areas for running, and cover of bushes, rocks, or both.	Low-Moderate; marginally suitable habitat exists within the northern, undeveloped portion of the Project site.
Phrynosoma blainvillii (coast horned lizard)	BLM Sensitive	CDFW Species of Special Concern	None	The species can be found in various scrublands, grasslands, coniferous and broadleaf forests, and woodlands. It can range from the coast to elevations of 2,000 meters in the Southern California mountains. It is most common in mid-elevations of the coastal mountains and valleys within open habitat that offer good opportunities for sunning.	Low; Project site lacks suitable habitat.

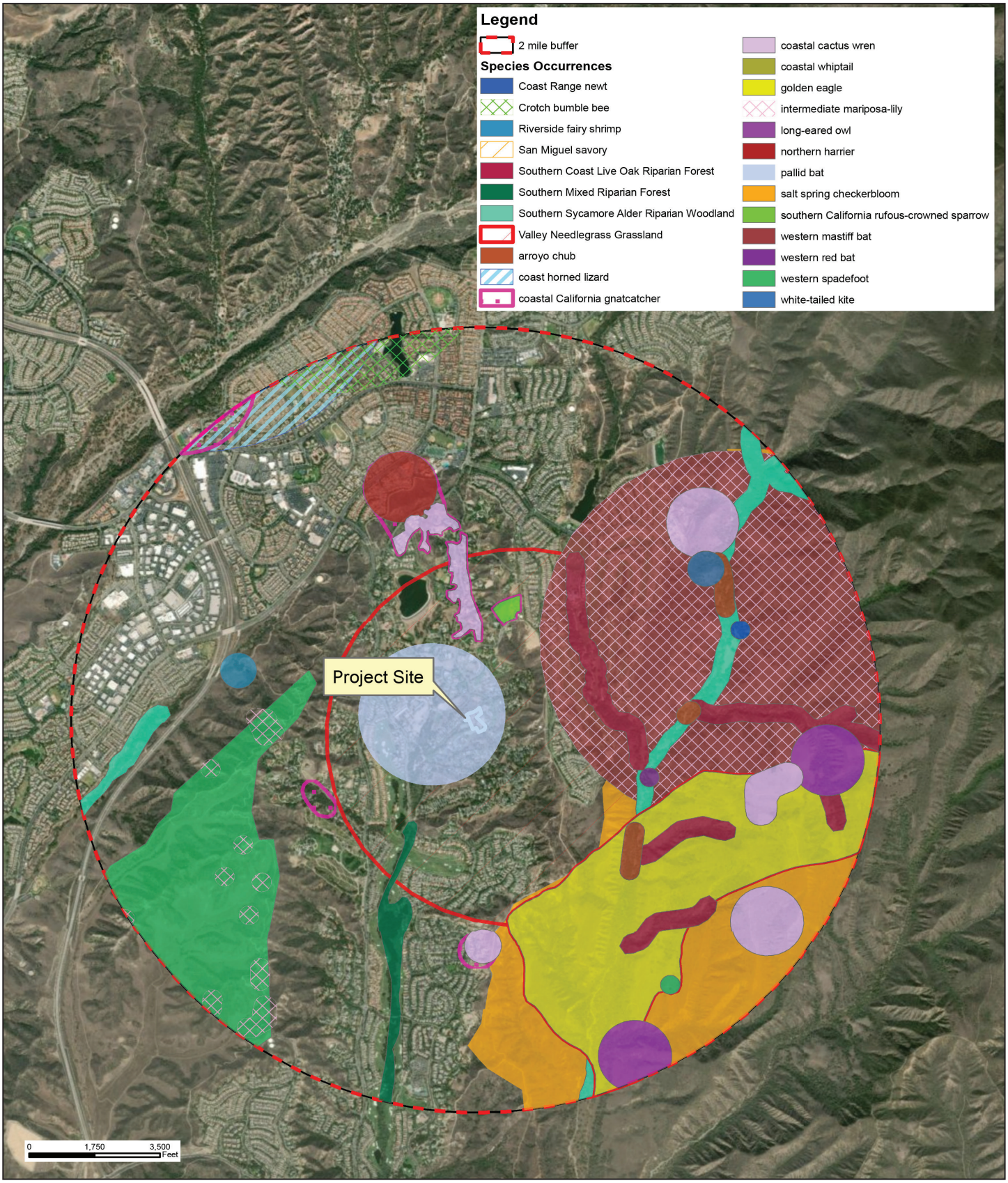
Species	Federal	State	CA Rare Plant Rank	Habitat	Potential Occurrence
Birds					
Aimophila ruficeps canescens (Southern California rufous-crowned sparrow)	None	CDFW Watch List	None	This species is found on moderate to steep, dry, grass-covered hillsides, coastal sage scrub, and chaparral and often occur near the edges of the denser scrub and chaparral associations. Preference is shown for tracts of California sagebrush.	Low; Project site lacks suitable habitat.
Aquila chrysaetos (golden eagle)	Federally Protected Bird of Conservation Concern BLM Sensitive	CDFW Watch List	None	Range-wide, golden eagles occur locally in open country (e.g., tundra, open coniferous forest, desert, barren areas), especially in hills and mountainous regions.	Low; Project site lacks suitable habitat.
Asio otus (long-eared owl)	None	CDFW Species of Special Concern	None	Found primarily in riparian and other lowland habitats in California west of the deserts during the spring-fall period. In summer, restricted to riparian, lacustrine, and coastal areas with vertical banks, bluffs, and cliffs with fine-textured or sandy soils.	Low Site lacks suitable habitat.
Campylorhynchus brunneicapillus sandiegensis (coastal cactus wren)	Bird of conservation Concern Forest Service Sensitive	SSC	None	Year-round resident of southern California found in arid parts of westward-draining slopes. Obligate inhabitants of coastal sage scrub, generally below 3,000 feet. Nest almost exclusively in prickly pear and coastal cholla.	Low; Project site lacks suitable habitat.
Circus hudsonius (northern harrier)	None	CDFW Species of Special Concern	None	They forage in any open area where they can find food including garbage dumps, scrublands, pastures, orchards, meadows, and farms. In the winter they forage along the Pacific Coast and use mostly marine areas including mudflats, estuaries, deltas, and beaches.	Moderate.
Elanus leucurus (white-tailed kite)	Federally Protected BLM Sensitive	None	None	Inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 feet of ground.	Low; Project site lacks suitable habitat.

Species	Federal	State	CA Rare Plant Rank	Habitat	Potential Occurrence
Polioptila californica (coastal California gnatcatcher)	Federally Threatened	CDFW Species of Special Concern	None	Obligate, permanent resident of coastal sage scrub below 835 meters in Southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	Low; Project site lacks suitable habitat.
Mammals					
Antrozous pallidus (Pallid bat)	BLM Sensitive Forest Service Sensitive	CDFW Species of Special Concern	None	Occurs in deserts, grasslands, shrublands, woodlands and forests but is most common in open, dry habitats. Commonly roost in rock crevices, caves, and mine tunnels but also roost in the attics of houses, under the eaves of barns, in hollow trees. Roosts must protect bats from high temperatures. This species is very sensitive to disturbance of roosting sites.	Moderate; some suitable roosting habitat present.
Eumops perotis californicus (western mastiff bat)	BLM Sensitive	CDFW Species of Special Concern	None	Open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban.	Moderate; some suitable roosting habitat present.
Lasiurus blossevillii (western red bat)	None	SSC	None	Locally common in some areas of California, occurring from Shasta Co. to the Mexican border, west of the Sierra Nevada/Cascade crest. Not found in desert areas. Roosts primarily in trees, less often in shrubs. Roost sites often are in edge habitats adjacent to streams, fields, or urban areas.	Moderate; some suitable roosting habitat present.
Source: VCS Environmental, *Biological Resources Assessment*, January 2020.					

No special status animal species were observed on the project site. However, three special status animal species were determined to have moderate potential to occur within the project site including the pallid bat, western mastiff bat, and western red bat. Additionally, two special status animal species were determined to have a low to moderate potential to occur within the project site including the Coastal Range newt and the coastal whiptail. All special status plant species analyzed exhibit a low potential to occur within the project site.

With the implementation of Mitigation Measures BIO-1 and BIO-2, potential impacts to pallid bat, western mastiff bat, western red bat, Coastal Range newt, and coastal whiptail would be less than significant.

Additionally, while coastal California gnatcatcher is not expected to occur within the project site due to a lack of suitable habitat, there is potential for this species to occur within the adjacent CSS habitat located approximately 75 feet north of the project site. With the implementation of the avoidance measures outlined below, impacts to nesting birds, including coastal California gnatcatcher, would be less than significant and not require mitigation for this species.



Source: Huitt-Zollars, ESRI and CNDDB; December 2019.

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California Natural Diversity Database (CNDDB) Occurrences

VCS Environmental

Figure 4.4-1

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

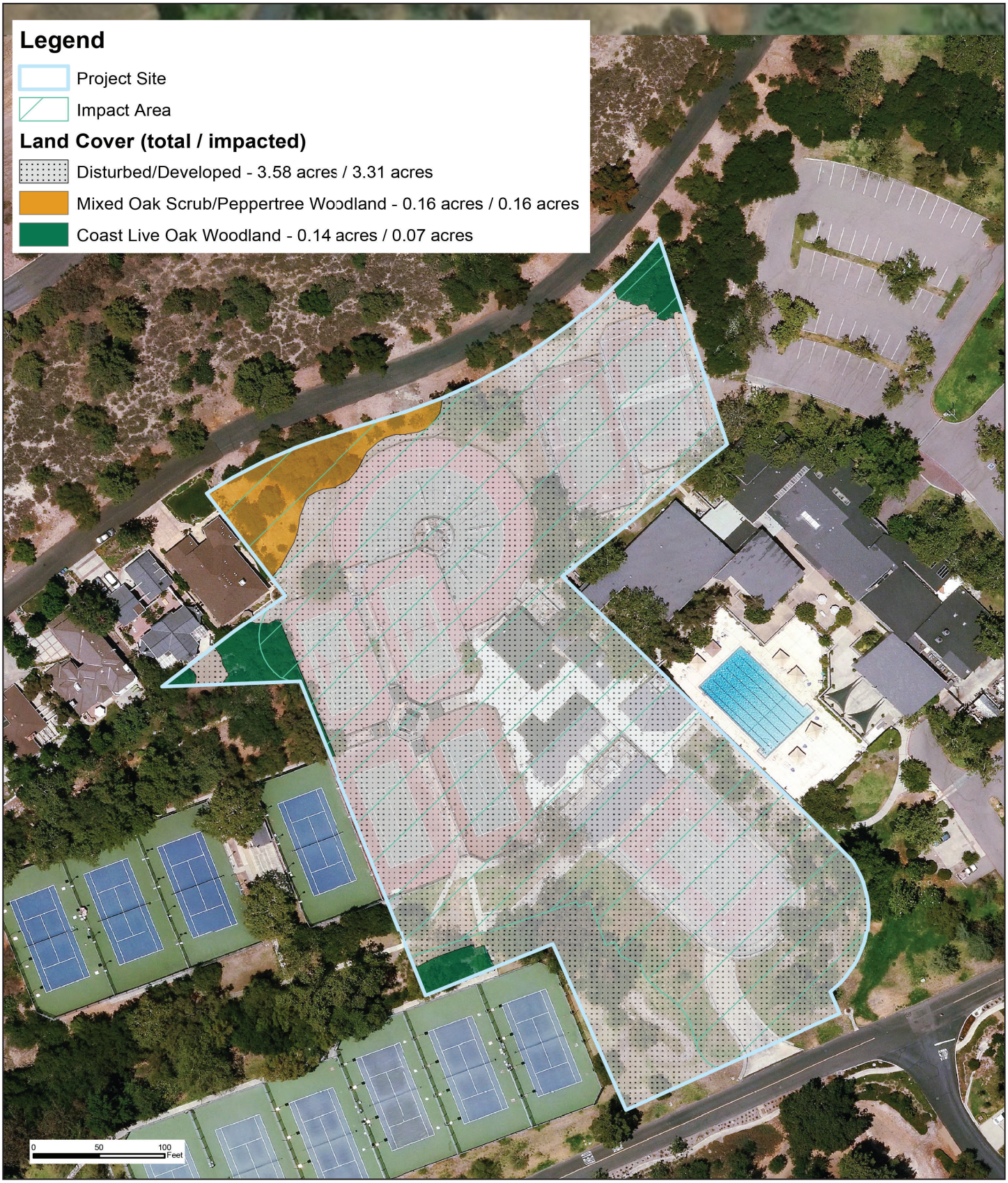
No Impact: VCS surveyed the entire project site on December 3, 2019 and mapped all the vegetation communities present; refer to Figure 4.4-2, *Land Cover*. A Jurisdictional Assessment was conducted by VCS Environmental and included in the Biological Resources Assessment to determine any impacts to jurisdictional features from project implementation; refer to Figure 4.4-3, *Delineation Map*. Three potential jurisdictional features communities were identified within or near the project site that contained riparian habitat, which is recognized as sensitive vegetation community by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. In total, 250 linear feet (0.03 acres) of Waters of the United States were identified within the project site and 278 linear feet (0.13 acres) of Waters of the State were identified within the project site. No other sensitive vegetation communities were identified within the project site. All jurisdictional features will be avoided as part of project activities and, therefore, no direct impacts to any riparian habitat or other sensitive natural community will occur from project implementation.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact: Two soil types were identified within the project site including Capistrano sandy loam and Myford sandy loam. Both identified soil types are categorized by well drained or moderately well drained soils which are not suitable for vernal pool habitat. VCS biologists conducted a preliminary database search and examined soil pits at multiple locations throughout the project. It was determined during the December 3, 2019 VCS survey that no wetlands were present within the project site and, therefore, no impacts will occur to any wetlands, marshes or vernal pools from the proposed project. No mitigation is required.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less Than Significant Impact With Mitigation Incorporated: The project site is fully developed and is surrounded by existing housing, recreational facilities, and roadways on all sides. There is a small drainage along the southwestern portion of the site; however, its only upstream connection is via a small culvert that flows under Avenida La Caza. The surrounding land uses limit the potential for the project to support regional wildlife movement and, therefore, no impacts to migratory wildlife corridors are expected to occur. The project does, however, contain features such as trees, shrubs, and empty buildings which could support nesting migratory birds, as common to any location containing such features. Because the site supports potential nesting sites, project construction may result in an impact to nesting birds. To avoid potential impacts to nesting migratory birds, construction activities should occur outside of nesting season. With implementation of Mitigation Measure BIO-3, potential impacts to migratory birds would be less than significant.



Source: Huitt-Zollars and ESRI; January 2020.

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Land Cover

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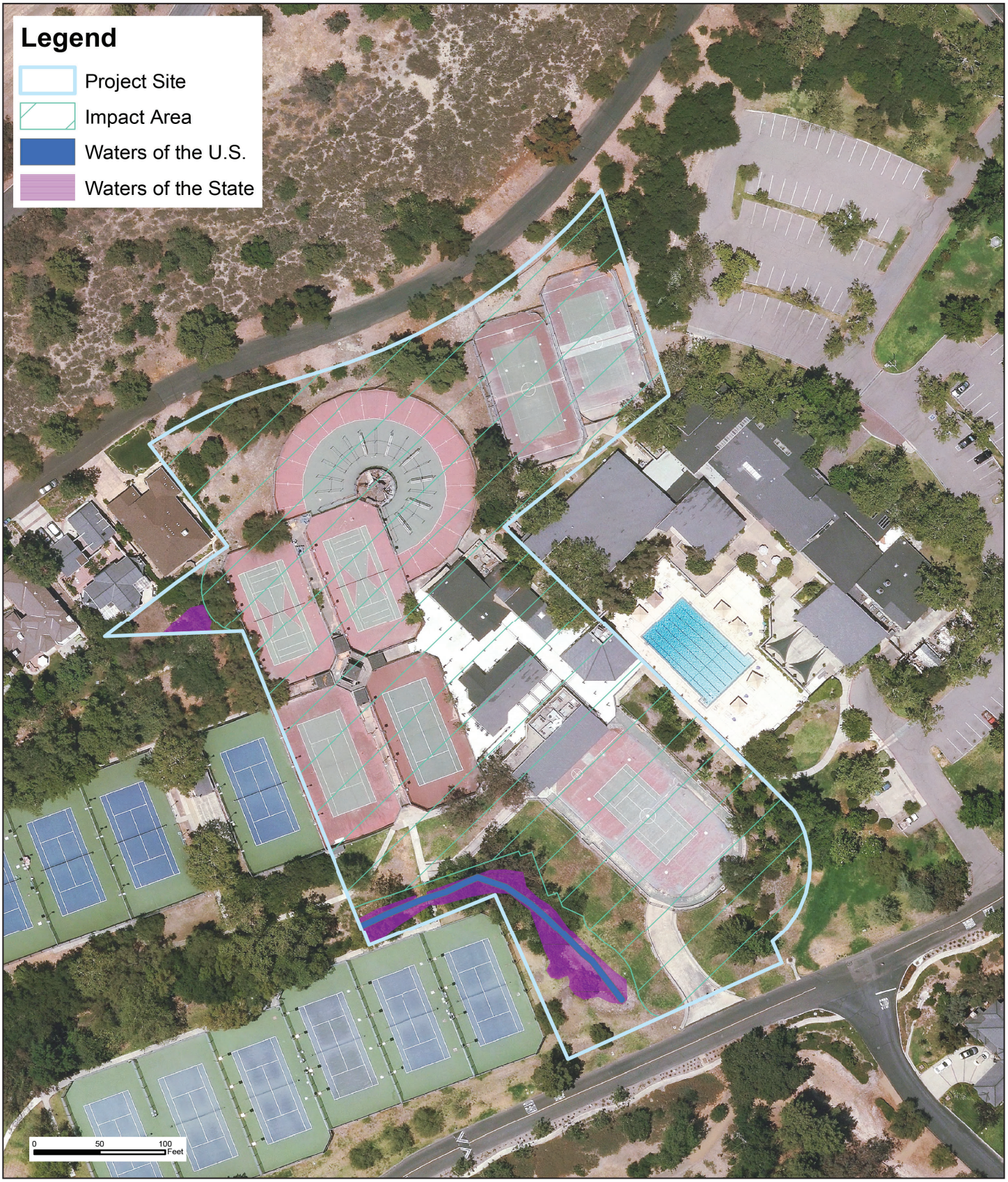
Figure 4.4-2



Source: Huitt-Zollars and ESRI; January 2020.

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Delineation Map

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Figure 4.4-3

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

No Impact: An inventory of existing trees on the project site was prepared by the project Arborist (Appendix B2). As shown in Figure 4.4-4, *Tree Inventory Map*, the construction activities would remove approximately 93 trees, of which two-thirds are non-native trees and over 50 percent of the trees have minor to major to extreme health problems.[2] The landscape plan proposes to plant approximately 50 trees of varying species. The County of Orange currently does not have an ordinance providing for the protection or replacement of trees. Therefore, the project would not conflict with any local policies or ordinances protecting biological resources. No mitigation is required.

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: The project site is located within the Southern Subregion of the Natural Community Conservation Plan (NCCP) and Habitat Conservation Plan. Although no plan is currently approved for this subregion, the Draft NCCP/MSAA/HCP has designated the project site as Developed[3] and, therefore, no impacts to any adopted Habitat Conservation Plan or other approved Conservation Plan would occur from project implementation. No mitigation is required.

STANDARD CONDITIONS OF APPROVAL

No Standard Conditions of Approval are required.

MITIGATION MEASURES

Mitigation Measure BIO-1: Bat Protection. Prior to the start of construction, including demolition and grading activities, all suitable areas within the project site and an appropriate survey buffer shall be surveyed for the presence of bat roosts by a qualified bat biologist. Surveys are recommended as follows:

1) Initial surveys are recommended to be conducted at least six months prior to the initiation of vegetation removal and ground disturbing activities, ideally during the maternity season (typically March 1 to August 31), to allow time to prepare mitigation and/or exclusion plans if needed, and

2) Pre-construction surveys shall be conducted by a qualified bat biologist no more than two weeks prior to the initiation of vegetation removal and ground disturbing activities.

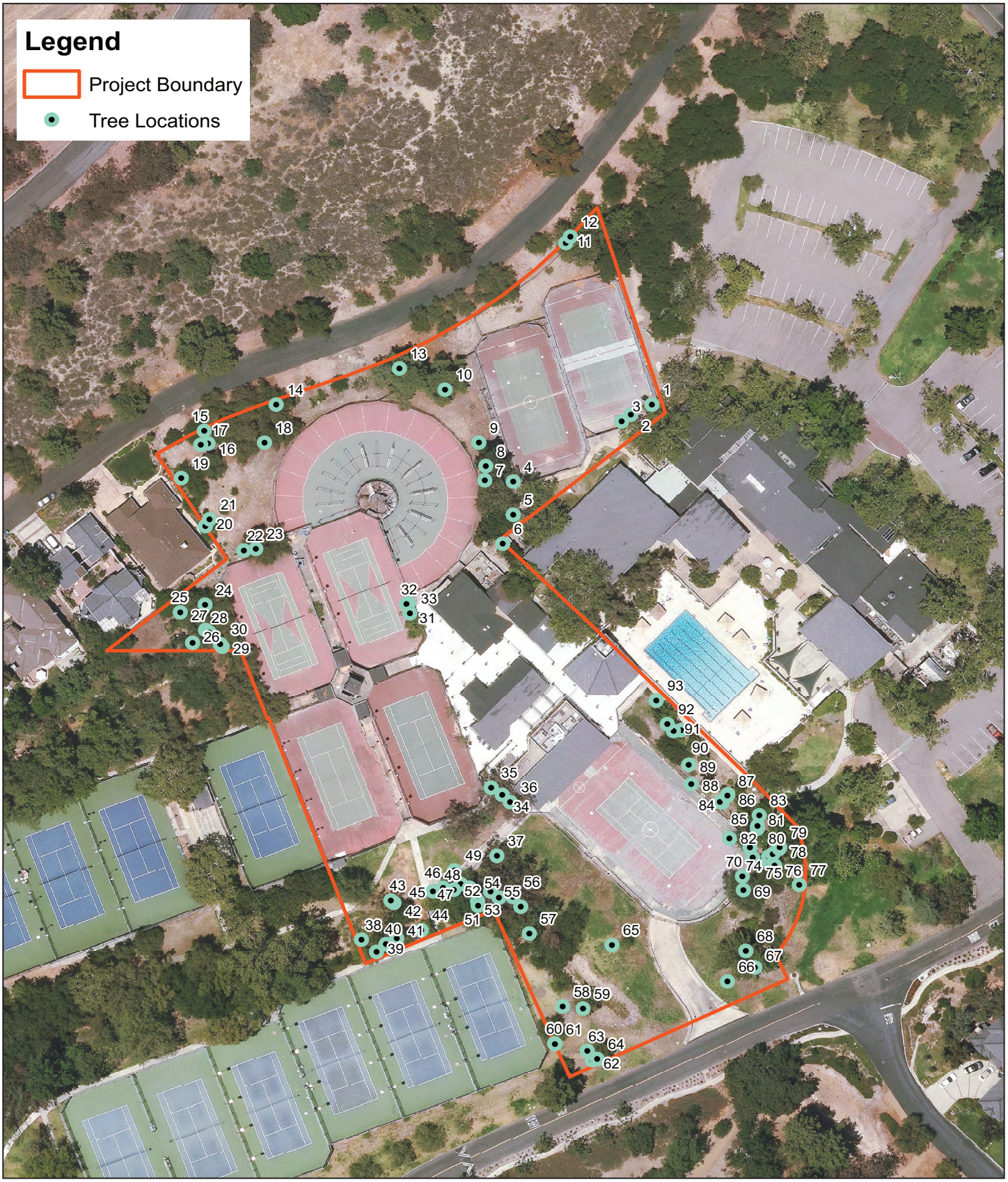
Surveys may entail direct inspection of the trees/suitable habitat or nighttime surveys.

Mitigation Measure BIO-1(a): If active bat roosts are present, a qualified bat biologist shall determine the species of bats present and the type of roost (i.e., day roost, night roost, maternity roost). If the biologist determines that the roosting bats are not a special-status species and the roost is not being used as a maternity roost, then the bats may be evicted from the roost by a qualified bat biologist experienced in developing and implementing bat mitigation and exclusion plans.

Mitigation Measure BIO-1(a)(i): If special-status bat species or a maternity roost of any bat species is present, but no direct removal of active roosts will occur, a qualified bat biologist shall determine appropriate avoidance measures, which may include implementation of a construction-free buffer around the active roost.

[2] Tree Inventory for Legacy at Coto prepared by Dane S. Shota Certified Arborist WE 3436A, February 24, 2020.

[3] U.S. Fish and Wildlife Service, Draft NCCP/MSAA/HCP, Figure 4-M, Southern NCCP/MSAA/HCP General Vegetation Map; https://www.fws.gov/carlsbad/HCPs/SoOrangeCoSubRegionHCP.html, accessed on June 10, 2020.



Source: ESRI, Dane S. Shota and Huitt-Zollars; February 2020.

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Tree Inventory Map

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Figure 4.4-4

Mitigation Measure BIO-1(a)(ii): If special-status bat species or a maternity roost of any bat species is present and direct removal of habitat (roost location) will occur, then a qualified bat biologist experienced in developing bat mitigation and exclusion plans shall develop a mitigation plan to compensate for the lost roost site. Removal of the roost shall only occur when the mitigation plan has been approved by the County and only when bats are not present in the roost. The mitigation plan shall detail the methods of excluding bats from the roost and the plans for a replacement roost in the vicinity of the project site. The mitigation plan shall be submitted to the County for approval prior to implementation. The plan shall include: (1) a description of the species targeted for mitigation; (2) a description of the existing roost or roost sites; (3) methods to be used to exclude the bats if necessary; (4) methods to be used to secure the existing roost site to prevent its reuse prior to removal; (5) the location for a replacement roost structure; (6) design details for the construction of the replacement roost; (7) monitoring protocols for assessing replacement roost use; (8) a schedule for excluding bats, demolishing of the existing roost, and construction of the replacement roost; and (9) contingency measures to be implemented if the replacement roosts do not function as designed.

Mitigation Measure BIO-1(b): Pre-construction surveys shall be conducted by a qualified bat biologist no more than two weeks prior to the initiation of vegetation removal and ground disturbing activities. If no active roosts are present, then trees/suitable habitat shall be removed within two weeks following the pre-construction survey. If active roosts are present, then follow BIO-2(a).

Mitigation Measure BIO-1(c): All potential roost trees shall be removed in a manner approved by a qualified bat biologist, which may include presence of a biological monitor.

Mitigation Measure BIO-1(d): All construction activity in the vicinity of an active roost shall be limited to daylight hours.

Mitigation Measure BIO-2: A pre-construction presence/absence survey for Coastal Range newt and coastal whiptail shall be performed by a qualified biologist within 30 days prior to the initiation of construction, including demolition and grading activities, within the project site where suitable habitat is present. The survey methodology should be consistent with accepted protocols or guidelines for determining presence of sensitive reptile and/or amphibian species in southern California. If either species is detected within the project site during the survey, avoidance and minimization measures shall be implemented such as temporary fencing, inspection of trenches and holes for entrapped wildlife each morning prior to the onset of project construction, and inspection of pipes, culverts, and similar construction material for entrapped wildlife. If no special status species are observed during the presence/absence survey, no further action is required.

Mitigation Measure BIO-3: A nesting bird survey shall be conducted within three days prior to start of construction, including demolition, grading, and vegetation removal, if construction and/or vegetation removal occurs during the nesting bird season (February 15 – September 1). If vegetation removal occurs outside of nesting season or if no nesting birds are found, no further mitigation is required. If active nests are identified, the biologist will establish appropriate buffers around the area (typically 500 feet for raptors and sensitive species, 200 feet for non-raptors/non-sensitive species). All work within these buffers will be halted until the nesting effort is finished (i.e., the juveniles are surviving independent from the nest). The onsite biologist will review and verify compliance with these nesting boundaries and will verify the nesting effort has finished. Work can resume within the buffer area when no other active nests are found. Alternatively, a qualified biologist may determine that certain work can be permitted within the buffer areas and would develop a monitoring plan to prevent any impacts while the nest continues to be active (eggs, chicks, etc.). If vegetation clearing is not initiated within 72 hours of a negative survey during nesting season, the nesting survey must be repeated to confirm the absence of nesting birds.

REFERENCES

County of Orange, *County of Orange General Plan,* July 2014.

Shota, Dane S., Certified Arborist WE 3436A, *Tree Inventory for Legacy at Coto*, February 24, 2020.

VCS Environmental, *Biological Resources Assessment*, January 2020.

4.5 Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource pursuant to in Section 15064.5?	☐	☐	☒	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☐	☒	☐
c. Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

ENVIRONMENTAL ANALYSIS

The following analysis is based on a Cultural Resources Technical Memorandum prepared by VCS Environmental in November of 2019 and is presented in Appendix C1. Also, a Historical Resources Assessment was prepared by Urbana Preservation and Planning and is presented in Appendix C2.

Background

Cultural resources include prehistoric archaeological sites, historic archaeological sites, historic structures, and artifacts made by people in the past. Prehistoric archaeological sites are places that contain the material remains of activities carried out by the native population of the area (Native Americans) prior to the arrival of Europeans in Southern California. Artifacts found in prehistoric sites include flaked stone tools such as projectile points, knives, scrapers, and drills; ground stone tools such as manos, metates, mortars, and pestles for grinding seeds and nuts; and bone tools. Historic archaeological sites are places that contain the material remains of activities carried out by people during the period when written records were produced after the arrival of Europeans. Historic archaeological material usually consists of refuse, such as bottles, cans and food waste, deposited near structure foundations. The California Register of Historical Resources widely uses a 45-year old threshold for consideration on the State Registry that can include houses, commercial structures, industrial facilities, and other structures and facilities.

Regulatory Setting

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

CEQA requires a lead agency to determine whether a project would have a significant effect on one or more historical resources. A "historical resource" is defined as a resource listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR) (*California Public Resources Code* [PRC], Section 21084.1); a resource included in a local register of historical resources (14 *California Code of Regulations* [CCR], Section 15064.5[a][2]); or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (14 CCR 15064.5[a][3]).

HUMAN REMAINS

Section 7050.5 of the *California Health and Safety Code* provides for the disposition of accidentally discovered human remains. Section 7050.5 states that, if human remains are found, no further excavation

or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined the appropriate treatment and disposition of the human remains. Section 5097.98 of the PRC states that, if remains are determined by the Coroner to be of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours which, in turn, must identify the person or persons it believes to be the most likely descended from the deceased Native American. The descendants shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.

ARCHAEOLOGICAL RECORDS SEARCH

A cultural resources records search was conducted at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton on December 4, 2018. The review consisted of an examination of the U.S. Geological Survey's (USGS') Cañada Gobernadora 7.5-minute quadrangle map to evaluate the project's Area of Potential Effects (APE) for any cultural resources sites that were recorded or cultural resources studies that were prepared for properties within and near the APE. As shown in Table 4.5-1, *Cultural Resources Within One Mile of the APE*, ten cultural resources properties have been recorded within one mile of the APE. None of the properties were within the APE. The ten resources were small lithic scatters found and recorded chiefly in local drainages surrounding the site; the nearest two were approximately 700 feet north and northwest of the APE.

Table 4.5-1
Cultural Resources Within One Mile of the APE

Site Number	Recorder(s) (Year)	Type of Resource
P-30-000034	Anon (1949)	Lithic Scatter
P-30-000560	Drover (1974)	Lithic Scatter
P-30-000561	Leonard (1974)	Lithic Scatter
P-30-000562	Leonard (1974)	Lithic Scatter
P-30-000563	Leonard (1974)	Lithic Scatter
P-30-000728	Cottrell (1978)	Lithic Scatter
P-30-000763	Mabry (1978)	Lithic Scatter
P-30-000764	Mabry (1978)	Lithic Scatter
P-30-000765	Mabry (1978)	Lithic Scatter
P-30-000766	Mabry (1978)	Lithic Scatter
Source: VCS Environmental, *Cultural Resources Technical Memorandum*, December 2019.		

COTO DE CAZA PLANNED COMMUNITY

First discovered by Spanish ranchers in the 1760s, the Coto de Caza area originally consisted of grassy hills dotted with Live Oak trees and cattle. In the 1930s, Ernest Bryant, Jr. purchased the property, naming it Bryant Ranch. The natural open space contained deer, birds, and mountain lions and made Bryant Ranch an ideal retreat for hunters and nature enthusiasts. Coto de Caza's transition to master-planned community began in 1963, when Ernest Bryant, Jr. sold 5,000 acres to Macco Realty, a subsidiary of Pennsylvania Railroad, then Penn Central. At this time, the Coto de Caza Development Corporation was formed in order to maintain a connection to the land's hunting origins. In 1964, Penn Central developed the northern lands of Coto de Caza as a private hunting and equestrian social club, the Hunt Club. The club opened to the public in the early 1970s. With construction of the Coto Valley Country Club in 1970, hunting and equestrian

activities were expanded to tennis and other sports activities. The Country Club included a swimming pool, gymnasium, racquetball courts, and bowling alley.

Vic Braden Tennis College

In 1971, Vic Braden started and operated a tennis college in Rancho Bernardo area of San Diego County. In 1973, the owners of Coto de Caza approached Braden with an offer to relocate his tennis college to Coto de Caza. A high-tech classroom and research center were constructed including the same teaching lanes that were utilized at Rancho Bernardo. At its opening on August 25,1974, the Vic Braden Tennis College featured six tennis courts, 17 teaching lanes, an observation tower, a high-tech classroom, and four video viewing rooms. The classroom included three large screens for projecting film shot at several thousand frames per second. Braden, a showman and entrepreneur, developed a "Laugh and Win" campaign to attract students and players to the facility. In 1978, he established a tennis school in Goslar, Germany. He is also cited as having established additional schools in Spain and Switzerland, though little information is identified for these facilities and they may have instead been touring exhibitions. In 1979, Braden was part of a contingent of players and coaches to visit China. The visit was led by the United Nations and Tennis International to improve relations between the two countries through the sport of tennis. In 1980, a sports research center was added to the Vic Braden Tennis College on the Coto de Caza property. The Coto Research Center included a running track with force plates and the latest scientific equipment, including indoor and outdoor cameras for photography and 3-D video. Research conducted at the center provided insight on lines people for the United States Tennis Association, using biofeedback studies to determine if emotional situations altered calls, as well as an Eye Mark Recorder to track eye movements at 10,000 frames per second. The center focused on a variety of issues including the effect of discouraging remarks on a player's heart, the interaction between horse and polo rider, the speed of a boxer's punch, and the best time to release an arrow. The Coto Research Center closed in 1990 and since that time, the tennis college site has been vacant.

PROJECT IMPACTS

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

Less Than Significant Impact: The Vic Braden Tennis College was constructed in 1974 and was expanded to include a research center in 1980. The tennis college property is 46 years old and the research center is 39 years old. The California Register Historical Resources (CRHR) does not include an age eligibility threshold for consideration. As the property has achieved the 45-year threshold that is widely employed for CRHR review, the property is also subject to historical resource eligibility and assessment of impacts and effects pursuant to Section 15064.5 of the CEQA Guidelines. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Public Resources Code Section 5024.1) including the following:

- CRHR Criterion 1: Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- CRHR Criterion 2: Is associated with the lives of persons important in California's past.
- CRHR Criterion 3: Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- CRHR Criterion 4: Has yielded, or may be likely to yield, information important in prehistory or history.

CRHR Criterion 1: No information was identified during the course of contextual or property-specific historical research to indicate that the Vic Braden Tennis College was associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States. The Vic Braden Tennis College appears ineligible under CRHR Criterion 1.

CRHR Criterion 2: No information was identified during the course of contextual or property-specific historical research to indicate that the Vic Braden Tennis College was associated with the lives of persons important to local, California or national history and; therefore, does not appear eligible under CRHR Criterion 2.

CRHR Criterion 3: No information was identified during the course of contextual or property-specific historical research to indicate that the Vic Braden Tennis College, in its current condition, embodies the distinctive characteristics of a type, period, region or method of construction, represents the work of a master, or possesses high artistic values. The Vic Braden Tennis College appears ineligible under CRHR Criterion 3.

CRHR Criterion 4: No information was identified during the course of contextual or property-specific historical research to indicate that the Vic Braden Tennis College, in its current condition, has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation. The Vic Braden Tennis College appears ineligible under CRHR Criterion 4.

Based on the historical evaluation, the Vic Braden Tennis College is ineligible for listing on the CRHR and the property does not meet the definition of a historical resource pursuant to Section 15064.5 of the CEQA Guidelines (California Code of Regulations, Title 14, Section 3). Implementation of the proposed project would require removal of the Vic Braden Tennis College in its entirety. The removal of the buildings, structures, and site features at the Vic Braden Tennis College property would not result in a significant impact to a historical resource or a substantial adverse change to the environment under CEQA. Because the proposed project would not result in a significant impact to a historical resource, mitigation measures relative to historical resources are not required.

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

Less Than Significant Impact: The Resources Element of the General Plan indicates that there are over 1,600 archaeological sites registered in Orange County, with a substantial concentration of them located in the southern portion of the County. According to Figure VI-10, Prehistory Archaeology, of the County of Orange General Plan, Coto de Caza is within or near a general area of sensitivity for prehistoric archaeology. A record search prepared for the project site did not identify any known archaeological resources on the project site. Additionally, a pedestrian survey conducted on the project site in December 2019, did not show any evidence of archaeological resources being present. Therefore, it is unlikely known archaeological resources would be present on the project site.

Based on the proposed grading plan for the project, excavation would extend to a depth of 11 feet below ground surface. Although the project site is not located within a general area of sensitivity for prehistorical archaeology, the grading activities associated with construction of the proposed project would encounter native soils and could have the potential to encounter unknown archaeological resources. In the unlikely event that archaeological resources are encountered during project construction, the project would be required to comply with Standard Condition A04, which would ensure that an archaeologist observes grading activities, salvage and catalogue archaeological resources as necessary, and establishes procedures for archaeological resource surveillance, as well as procedures for temporarily halting or redirecting work.

With compliance with Standard Condition A04, potential impacts to unknown archaeological resources would be less than significant. No mitigation is required.

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

Less Than Significant Impact With Mitigation Incorporated: No human remains or cemeteries are known to exist within or near the project site. However, there is always the potential that subsurface construction activities associated with the proposed project could encounter and potentially damage or destroy previously undiscovered human remains. Accordingly, this is a potentially significant impact. In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5; Health and Safety Code Section 7050.5; Public Resources Code Section 5097.94 and Section 5097.98 must be followed. With the implementation of Mitigation Measure CR-1 potential impacts to human remains would be less than significant.

STANDARD CONDITIONS OF APPROVAL

Standard Condition A04: Prior to the issuance of any Grading Permit, the Applicant shall provide written evidence to the Director, OC Development Services, or designee, that Applicant has retained a County-certified archaeologist, to observe grading activities and salvage and catalogue archaeological resources, as necessary. The archaeologist shall be present at the pre-grade conference, shall establish procedures for archaeological resource surveillance, and shall establish, in cooperation with the Applicant, procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the artifacts as appropriate. If the archaeological resources are found to be significant, the archaeological observer shall determine appropriate actions, in cooperation with the project Applicant, for exploration and/or salvage.

Prior to the release of the grading bond, the Applicant shall obtain approval of the archaeologist's follow-up report from the Manager, Harbors, Beaches and Parks (HBP)/Coastal and Historical Facilities. The report shall include the period of inspection, an analysis of any artifacts found and the present repository of the artifacts. Applicant shall prepare excavated material to the point of identification. Applicant shall offer excavated finds for curatorial purposes to the County of Orange, or its designee, on a first refusal basis. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the Manager, HBP/Coastal and Historical Facilities. Applicant shall pay curatorial fees if an applicable fee program has been adopted by the Board of Supervisors, and such fee program is in effect at the time of presentation of the materials to the County of Orange or its designee, all in a manner meeting the approval of the Manager, HBP/Coastal and Historical Facilities.

MITIGATION MEASURES

Mitigation Measure CR-1: If human remains are encountered during excavation activities, all work shall halt in the vicinity of the remains and the County Coroner shall be notified (*California Public Resources Code,* Section 5097.98). The Coroner will determine whether the remains are of forensic interest. If the Coroner, with the aid of a qualified Archaeologist, determines that the remains are prehistoric, she/he will contact the Native American Heritage Commission (NAHC). The NAHC will be responsible for designating the most likely descendant (MLD), who will be responsible for the ultimate disposition of the remains, as required by Section 7050.5 of the *California Health and Safety Code*. The MLD shall make his/her recommendation within 48 hours of being granted access to the site. If feasible, the MLD's recommendation should be followed and may include scientific removal and non-destructive analysis of the human remains and any items associated with Native American burials (*California Health and Safety Code,* Section 7050.5). If the landowner rejects the MLD's recommendations, the landowner shall rebury the remains with appropriate dignity on the property in a location that will not be subject to further subsurface disturbance (*California Public Resources Code,* Section 5097.98).

REFERENCES

County of Orange, *County of Orange General Plan, Resources Element*, July 2014.

County of Orange, *Standard Conditions of Approval*.

Urbana Preservation and Planning, *Historical Resources Analysis Report Vic Braden Tennis College*, November 2019.

VCS Environmental, *Cultural Resources Technical Memorandum*, December 2019.

4.6 Energy

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

ENVIRONMENTAL ANALYSIS

The following analysis is based on an Energy Report prepared by Vista Environmental in January 2020 and is presented in Appendix A.

Regulatory Framework

The regulatory setting related to energy conservation is primarily addressed through State and County regulations, which are discussed below.

State

Energy conservation management in the State was initiated by the 1974 Warren-Alquist State Energy Resources Conservation and Development Act that created the California Energy Resource Conservation and Development Commission (currently named California Energy Commission [CEC]), which was originally tasked with certifying new electric generating plants based on the need for the plant and the suitability of the site of the plant. In 1976, the Warren-Alquist Act was expanded to include new restrictions on nuclear generating plants, which effectively resulted in a moratorium of any new nuclear generating plants in the State. The following details specific regulations adopted by the State in order to reduce the consumption of energy.

CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 20

On November 3, 1976, the CEC adopted the *Regulations for Appliance Efficiency Standards Relating to Refrigerators, Refrigerator-Freezers and Freezers and Air Conditioners,* which were the first energy-efficiency standards for appliances. The appliance efficiency regulations have been updated several times by the Commission and the most current version is the *2016 Appliance Efficiency Regulations*, adopted January 2017 and now includes almost all types of appliances and lamps that use electricity, natural gas as well as plumbing fixtures. The authority for the CEC to control the energy-efficiency of appliances is detailed in California Code of Regulations (CCR), Title 20, Division 2, Chapter 4, Article 4, Sections 1601-1609.

CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 6

The CEC is also responsible for implementing the CCR Title 24, Part 6: *California's Energy Efficiency Standards for Residential and Nonresidential Buildings* (Title 24 Part 6) that were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. In 2008, the State set an energy-use reduction goal of zero-net-energy use of all new homes by 2020 and the CEC was mandated to meet this goal through revisions to the Title 24, Part 6 regulations.

The Title 24 standards are updated on a three-year schedule and since 2008, the standards have been incrementally moving to the 2020 goal of the zero-net-energy use. On January 1, 2020, the 2019 standards went into effect, that have been designed so that the average new home built in California will now use zero-net-energy and that non-residential buildings will use about 30 percent less energy than the 2016 standards due mainly to lighting upgrades. The 2019 standards also encourage the use of battery storage and heat pump water heaters, require the more widespread use of LED lighting, as well as improve the building's thermal envelope through high performance attics, walls and windows. The 2019 standards also require improvements to ventilation systems by requiring highly efficient air filters to trap hazardous air particulates as well as improvements to kitchen ventilation systems.

CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 11

CCR Title 24, Part 11: *California Green Building Standards* (CALGreen) was developed in response to continued efforts to reduce GHG emissions associated with energy consumption. The CALGreen Building Standards are also updated every three years and the current version is the 2019 California Green Building Standard Code that become effective on January 1, 2020.

The CALGreen Code contains requirements for construction site selection; storm water control during construction; construction waste reduction; indoor water use reduction; material selection; natural resource conservation; site irrigation conservation; and more. The code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The code also requires building commissioning, which is a process for verifying that all building systems (e.g., heating and cooling equipment and lighting systems) are functioning at their maximum efficiency.

The CALGreen Code provides standards for bicycle parking, carpool/vanpool/electric vehicle spaces, light and glare reduction, grading and paving, energy efficient appliances, renewable energy, graywater systems, water efficient plumbing fixtures, recycling and recycled materials, pollutant controls (including moisture control and indoor air quality), acoustical controls, storm water management, building design, insulation, flooring, and framing, among others. Implementation of the CALGreen Code measures reduces energy consumption and vehicle trips and encourages the use of alternative-fuel vehicles, which reduces pollutant emissions.

Some of the notable changes in the 2019 CALGreen Code over the prior 2016 CALGreen Code include an alignment of building code engineering requirements with the national standards that include anchorage requirements for solar panels, provides design requirements for buildings in tsunami zones, increases Minimum Efficiency Reporting Value (MERV) for air filters from eight to 13, increased electric vehicle charging requirements in parking areas, and sets minimum requirements for use of shade trees.

County of Orange

The County of Orange General Plan, Chapter 6 Resources Element, September 13, 2005, provides an Energy Resources Component that details the following applicable goals and policies.

Goal 1: Maximize the conservation and wise use of energy resources in all residences, businesses, public institutions, and industries in Orange County.

Goal 2: Encourage the utilization of existing energy resources to their highest potential and the development of alternative energy sources consistent with sound energy conservation practices and techniques to meet the County's future energy demand.

Policy 1 – Land Use: To plan urban land uses with a balance of residential, industrial, commercial, and public land uses as set forth in the Land Use Element.

Policy 2 – Energy Resource Development: To encourage and actively support the efficient use and optimum development of energy resources in the County consistent with sound resource management practices.

Policy 3 – Energy Conservation: To encourage and actively support the utilization of energy conservation measures in all new and existing structures in the County.

Policy 4 – Transportation: To provide incentives for transportation system management programs and support regional public transportation programs that reduce energy consumption.

Policy 5 – Energy Financing: To examine the benefits of local government financing programs that promote energy conservation and development through cooperative public/private efforts.

Policy 6 – Alternative Energy Systems: To encourage the use of alternative energy systems and to the extent feasible, remove the regulatory barriers to their implementation.

Policy 7 – Solar Access: To support and encourage voluntary efforts to provide solar access opportunities in new developments.

Threshold of Significance

The recent 2018 amendments and additions to the State CEQA Guidelines now includes an Energy Section that analyzes the proposed project's energy consumption in order to avoid or reduce inefficient, wasteful or unnecessary consumption of energy. Since the Energy Section has been added, no state or local agencies have adopted specific criteria or thresholds to be utilized in an energy impact analysis. However, Section 15126.2(b) of the 2018 *Guidelines for the Implementation of the California Environmental Quality Act,* provide the following direction on how to analyze a project's energy consumption:

> "If analysis of the project's energy use reveals that the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy, or wasteful use of energy resources, the EIR shall mitigate that energy use. This analysis should include the project's energy use for all project phases and components, including transportation-related energy, during construction and operation. In addition to building code compliance, other relevant considerations may include, among others, the project's size, location, orientation, equipment use and any renewable energy features that could be incorporated into the project. This analysis is subject to the rule of reason and shall focus on energy use that is caused by the project. This analysis may be included in related analyses of air quality, greenhouse gas emissions, transportation or utilities in the discretion of the lead agency."

If the proposed project creates inefficient, wasteful or unnecessary consumption of energy during construction or operation activities or conflicts with a state or local plan for renewable energy or energy efficiency, then the proposed project would create a significant energy impact.

PROJECT IMPACTS

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

Less Than Significant Impact: The proposed project would impact energy resources during construction and operation. Energy resources that would be potentially impacted include electricity, natural gas, and petroleum-based fuel supplies and distribution systems. This analysis includes a discussion of the potential

energy impacts of the proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy.

CONSTRUCTION ENERGY CONSUMPTION

The construction activities for the proposed project are anticipated to include demolition and grading of the project site, building construction and application of architectural coatings to the proposed active senior living facility, and paving of the proposed parking lot and onsite roads. The proposed project would consume energy resources during construction in three (3) general forms:

1) Electricity associated with the conveyance of water that would be used during project construction for dust control (supply and conveyance) and electricity to power any necessary lighting during construction, electronic equipment, or other construction activities necessitating electrical power;

2) Petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, construction worker travel to and from the project site, as well as delivery and haul truck trips (e.g., hauling of demolition material to offsite reuse and disposal facilities); and,

3) Energy used in the production of construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Construction-Related Electricity

During construction, the proposed project would consume electricity to construct the new structures and infrastructure. Electricity would be supplied to the project site by Southern California Edison (SCE) and would be obtained from the existing electrical lines in the vicinity of the project site. The use of electricity from existing power lines rather than temporary diesel or gasoline powered generators would minimize impacts on energy use. Electricity consumed during project construction would vary throughout the construction period based on the construction activities being performed. Various construction activities include electricity associated with the conveyance of water that would be used during project construction for dust control (supply and conveyance) and electricity to power any necessary lighting during construction, electronic equipment, or other construction activities necessitating electrical power. Such electricity demand would be temporary, nominal, and would cease upon the completion of construction. Overall, construction activities associated with the proposed project would require limited electricity consumption that would not be expected to have an adverse impact on available electricity supplies and infrastructure. Therefore, the use of electricity during project construction would not be wasteful, inefficient, or unnecessary. The operational electrical loads would increase with the proposed project, which could require the upsizing of wires at the project site In event upsizing the wiring is required, the upsized wire would be pulled through and connected to the existing underground conduit that extends into the project site. Where feasible, the new service installations and connections would be scheduled and implemented in a manner that would not result in electrical service interruptions to other properties. Compliance with County's guidelines and requirements would ensure that the proposed project fulfills its responsibilities relative to infrastructure installation, coordinates any electrical infrastructure removals or relocations, and limits any impacts associated with construction of the project. Construction of the project's electrical infrastructure would not adversely affect the electrical infrastructure serving the surrounding uses or utility system capacity.

Construction-Related Natural Gas

Construction of the proposed project typically would not involve the consumption of natural gas. Natural gas would not be supplied to support construction activities, thus there would be no demand generated by construction. Since the project site is currently developed and has natural gas service to the project site,

construction of the proposed project would be limited to installation of new natural gas connections within the project site. Development of the proposed project would not require extensive infrastructure improvements to serve the project site. Construction-related energy usage impacts associated with the installation of natural gas connections are expected to be confined to trenching in order to place the lines below surface. In addition, prior to ground disturbance, the proposed project would notify and coordinate with Southern California Gas to identify the locations and depth of all existing gas lines and avoid disruption of gas service. Therefore, construction-related impacts to natural gas supply and infrastructure would be less than significant. No mitigation is required.

Construction-Related Petroleum Fuel Use

Petroleum-based fuel usage represents the highest amount of transportation energy potentially consumed during construction, which would be utilized by both off-road equipment operating on the project site and on-road automobiles transporting workers to and from the project site and on-road trucks transporting equipment and supplies to the project site.

The off-road construction equipment fuel usage was calculated through use of the off-road equipment assumptions and fuel use assumptions, which found that the off-road equipment utilized during construction of the proposed project would consume 38,618 gallons of fuel. The on-road construction trips fuel usage was calculated through use of the construction vehicle trip assumptions and fuel use assumptions found that the on-road trips generated from construction of the proposed project would consume 20,364 gallons of fuel. As such, the combined fuel used from off-road construction equipment and on-road construction trips for the proposed project would result in the consumption of 58,982 gallons of petroleum fuel. Construction activities associated with the proposed project would be required to adhere to all State and SCAQMD regulations for off-road equipment and on-road trucks, which provide minimum fuel efficiency standards. As such, construction activities for the proposed project would not result in the wasteful, inefficient, and unnecessary consumption of energy resources. Impacts regarding transportation energy would be less than significant. No mitigation is required.

OPERATIONAL ENERGY CONSUMPTION

Operations-Related Electricity

Operation of the proposed project would result in consumption of electricity at the project site. The proposed project would consume 757,655 kilowatt-hours per year of electricity. It should be noted that the proposed project would comply with all Federal, State, and City requirements related to the consumption of electricity, which includes CCR Title 24, Part 6 *Building Energy Efficiency Standards* and CCR Title 24, Part 11: *California Green Building Standards.* The CCR Title 24, Part 6 and Part 11 standards require numerous energy efficiency measures to be incorporated into the proposed buildings, including enhanced insulation, use of energy efficient lighting and appliances as well as requiring a variety of other energy-efficiency measures to be incorporated into all of the proposed structures. Therefore, the proposed project will be designed and built to minimize electricity use and that existing and planned electricity capacity and electricity supplies would be sufficient to support the proposed project's electricity demand. Thus, impacts with regard to electrical supply and infrastructure capacity would be less than significant and no mitigation measures would be required.

Operations-Related Natural Gas

Operation of the proposed project would result in increased consumption of natural gas at the project site. The proposed project would consume 1,404 MBTU per year of natural gas. It should be noted that, the proposed project would comply with all Federal, State, and City requirements related to the consumption

of natural gas, that includes CCR Title 24, Part 6 *Building Energy Efficiency Standards* and CCR Title 24, Part 11: *California Green Building Standards.* The CCR Title 24, Part 6 and Part 11 standards require numerous energy efficiency measures to be incorporated into the proposed structures, including enhanced insulation as well as use of efficient natural gas appliances and HVAC units. Therefore, the proposed project will be designed and built to minimize natural gas use and that existing and planned natural gas capacity and natural gas supplies would be sufficient to support the proposed project's natural gas demand. Thus, impacts with regard to natural gas supply and infrastructure capacity would be less than significant and no mitigation measures would be required.

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

Less Than Significant Impact: The applicable energy plan for the proposed project is the County of Orange General Plan, Chapter 6 Resources Element, September 13, 2005, that provides an Energy Resources Component. The proposed project's consistency with the applicable energy-related policies in the General Plan are shown in Table 4.6-1, *Proposed Project Compliance with County General Plan Energy Policies*. No mitigation is required.

Table 4.6-1
Proposed Project Compliance with County General Plan Energy Policies

General Plan Energy Policy	Proposed Project Consistency with General Plan Policies
Policy 1 – Land Use: To plan urban land uses with a balance of residential, industrial, commercial, and public land uses as set forth in the Land Use Element.	**Consistent.** The proposed project is an allowed use under the current land use designation of Suburban Residential (1B). In addition, the proposed project would provide onsite amenities, including a bistro that would operate as a convenience market that would be open to both the proposed and nearby residents, which would reduce energy usage by reducing vehicle trips Additionally, the proposed project includes a fitness center, cinema, library, demonstration kitchen, restaurant, lounge and swimming pool that would be open to the proposed residents, that would reduce the energy usage by reducing vehicle trips of residents.
Policy 2 – Energy Resource Development: To encourage and actively support the efficient use and optimum development of energy resources in the County consistent with sound resource management practices.	**Not Applicable.** This policy is only applicable for the development of energy resources. No known energy resources (i.e., oil wells or mining) exist on the project site.
Policy 3 – Energy Conservation: To encourage and actively support the utilization of energy conservation measures in all new and existing structures in the County.	**Consistent.** The proposed project has been designed to exceed the State's Title 24 energy efficiency standards and will incorporate several energy-efficiency design features into the project.
Policy 4 – Transportation: To provide incentives for transportation system management programs and support regional public transportation programs that reduce energy consumption.	**Not Applicable.** This policy is only applicable to the County to develop regional transportation programs.
Policy 5 – Energy Financing: To examine the benefits of local government financing programs that promote energy conservation and development through cooperative public/private efforts.	**Not Applicable.** This policy is only applicable to the County to develop government financing programs that promote energy conservation.

General Plan Energy Policy	Proposed Project Consistency with General Plan Policies
Policy 6 – Alternative Energy Systems: To encourage the use of alternative energy systems and to the extent feasible, remove the regulatory barriers to their implementation.	**Consistent.** The proposed project will provide electric vehicle charging stations in 10 percent of the parking spaces to promote the use of alternative energy vehicles.
Policy 7 – Solar Access: To support and encourage voluntary efforts to provide solar access opportunities in new developments.	**Consistent.** The proposed project will be designed to be solar ready, where the roof is designed to hold the load of solar panels and electrical conduit is installed between the roof and the electrical room, in order to assist in the future installation of solar panels.
Source: County of Orange, 2005.	

STANDARD CONDITIONS OF APPROVAL

No Standard Conditions of Approval are required.

MITIGATION MEASURES

No Mitigation Measures are required.

REFERENCES

County of Orange, *County of Orange General Plan,* September 13, 2005.

International Code Council, *Guide to the 2016 California Green Building Standards Code Nonresidential,* January 2017.

Vista Environmental, *Air Quality, Energy, and Greenhouse Gas Emissions Impact Analysis - The Legacy at Coto Senior Living Residential Project*, January 29, 2020.

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4.7 Geology and Soils

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1) 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.	☐	☐	☐	☒
2) Strong seismic ground shaking?	☐	☐	☒	☐
3) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
4) Landslides?	☐	☐	☐	☒
b. Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

ENVIRONMENTAL ANALYSIS

The following analysis is based on a Preliminary Geotechnical Investigation Report prepared for the project site by GMU Geotechnical, Inc., in January 2020 and is presented in Appendix D.

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

1) 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.

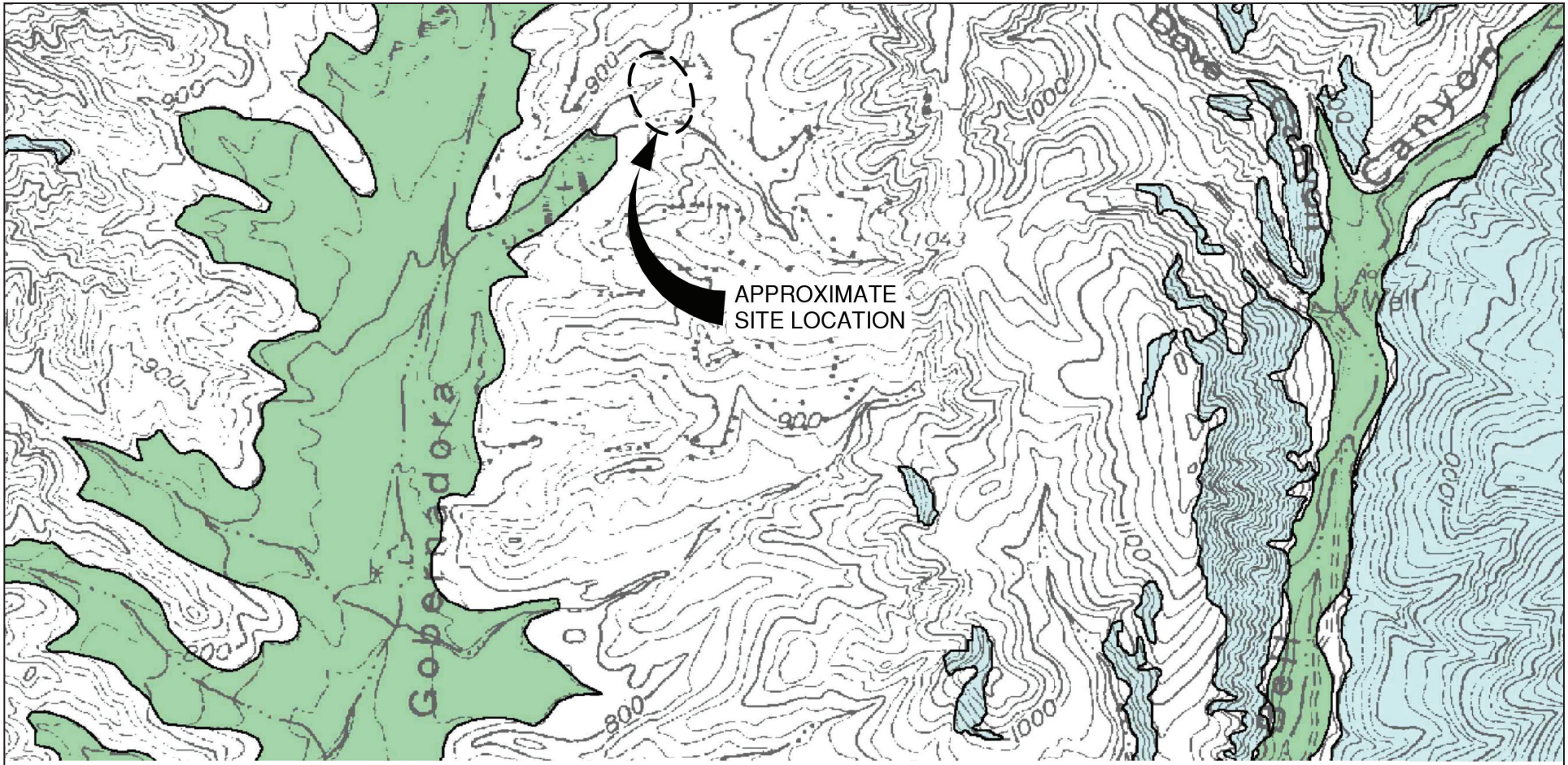
No Impact: The Alquist-Priolo Earthquake Fault Zoning Act (Act) regulates development near active faults in order to mitigate the hazards of surface fault-rupture. An active fault is one that has experienced earthquake activity in the past 11,000 years. Under the Act, the State Geologist is required to delineate special study zones along known active faults, known as Alquist-Priolo Earthquake Fault Zones. The Act also requires that prior to approval of a project, a geologic study be prepared to define and delineate any hazards from surface rupture and that a 50-foot building setback be established from any known trace hazard. According to the California Geologic Survey, there is no Alquist-Priolo Earthquake Fault Zones on the project site or in the nearby area. Therefore, the proposed project would not directly or indirectly be exposed to ground rupture impacts. Therefore, no ground rupture impacts would occur. No mitigation is required.

2) Strong seismic ground shaking?

Less Than Significant Impact: The project site is situated within a seismically active region that could be subject to ground shaking impacts from several active faults in the region. According to the project geotechnical report, the site is located approximately 5.9 miles from the San Joaquin Hills Fault and about 10.62 miles from the Elsinore Fault. These faults would have the potential to produce an earthquake ranging from 7.1 to 7.9 on the Richter Scale. In the event an earthquake of this magnitude occurs, the project site could experience periodic shaking, possibly of considerable intensity. The potential seismic shaking risks at the project site would be like other areas in southern California. The proposed structures on the project site would be required to be designed to meet the County's construction development standards and the seismic design parameters of the California Uniform Building Code to withstand potential seismic shaking impacts caused by an earthquake within an acceptable level of risk. Additionally, the proposed project would be subject to Standard Condition G01, which would ensure that the geotechnical report adheres to County rules and regulations set forth in the County Municipal Code and in the correct format. Compliance with the County construction development standards, California Uniform Building Code Seismic Safety Standards and Standard Condition G01 would minimize risks related to seismic shaking impacts. Therefore, the proposed project would not expose people or structures to potential adverse effects of ground shaking and potential impacts would be less than significant. No mitigation is required.

3) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact: Liquefaction is the phenomenon in which loosely deposited soils located below the water table undergo rapid loss of shear strength due to excess pore pressure generation when subject to strong earthquake induced ground shaking. Liquefaction is known generally to occur in saturated or near-saturated cohesion-less soils at depths shallower than 50-feet below the ground surface. As shown in Figure 4.7-1, *Seismic Hazard Zone Map*, the California Department of Conservation Hazard Zone Map for the Cañada Gobernadora United States Geological Survey (USGS) Quadrangle shows the project site is not located within a Seismic Hazard Zone for Liquefaction Potential. The potential for ground failure and liquefaction would be low and potential liquefaction impacts would be less than significant. No mitigation is required.



MAP EXPLANATION

Zones of Required Investigation:

Liquefaction

Areas where historic occurrence of liquefaction, or local geological, geotechnical and groundwater conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.

Earthquake-Induced Landslides

Areas where previous occurrence of landslide movement, or local topographic, geological, geotechnical and subsurface water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.

NOTE: Seismic Hazard Zones identified on this map may include developed land where delineated hazards have already been mitigated to city or county standards. Check with your local building/planning department for information regarding the location of such mitigated areas.

Source: GMU Geotechnical, Inc.; January 7, 2020.

LEGACY AT COTO
Initial Study/Mitigated Negative Declaration

Seismic Hazard Zone Map

4) Landslides?

No Impact: According to the California Geologic Survey Landslide Hazard Map for the Cañada Gobernadora Quadrangle, the project site is not located within a zone susceptible to earthquake-induced landslides. Additionally, the proposed project would not create slopes or features that would increase the landslide potential beyond existing conditions. No impacts regarding potential landslide impacts would occur. No mitigation is required.

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

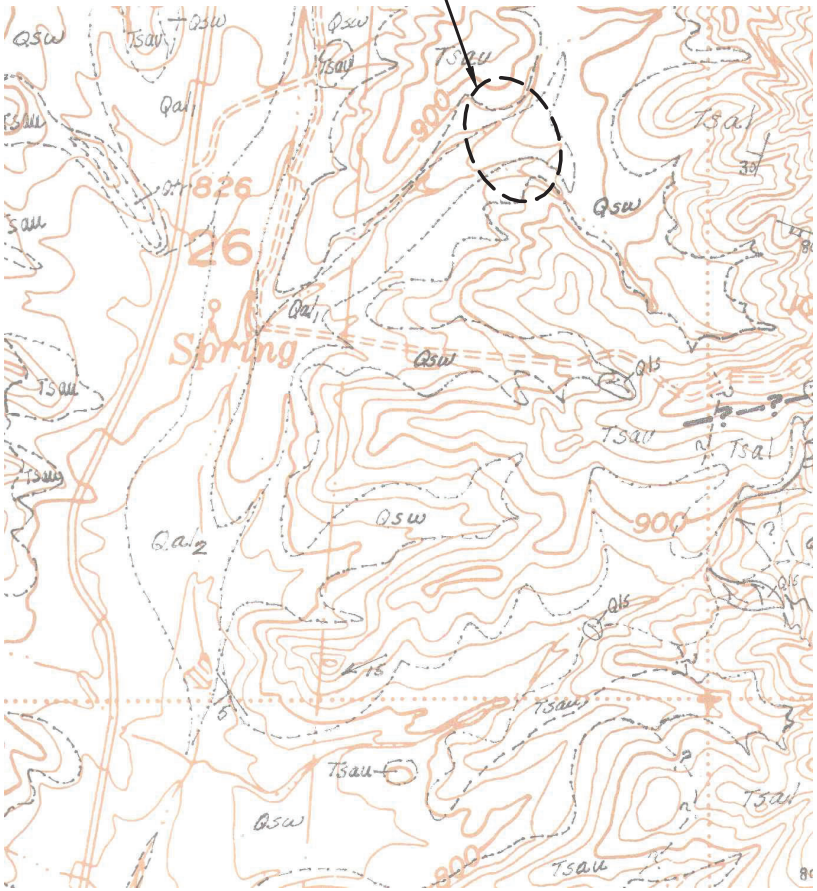
Less Than Significant Impact With Mitigation Incorporated: The construction of the proposed project would require grading of the entire 4.2-acre site. The land clearing and grading activities associated with the proposed project would uncover soil, which could be subject to erosion impacts caused by water and wind. Additionally, construction equipment and vehicles could indirectly transport sediment to offsite locations. Construction projects which disturb one or more acres of soil are required to obtain coverage under a general construction permit issued from the State Water Resources Control Board. The General Construction Permit would require the filing of a Notice of Intent with the State Water Resources Control Board and the preparation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would provide a list of Best Management Practices to minimize potential adverse erosion impacts. Additionally, the proposed project would be required to comply with Standard Condition D01b, Standard Condition D02b, Standard Condition D03a, Standard Condition D09a, Standard Condition WQ01, Standard Condition WQ03, Standard Condition WQ04, Standard Condition WQ05, and Division 13, Stormwater Management and Urban Runoff-County Regulations of the Orange County Municipal Code related to the reduction or elimination of storm water runoff pollutants. Compliance with applicable NPDES erosion control requirements and implementation of Standard Conditions would reduce impacts related to substantial soil erosion or the loss of topsoil to a less than significant level. No mitigation is required.

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

Less Than Significant Impact: As stated previously, the project site is not within a liquefaction or landslide hazard area. Additionally, the potential for lateral spreading would be low. The project geotechnical report has not identified other type of ground failure constraints that could affect the geotechnical stability of the project. The project would require compliance with California Building Code and County of Orange Standard Conditions of Approval G01 to ensure the project is geotechnically stable. Compliance with California Building Code and County of Orange Standard Conditions of Approval G01 would reduce potential geologic constraint impacts to less than significant. No mitigation is required.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less Than Significant Impact: Expansive soils are defined as fine grained silts and clays which are subject to swelling and contracting. The amount of swelling and contracting would be subject to the amount of fine-grained clay materials present in the soils and the amount of moisture either introduced or extracted from the soils. As shown in Figure 4.7-2, *Regional Geotechnical Map*, the project site is underlain by artificial fill materials, slopewash materials and bedrock of the Santiago Formation. Based on the project geotechnical report, the project site has low potential for expansive soils. The proposed project would require compliance with California Building Code and County of Orange Standard Conditions of Approval G01 to ensure the project is geotechnically stable. Compliance with California Building Code and County of Orange Standard Conditions of Approval G01 would reduce potential geologic constraint impacts to less than significant. No mitigation is required.

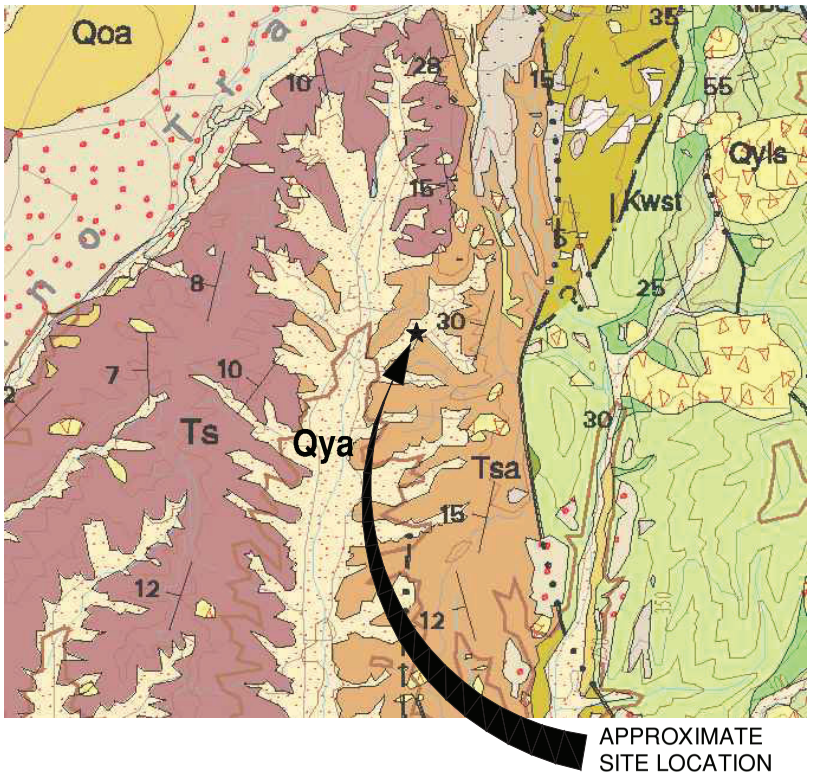


1 NW 1/4 Canada Gobernadora Quadrangle

Scale: 1" = 10,000

LEGEND

Qal	ALLUVIUM
Qsw	SLOPEWASH
Tsau	SANTIAGO FORMATION, UPPER MEMBER



2 Geologic Map of the Santa Ana 30'x60' Quadrangle

Scale: 1:200,000

LEGEND

Qya	YOUNG ALLUVIUM DEPOSITS
Tsa	SANTIAGO FORMATION

Source: GMU Geotechnical, Inc.; January 7, 2020.

LEGACY AT COTO
Initial Study/Mitigated Negative Declaration
Regional Geotechnical Map

VCS Environmental

Figure 4.7-2

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

No Impact: The proposed project would not involve the use of septic tanks or alternative wastewater disposal systems. Therefore, no impacts would occur regarding septic tanks or alternative wastewater disposal systems. No mitigation is required.

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

Less Than Significant Impact: A Vertebrate Paleontology records search was conducted by the Natural History Museum of Los Angeles County (NHMLAC) on December 11, 2019. According to NHMLAC, most of the project site has surface deposits composed of younger Quaternary Alluvium derived as alluvial fan deposit from the surrounding more elevated terrain and the drainage adjacent that currently flows through the project site. These deposits usually do not contain significant vertebrate fossils in the uppermost layers but may contain significant vertebrate fossils in older sedimentary deposits at relatively shallow depths.

The record search determined no vertebrate paleontological localities were recorded on the project site. However, fossils were identified and recorded in the vicinity from the same subsurface sedimentary deposits that are on the project site. According to NHMLAC, shallow excavations in the younger Quaternary Alluvium probably would not uncover significant vertebrate fossil remains. However, deeper excavations that extend down into the older Quaternary deposits and any excavations into the Santiago Formation in the elevated portion of the project site could encounter significant fossils. The NHMLAC recommends excavations below the uppermost layers in the project site be monitored by a qualified paleontologist in order to quickly identify and collect specimens. Sediment samples should also be collected from the older sedimentary deposits to determine their small fossil potential. Fossils collected should be placed in an accredited and permanent scientific institution for the benefit of current and future generations. To avoid potential impacts to paleontological resources, the proposed project would be required to comply with Standard Condition A07, which would ensure that a paleontologist observe grading activities, salvage and catalogue paleontological resources as necessary, and establish procedures for archaeological resource surveillance, as well as procedures for temporarily halting or redirecting work. With compliance with Standard Condition A07, potential impacts to paleontological resource would be less than significant. No mitigation is required.

STANDARD CONDITIONS OF APPROVAL

Standard Condition G01: Prior to the issuance of a Grading Permit, the Applicant shall submit a geotechnical report to the Director, OC Development Services, or designee, for approval. The report shall include the information and be in the form as required by the Grading Manual.

Standard Condition A07: Prior to the issuance of any grading permit, the project applicant shall provide written evidence to the Manager, Subdivision and Grading, that applicant has retained a County certified paleontologist to observe grading activities and salvage and catalogue fossils, as necessary. The paleontologist shall be present at the pre-grade conference, shall establish procedures for paleontological resource surveillance, and shall establish, in cooperation with the applicant, procedures for temporarily halting or redirecting work to permit sampling, identification, and evaluation of the fossils. If the paleontological resources are found to be significant, the paleontologist shall determine appropriate actions, in cooperation with the applicant, which ensure proper exploration and/or salvage.

Prior to the release of the grading bond, the applicant shall submit the paleontologist's follow-up report for approval by the Manager, HBP/Coastal and Historical Facilities. The report shall include the period of

inspection, a catalogue and analysis of the fossils found, and the present repository of the fossils. Applicant shall prepare excavated material to the point of identification. The applicant shall offer excavated finds for curatorial purposes to the County of Orange, or its designee, on a first refusal basis. These actions, as well as final mitigation and disposition of the resources, shall be subject to approval by the HBP/Coastal and Historical Facilities. Applicant shall pay curatorial fees if an applicable fee program has been adopted by the Board of Supervisors, and such fee program is in effect at the time of presentation of the materials to the County of Orange or its designee, all in a manner meeting the approval of the Manager, HBP/Coastal and Historical Facilities.

Standard Condition D01b: Prior to the issuance of any Grading Permits, the following drainage studies shall be submitted to and approved by the Director, OC Development Services, or designee:

A. A drainage study of the project including diversions, offsite areas that drain onto and/or through the project, and justification of any diversions; and

B. When applicable, a drainage study evidencing that proposed drainage patterns will not overload existing storm drains; and

C. Detailed drainage studies indicating how the project grading, in conjunction with the drainage conveyance systems including applicable swales, channels, street flows, catch basins, storm drains, and flood water retarding, will allow building pads to be safe from inundation from rainfall runoff which may be expected from all storms up to and including the theoretical 100-year flood.

Standard Condition D02b: Prior to the issuance of any Grading Permits, the Applicant shall in a manner meeting the approval of the Director, OC Development Services, or designee:

1. Design provisions for surface drainage; and

2. Design all necessary storm drain facilities extending to a satisfactory point of disposal for the proper control and disposal of storm runoff; and

3. Dedicate the associated easements to the County of Orange, if determined necessary.

Prior to the issuance of any Certificates of Use and Occupancy, said improvements shall be constructed in a manner meeting the approval of the Manager, Construction.

Standard Condition D03a: Prior to the issuance of any Grading Permit, and if determined necessary by the Director, OC Development Services, or designee, the Applicant shall record a letter of consent, from the upstream and/or downstream property owners permitting drainage diversions and/or unnatural concentrations. The form of the letter of consent shall be approved by the Director, OC Development Services, or designee, prior to recordation of the letter.

Standard Condition D09a: Prior to the issuance of any Grading Permits, Applicant shall delineate on the grading plan the floodplain which affects the property, in a manner meeting the approval of the Director, OC Development Services, or designee.

Standard Condition WQ01: Prior to the recordation of any Final Subdivision Map (except those maps for financing or conveyance purposes only) or the issuance of any Grading or Building Permit (whichever comes first), the Applicant shall submit for review and approval by the Manager, Inspection Services Division, a Water Quality Management Plan (WQMP) specifically identifying Best Management Practices (BMPs) that will be used onsite to control predictable pollutant runoff. This WQMP shall identify, at a minimum, the routine structural and non-structural measures specified in the current Drainage Area Management Plan (DAMP). The WQMP may include one or more of the following:

- Discuss regional water quality and/or watershed programs (if available for the project);
- Address Site Design BMPs (as applicable) such as minimizing impervious areas, maximizing permeability, minimizing directly connected impervious areas, creating reduced or "zero discharge" areas, and conserving natural areas;
- Include the applicable Routine Source Control BMPs as defined in the DAMP; and
- Demonstrate how surface runoff and subsurface drainage shall be managed and directed to the nearest acceptable drainage facility (as applicable), via sump pumps if necessary.

Standard Condition WQ03: Prior to the issuance of a Certificate of Use and Occupancy, the Applicant shall demonstrate compliance with the WQMP in a manner meeting the satisfaction of the Manager, Inspection Services Division, including:

- Demonstrate that all structural Best Management Practices (BMPs) described in the project's WQMP have been implemented, constructed, and installed in conformance with approved plans and specifications;
- Demonstrate that the Applicant has complied with all non-structural BMPs described in the project's WQMP;
- Submit for review and approval an Operations and Maintenance (O&M) Plan for all structural BMPs for attachment to the WQMP;
- Demonstrate that copies of the project's approved WQMP (with attached O&M Plan) are available for each of the incoming occupants;
- Agree to pay for a Special Investigation from the County of Orange for a date (12) twelve months after the issuance of a Certificate of Use and Occupancy for the project to verify compliance with the approved WQMP and O&M Plan; and
- Demonstrate that the Applicant has agreed to and recorded one of the following: 1) the CC&R's (that must include the approved WQMP and O&M Plan) for the project Home Owner's Association; 2) a water quality implementation agreement that has the approved WQMP and O&M Plan attached; or 3) the final approved Water Quality Management Plan (WQMP) and Operations and Maintenance (O&M) Plan.

Standard Condition WQ04: Prior to the issuance of any Grading or Building Permits, the Applicant shall demonstrate compliance under California's General Permit for Stormwater Discharges Associated with Construction Activity by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) Number or other proof of filing in a manner meeting the satisfaction of the Director, OC Development Services, or designee. Projects subject to this requirement shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). A copy of the current SWPPP shall be kept at the project site and be available for County review on request.

Standard Condition WQ05: Prior to the issuance of any Grading or Building Permit, the Applicant shall submit an Erosion and Sediment Control Plan (ESCP) in a manner meeting approval of the Director, OC Development Services, or designee, to demonstrate compliance with local and state water quality regulations for grading and construction activities. The ESCP shall identify how all construction materials, wastes, grading or demolition debris, and stockpiles of soil, aggregates, soil amendments, etc. shall be properly covered, stored, and secured to prevent transport into local drainages or coastal waters by wind,

rain, tracking, tidal erosion or dispersion. The ESCP shall also describe how the Applicant will ensure that all BMP's will be maintained during construction of any future public rights-of-way. A copy of the current ESCP shall be kept at the project site and be available for County review on request.

MITIGATION MEASURES

No Mitigation Measures are required.

REFERENCES

California Department of Conservation, *State of California Seismic Hazard Zones*, Cañada Gobernadora Quadrangle, Official Map of Liquefaction Zone, accessed December 2019.

County of Orange, *County of Orange General Plan*, July 2014.

County of Orange, *Codified Ordinances of the County of Orange*, codified through Ordinance No. 16-002, enacted March 15, 2016. (Supplement No. 130).

County of Orange, *Standard Conditions of Approval*.

GMU Geotechnical, Inc., *Preliminary Geotechnical Investigation Report*, January 7, 2020.

State of California Department of Conservation, *Regulatory Maps*, accessed December 2019.

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4.8 Greenhouse Gas Emissions

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

ENVIRONMENTAL ANALYSIS

The following analysis is based on an Air Quality and Greenhouse Gas Study prepared by Vista Environmental, in January 2020 and is presented in Appendix A.

Existing Setting

Constituent gases of the Earth's atmosphere, called atmospheric greenhouse gases (GHGs), play a critical role in the Earth's radiation amount by trapping infrared radiation from the Earth's surface, which otherwise would have escaped to space. Prominent greenhouse gases contributing to this process include carbon dioxide (CO_2), methane (CH_4), ozone (O_3), water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs). This phenomenon, known as the Greenhouse Effect, is responsible for maintaining a habitable climate. Anthropogenic (caused or produced by humans) emissions of these greenhouse gases in excess of natural ambient concentrations are responsible for the enhancement of the Greenhouse Effect and have led to a trend of unnatural warming of the Earth's natural climate, known as global warming or climate change. Emissions of gases that induce global warming are attributable to human activities associated with industrial/manufacturing, agriculture, utilities, transportation, and residential land uses. Emissions of CO_2 and N_2O are byproducts of fossil fuel combustion. Methane, a potent greenhouse gas, results from off gassing associated with agricultural practices and landfills. Sinks of CO_2, where CO_2 is stored outside of the atmosphere, include uptake by vegetation and dissolution into the ocean.

GLOBAL WARMING POTENTIAL

GHGs have varying global warming potential (GWP). The GWP is the potential of a gas or aerosol to trap heat in the atmosphere; it is the cumulative radiative forcing effects of a gas over a specified time horizon resulting from the emission of a unit mass of gas relative to the reference gas, CO_2. The GHGs listed by the CEQA Guidelines are discussed in this section in order of abundance in the atmosphere. Water vapor, the most abundant GHG, is not included in this list because its natural concentrations and fluctuations far outweigh its anthropogenic (human-made) sources. To simplify reporting and analysis, GHGs are commonly defined in terms of their GWP. The IPCC defines the GWP of various GHG emissions on a normalized scale that recasts all GHG emissions in terms of CO_2e. As such, the GWP of CO_2 is equal to 1. The GWP values used in this analysis are based on the 2007 IPCC Fourth Assessment Report, which are used in CARB's 2014 Scoping Plan Update and the CalEEMod Model Version 2016.3.2 and are detailed in Table 4.8-1, *Global Warming Potentials, Atmospheric Lifetimes and Abundances of GHGs*. The IPCC has updated the Global Warming Potentials of some gases in their Fifth Assessment Report; however, the new values have not yet been incorporated into the CalEEMod model that has been utilized in this analysis.

Table 4.8-1
Global Warming Potentials, Atmospheric Lifetimes and Abundances of GHGs

Gas	Atmospheric Lifetime (years)[1]	Global Warming Potential (100 Year Horizon)[2]	Atmospheric Abundance
Carbon Dioxide (CO_2)	50-200	1	379 ppm
Methane (CH_4)	9-15	25	1,774 ppb
Nitrous Oxide (N_2O)	114	298	319 ppb
HFC-23	270	14,800	18 ppt
HFC-134a	14	1,430	35 ppt
HFC-152a	1.4	124	3.9 ppt
PFC: Tetrafluoromethane (CF_4)	50,000	7,390	74 ppt
PFC: Hexafluoroethane (C_2F_6)	10,000	12,200	2.9 ppt
Sulfur Hexafluoride (SF_6)	3,200	22,800	5.6 ppt

Abbreviations: ppm = parts per million; ppb = parts per billion; ppt = parts per trillion
Notes:
[1] Defined as the half-life of the gas.
[2] Compared to the same quantity of CO_2 emissions and is based on the Intergovernmental Panel on Climate Change (IPCC) 2007 standard, which is utilized in CalEEMod (Version 2016.3.2),that is used in this report (CalEEMod user guide: Appendix A).
Source: *The Legacy at Coto Senior Living Residential Project Air Quality, Energy, and Greenhouse Gas Emissions Impact Analysis* prepared by Vista Environmental, January 29, 2020.

Regulatory Setting

California Air Resources Board (CARB) has proposed interim statewide CEQA thresholds for GHG emissions and released Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the California Environmental Quality Act, on October 24, 2008 that has been utilized by the SCAQMD's GHG Significance Threshold Stakeholder Working Group in their framework for developing SCAQMD's draft GHG emissions thresholds. The State currently has no regulations that establish ambient air quality standards for GHGs. However, the State has passed laws directing CARB to develop actions to reduce GHG emissions. The following is a listing of relevant State laws to reduce GHG emissions. A detailed discussion of each law is presented in Appendix A.

- Executive Order B-30-15, Senate Bill 32 and Assembly Bill 197
- Assembly Bill 1493
- Executive Order S-3-05
- Assembly Bill 32
- Executive Order S-1-07
- Senate Bill 97
- Senate Bill 375
- Assembly Bill 341 and Senate Bills 939 and 1374
- California Code of Regulations (CCR) Title 24, Part 11

SCAQMD THRESHOLDS

The proposed project is located within the jurisdiction of the SCAQMD. In order to identify significance criteria under CEQA for development projects, SCAQMD initiated a Working Group, which provided detailed methodology for evaluating significance under CEQA. At the September 28, 2010 Working Group meeting, the SCAQMD released its most current version of the draft GHG emissions thresholds, which recommends a tiered approach that provides a quantitative annual threshold of 3,000 $MTCO_2e$ for all land use projects. Although the SCAQMD provided substantial evidence supporting the use of the above

threshold, as of November 2017, the SCAQMD Board has not yet considered or approved the Working Group's thresholds.

It should be noted that SCAQMD's Working Group's thresholds were prepared prior to the issuance of Executive Order B-30-15 on April 29, 2015 that provided a reduction goal of 40 percent below 1990 levels by 2030. This target was codified into statute through passage of AB197 and SB32 in September 2016. However, to date, no air district or local agency within California has provided guidance on how to address AB197 and SB32 with relation to land use projects. Also, at this time, it is unclear what role land use strategies can or should play in achieving the AB197 and SB32 reduction goal of 40 percent below 1990 levels by 2030. As such, this analysis has relied on the SCAQMD Working Group's recommended thresholds. Therefore, the proposed project would be considered to create a significant cumulative GHG impact if the proposed project would exceed the annual threshold of 3,000 $MTCO_2e$.

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

Less Than Significant Impact: The proposed project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. The proposed project would consist of development of an active senior living facility. The proposed project is anticipated to generate GHG emissions from area sources, energy usage, mobile sources, waste disposal, water usage, and construction equipment. The project's GHG emissions have been calculated with the CalEEMod Model Version 2016.3.2 based on the project construction and operational parameters. A summary of the results is shown Table 4.8-2, *Project Related Greenhouse Gas Annual Emissions*.

Table 4.8-2
Project Related Greenhouse Gas Annual Emissions

Category	Greenhouse Gas Emissions (Metric Tons per Year)			
	CO_2	CH_4	N_2O	CO_2e
Area Sources[1]	1.86	0.00	0.00	1.90
Energy Usage[2]	316.32	0.01	0.00	317.63
Mobile Sources[3]	432.05	0.02	0.00	432.50
Solid Waste[4]	5.19	0.31	0.00	12.87
Water and Wastewater[5]	40.70	0.19	0.01	46.84
Construction[6]	18.14	0.00	0.00	18.22
Total GHG Emissions	**814.26**	**0.53**	**0.01**	**829.96**
			SCAQMD Draft Threshold of Significance	**3,000**
			Exceed Thresholds?	**No**

Notes:
[1] Area sources consist of GHG emissions from consumer products, architectural coatings, and landscaping equipment.
[2] Energy usage consists of GHG emissions from electricity and natural gas usage.
[3] Mobile sources consist of GHG emissions from vehicles.
[4] Waste includes the CO_2 and CH_4 emissions created from the solid waste placed in landfills.
[5] Water includes GHG emissions from electricity used for transport of water and processing of wastewater.
[6] Construction emissions amortized over 30 years as recommended in the SCAQMD GHG Working Group on November 19, 2009.
Source: *The Legacy at Coto Senior Living Residential Project Air Quality, Energy, and Greenhouse Gas Emissions Impact Analysis* prepared by Vista Environmental, January 29, 2020.

The data provided in Table 4.8-2 shows that the proposed project would create 829.96 $MTCO_2e$ per year. According to the SCAQMD draft threshold of significance, a cumulative global climate change impact would occur if the GHG emissions created from the on-going operations would exceed 3,000 $MTCO_2e$ per year. Therefore, a less than significant generation of greenhouse gas emissions would occur from development of the proposed project. Impacts would be less than significant. No mitigation is required.

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

Less Than Significant Impact: The proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing GHG emissions. The proposed project consists of the development of an active senior living facility. The proposed project is anticipated to create 829.96 $MTCO_2e$ per year, which is well below the SCAQMD draft threshold of significance of 3,000 $MTCO_2e$ per year. The SCAQMD developed this threshold through a Working Group, which also developed detailed methodology for evaluating significance under CEQA. At the September 28, 2010 Working Group meeting, the SCAQMD released its most current version of the draft GHG emissions thresholds, which recommends a tiered approach that provides a quantitative annual threshold of 3,000 $MTCO_2e$ for all land use type projects, which was based on substantial evidence supporting the use of the recommended thresholds. Therefore, the proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases resulting in less than significant impacts. No mitigation is required.

STANDARD CONDITIONS OF APPROVAL

No Standard Conditions of Approval are required.

MITIGATION MEASURES

No Mitigation Measures are required.

REFERENCES

County of Orange, *County of Orange General Plan,* September 13, 2005.

County of Orange, *County of Orange Zoning Code,* June 2005.

Stantec Consulting Services Inc., *Legacy Club Traffic Study,* April 13, 2020.

Vista Environmental, *Air Quality, Energy, and Greenhouse Gas Emissions Impact Analysis - The Legacy at Coto Senior Living Residential Project*, January 29, 2020.

4.9 Hazards and Hazardous Materials

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

ENVIRONMENTAL ANALYSIS

The following analysis is based on a Phase 1 Environmental Site Assessment prepared by Group Delta in November 2018 and is presented in Appendix E.

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: Title 22 of the California Code of Regulations (CCR), Division 4.5, Chapter 11, Article 3, classifies hazardous materials into the following four categories based on their properties:

- Toxic (causes human health effects),
- Ignitable (has the ability to burn),
- Corrosive (causes severe burns or damage to materials), and

- Reactive (causes explosions or generates toxic gases).

Hazardous materials have been and are commonly used in commercial, agricultural and industrial applications as well as in residential areas to a limited extent. Hazardous wastes are hazardous materials that no longer have practical use, such as substances that have been discarded, discharged, spilled, contaminated, or are being stored prior to proper disposal. The health impacts of hazardous materials exposure are based on the frequency of exposure, the exposure pathway, and individual susceptibility.

The long-term operation of the proposed project would not involve the routine transport, use or disposal of hazardous materials in quantities or conditions that would pose a hazard to public health and safety or the environment. The operation of the proposed project could involve the use of cleaning products and occasional use of pesticide activities and herbicides for landscape maintenance. The materials would be common for general maintenance and would not be stored in large quantities that pose a health hazard to the public. Potential impacts would be less than significant. No mitigation is required.

The construction operations associated with the proposed project would involve the handling of incidental amounts of hazardous substances, such as solvents, fuels and oil. To avoid public exposure to hazardous materials, the proposed project would be required to comply with local, state and federal laws and regulations regarding the handling and storage of hazardous materials. With compliance with local, state and federal hazardous material laws and regulations and implementation of BMPs, potential hazardous impacts to the public would be less than significant. No mitigation is required.

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 With Mitigation Incorporated: A Phase 1 Environmental Site Assessment of the project site was conducted to determine if any significant surface or subsurface property contamination caused by hazardous and toxic substances should be considered during the construction and operation of the proposed project. The site assessment included a review of available federal and state data reported by Environmental Data Resources (EDR), available regulatory agency environmental records, and available site history and records. The review did not identify any Recognized Environmental Conditions (REC) for the project site. The existing buildings on the project site were constructed during a period where asbestos containing building materials (ACMs) and lead based paints (LBPs) were commonly used. If asbestos containing building materials are present, they could inadvertently be released into the air during demolition activities. To avoid the potential release of asbestos, an asbestos and lead paint survey will be conducted for structures proposed for demolition.

The construction operations associated with the proposed project would involve the handling of incidental amounts of hazardous substances, such as solvents, fuels and oil. The level of risk associated with the accidental release of hazardous substances would not be considered significant due to the small volume and low concentration of hazardous materials that would be utilized during construction. The construction contractor would be required to use standard construction controls and safety procedures that would avoid or minimize the potential for accidental release of hazardous substances into the environment. The most relevant measures would pertain to Material Delivery and Storage; Material Use; and Spill Prevention and Control. These measures would outline the required improvements and procedures for preventing impacts of hazardous materials to workers and the environment during construction. With implementation of Mitigation Measure HAZ-1 and compliance with local, state and federal hazardous material laws and regulations and implementation of BMPs, potential hazardous impacts to the public would be less than significant.

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 project site is not located within one-quarter mile of a school. The nearest public school to the project site would be Wagon Wheel Elementary School (30912 Bridle Path, Trabuco Canyon, California 92679), located approximately three miles to the south of the project site. The nearest private school to the project site would be the Santa Margarita Catholic High School (22062 Antonio Parkway, Rancho Santa Margarita, California 92688). Therefore, implementation of the proposed project would not emit hazardous emissions or the handle hazardous or acutely hazardous materials, substances, or wastes within a 0.25-mile of an existing or proposed school. No impact would occur. No mitigation is required.

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

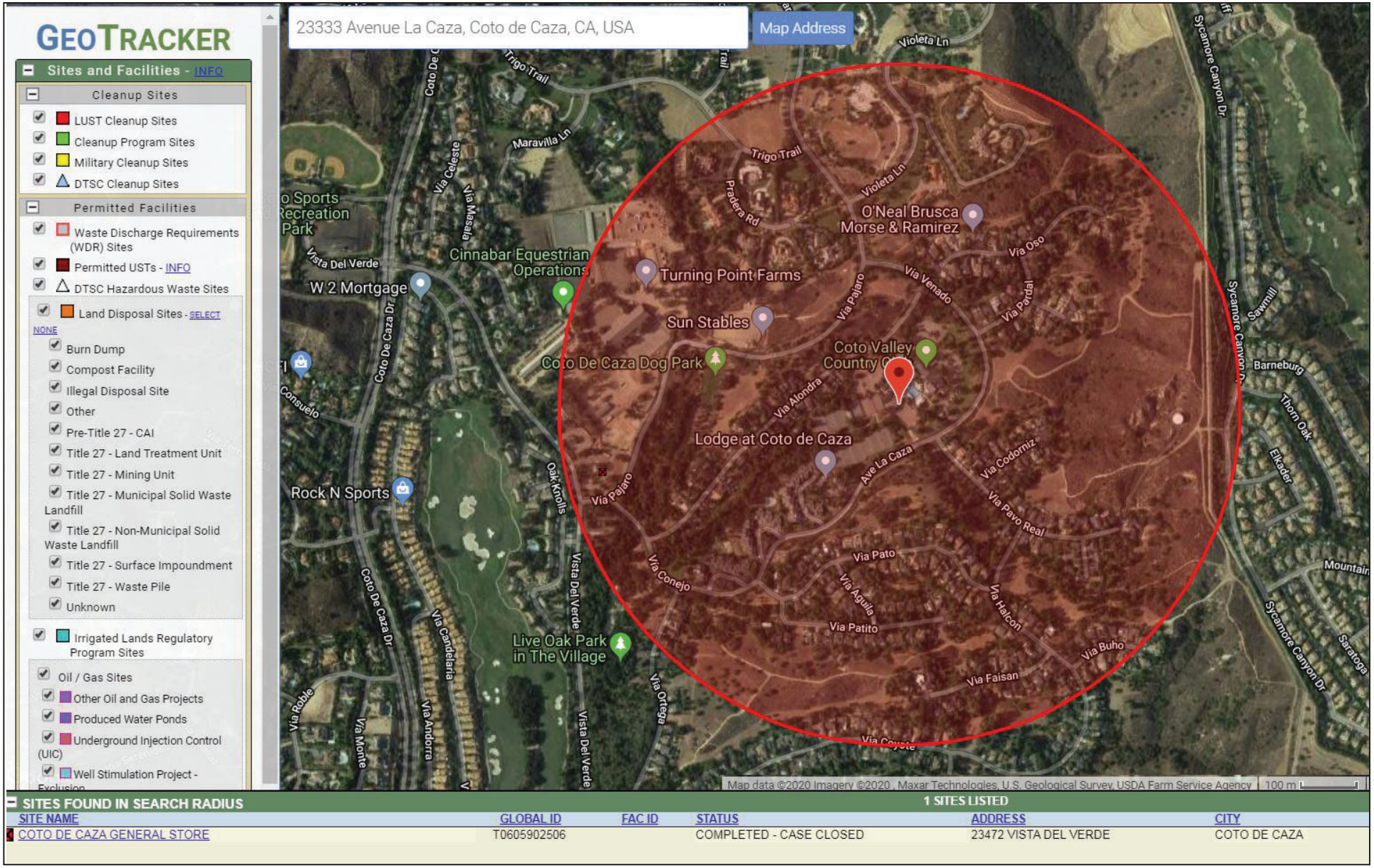
No Impact: A Phase 1 Environmental Site Assessment was prepared for the proposed project to identify known or suspected environmental concerns or recognized environmental conditions that could be associated with the project site and if adjoining properties, and nearby locations are suspected sites of environmental contamination. Additionally, as shown in Figure 4.9-1, *GeoTracker 2,000 Feet Radius Search*, the State Water Resources Control Board GeoTracker search did not identify any environmental concerns. Both the Phase 1 Environmental Site Assessment and Geo-Tracker Search identified one underground storage cleanup site within one-half mile of the site. The site was located at the Coto de Caza General Store located at 23472 Vista Del Verde located approximately 0.35 miles southwest of the project site. The case stated that a gasoline-automotive substance was released to the underlying soil. Groundwater samples were collected in the vicinity of the release and water was confirmed to have not been affected by the release. The case was closed on March 14, 1995 and determined to not pose any health hazards. Based on the regulatory status of the property, the site is not considered a recognized environmental concern. Because the project site and immediate area is not included on any list of hazardous waste site, no potential impact would occur regarding creating a significant hazard to the public or the environment. No mitigation is required.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. The project site is not located within an airport land use plan and there are no public airports within two miles of the project site. The nearest airport would be John Wayne Airport, located approximately 17 miles from the project site. Therefore, no impact would occur in this regard. No mitigation is required.

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

Less Than Significant Impact: The following analysis is consistent with analysis provided in Section 4.20 (a) regarding potential conflicts with adopted emergency response associated with wildland fire hazards. According to the General Plan Safety Element, the County of Orange maintains an Emergency Response Plan which consists of both a detailed summary of the Countywide organization and a detailed description of the responsibility of each component agency in time of a disaster. The plan identifies the Orange County Operational Area Emergency Operation Center as being responsible for emergency support and protection.



Source: State of California, State Water Resources Control Board GeoTracker; January 2020.

The Orange County Fire Authority (OCFA) would provide emergency medical and fire protection support, and the Orange County Sheriff's Department (OCSD) would be responsible for coordinating law enforcement and traffic control operations in emergency situations. There is not an adopted emergency evacuation plan or pre-designated evacuation routes for Coto de Caza. Under the California Standardized Incident Command System (ICS), evacuation is a law enforcement function. The Orange County Sheriff's Department would be in charge of evacuating neighborhoods in the event of a fire that threatens homes. These evacuations would be decided within the Incident Command structure in consultation with the fire department, law enforcement, public works, and local government liaisons in order to establish when and where they would occur. Under the Ready Set Go program instituted in Orange County, citizens are encouraged to evacuate prior to an evacuation recommendation, advisory or order. Prior to issuance of occupancy permits, the applicant would work with the Orange County Sheriff's Department and the Orange County Fire Authority to confirm the standard for triggering voluntary evacuations and would establish a predecessor trigger for the Legacy at Coto project that would be approved by the County of Orange. To ensure safe evacuation from Coto de Caza an evacuation plan has been prepared for Legacy residents. Residents of the project would be evacuated before voluntary or mandatory evacuation orders are issued during a wildland fire. A special monetary fund would be established to charter buses from a charter bus company to evacuate residents in the event an emergency occurs. The use of the bus would be funded by the project and all residents would be required to be bused out of Coto de Caza. An adequate amount of buses would be provided to ensure seating for Legacy residents. Additionally, the funds would be used to house residents at local hotels until any danger passes. Additional safety qualified staff would also be provided during red flag warning days to assist residents. Fire drills would be practiced twice a year to ensure all residents and staff are well trained on the procedure.

During an emergency, primary access to the project would be from a fire safety compliant driveway accessed from Avenida La Caza. Secondary emergency access to the project would be provided from Via Alondra on the northern site perimeter. Additionally, as part of the project, a restricted access vehicle connection from Via Alondra to Via Venado would be provided only for fire safety purposes. The primary evacuation routes for the greater Coto community would be through a series of internal neighborhood roadways, which would connect with the primary egress roads, Coto de Caza Drive and Plano Trabuco Road, which intersects with the County's primary and major evacuation routes. All Legacy residents would be required to be evacuated by buses. The early evacuation of the residents by bus would reduce the overall amount vehicles on roads that would be used for evacuation, which would reduce potential traffic congestion and potentially increase response times to evacuate Coto de Caza. It is assumed that all residents would be evacuated by bus. The employees of Legacy and in the event some residents that are not able to be bused would need to be evacuated with private vehicles.

Based on the project traffic report, the proposed project would not generate a substantial amount of traffic that would cause congestion or queuing along project area roadways that might be used for evacuation. The increased traffic from the proposed project would be a negligible increase in vehicles evacuating compared to the overall amounts of vehicles that would be evacuated from Coto de Caza under the current condition and impacts would be less than significant. Because there are no adopted emergency response plans or emergency evacuation plans for Coto de Caza implementation of the proposed project would not impair any adopted emergency response plans or emergency evacuation plans. The proposed project would implement a pre-evacuation program to evacuate residents before voluntary or mandatory evacuation, which reduce traffic congestion and evacuation delays and enhance emergency responses to the project area and impacts would be less than significant. No mitigation is required.

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

Less Than Significant Impact: The following analysis is consistent with analysis provided in Section 4.20 regarding potential impacts associated with wildland fire hazards. According to the County of Orange General Plan Safety Element, the project site is within an area that has been designated as a Fire Hazard Area. The proposed project would replace existing structures and construct new structures. The project would be required to design, construct and maintain structures and access ways in compliance with local, regional, state requirements related to emergency access. These standards would ensure that structural and nonstructural architectural elements of the building would not impede emergency egress for fire safety staffing/personnel, equipment, and apparatus or hinder evacuation from fire. Additionally, the project includes evacuation procedures and protocols for evacuation in the event wildland fire occurs. The proposed project would be required to be reviewed by the Orange County Fire Authority and the County of Orange Building Department to ensure that building construction meets the minimum standards for fire safety as defined in the County Building Codes and County Fire Codes. Impacts would be less than significant. No mitigation is required.

STANDARD CONDITIONS OF APPROVAL

No Standard Conditions of Approval are required.

MITIGATION MEASURES

Mitigation Measure HAZ-1: Prior to demolition of buildings expected to contain asbestos containing building materials or lead paint, the Applicant shall prepare an asbestos and lead paint survey. In the event asbestos containing building materials or lead paint are identified, it shall be removed and disposed of in accordance with local, state and federal regulations.

REFERENCES

County of Orange, *County of Orange General Plan*, July 2014.

Department of Toxic Substances Control, website accessed December 2019.

Group Delta, *Phase 1 Environmental Site Assessment*, November 2018.

4.10 Hydrology and Water Quality

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
1) Result in substantial erosion or siltation on- or offsite?	☐	☐	☒	☐
2) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?	☐	☐	☒	☐
3) 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?	☐	☐	☒	☐
4) Impede or redirect flood flows?	☐	☒	☐	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☒	☐	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

ENVIRONMENTAL ANALYSIS

The following analysis is based on a Preliminary Water Quality Management Plan (WQMP) presented in Appendix F1 and a Preliminary Drainage Report presented in Appendix F2, both prepared by Huitt-Zollars International, in February 2020

Existing Setting

REGIONAL WATERSHED

The project site is located within the San Juan Creek Watershed. The watershed is approximately 176 square miles, extending from the Cleveland National Forest in the Santa Ana Mountains to the Pacific Ocean at Doheny State Beach near Dana Point Harbor. The watershed is comprised of 23 canyons with three primary watercourses, San Juan Creek, Trabuco Creek and Oso Creek. The San Juan Creek Watershed is bounded on the north by the Aliso Creek and Salt Creek watershed, and on the south by the San Mateo

Creek watershed. The Lake Elsinore Watershed, which is tributary to the Santa Ana River Watershed, is adjacent to the eastern edge of the San Juan Creek Watershed.

The project site drains in a general north to south direction with a mild slope into a natural earthen channel that forms the headwaters of Cañada Gobernadora. Surface water runoff flows south into Cañada Gobernadora for approximately 7.5 miles before entering San Juan Creek, where it flows an additional 7.5 miles southwest to outlet to the Pacific Ocean at Doheny State Beach. The downstream receiving water bodies include Cañada Gobernadora, San Juan Creek and Doheny Beach.

Cañada Gobernadora is a tributary to San Juan Creek. The creek begins in the foothills of the Santa Ana Mountains and flows south through residential, agricultural and undeveloped land, to its confluence with San Juan Creek, a few miles upstream of the City of San Juan Capistrano. The upper half of the stream is largely channelized and flows through golf courses, while the lower half is a wash-like earth-bottomed natural channel that can be up to 700 feet wide and is vegetated by trees and scrub. The stream receives some urban runoff from the residential communities higher in its watershed. Cañada Gobernadora forms an unofficial dividing line for the lower portion of the San Juan watershed; most urban development is confined to west of the creek's valley, while agricultural and undeveloped lands lie to the east of the creek (U.S. Army Corps of Engineers, 2002).

San Juan Creek is a 29-mile long stream that begins in the southern Santa Ana Mountains in the Cleveland National Forest and winds west and south through San Juan Canyon. The creek flows through residential Rancho Mission Viejo, crosses under Interstate 5, and enters a concrete flood control channel, turning south and receiving El Horno Creek from the north. It receives its largest tributary, Arroyo Trabuco, from the right, then flows south toward the Pacific Ocean. The creek forms a fresh water lagoon at the northern end of Doheny State Beach, which overflows into Capistrano Bay during periods of high flow.

Doheny Beach is a 62-acre park operated by the California State Parks. It is located at the ocean outfall of San Juan Creek on both the north and south sides of the creek in the City of Dana Point.

ONSITE CONDITIONS

The existing site is developed and consists of tennis courts, a pool, parking and offices. The existing site is approximately 75 percent impervious, with about 0.13 acres of undeveloped Waters of the State stream area. Elevations range from approximately 866 feet to 888 feet in elevation. Onsite drainage patterns consist of sheet flow east to west. A breakdown on the amounts of impervious area and pervious area on the project site are shown in Table 4.10-1, *Existing Site Cover*.

Table 4.10-1
Existing Site Cover

Land Use	Total Area (Acres)	Impervious Area (Acres)	Pervious Area (acres)	Impervious Percentage
Natural Scrub Cover	0.42	0	0.42	0%
Tennis Facility	3.44	2.58	0.86	75%
Total	**3.86**	**2.58**	**1.28**	**67%**

Source: Huitt-Zollars International, *Legacy at Coto Preliminary Water Quality Management Plan (WQMP)*, February 24, 2020.

Regulatory Framework

SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD BASIN PLAN

The downstream water bodies for the proposed project are located within the jurisdiction of the San Diego Regional Water Quality Control Board. The San Diego Region Basin Plan designates beneficial uses for

surface waters, coast streams and coastal waters in the region that are required to be protected. Additionally, the Basin Plan identifies impaired water bodies and environmental sensitive areas within the region that afford additional protection.

Beneficial Uses

The San Diego Region Basin Plan (Basin Plan) designates beneficial uses for surface waters in Cañada Gobernadora, San Juan Creek and Doheny Beach. The beneficial uses include quantitative and narrative criteria for a range of water quality constituents that are applicable to certain receiving water bodies in order to protect the beneficial uses. The beneficial uses in the Basin Plan are described in Table 4.10-2, *Beneficial Use Descriptions*.

Table 4.10-2
Beneficial Use Descriptions

Abbreviation	Beneficial Use
GWR	Groundwater Recharge waters are used for natural or artificial recharge of groundwater for purposes that may include, but are not limited to, future extraction, maintaining water quality or halting saltwater intrusion into freshwater aquifers.
REC 1	Water Contact Recreation waters are used for recreational activities involving body contact with water where ingestion of water is reasonably possible. These uses may include, but are not limited to, swimming, wading, water skiing, skin and scuba diving, surfing, whitewater activities, fishing and use of natural hot springs.
REC 2	Non-Contact Water Recreation waters are used for recreational activities involving proximity to water, but not normally body contact with water where ingestion of water would be reasonably possible. These uses may include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tide pool and marine life study, hunting, sightseeing and aesthetic enjoyment in-conjunction with the above activities.
WARM	Warm waters support warm water ecosystems that may include, but are not limited to, preservation and enhancement of aquatic habitats, vegetation, fish, and wildlife, including invertebrates.
LWARM	Limited Warm Freshwater Habitat waters support warm water ecosystems which are severely limited in diversity and abundance.
COLD	Cold Freshwater habitat waters support cold water ecosystems.
BIOL	Preservation of Biological Habitats of Special Significance waters support designated areas of habitats.
WILD	Wildlife Habitat waters support wildlife habitats that may include, but are not limited to, the preservation and enhancement of vegetation and prey species used by waterfowl and other wildlife.
RARE	Rare, Threatened or Endangered Species (RARE) waters support habitats necessary for the survival and successful maintenance of plant or animal species designated under state or federal law as rare, threatened or endangered.
MUN	Municipal and Domestic Supply waters are used for community, military, municipal or individual water supply systems. These uses may include, but are not limited to, drinking water supply.
AGR	Agricultural Supply waters are used for farming, horticulture or ranching. These uses may include, but are not limited to, irrigation, stock watering, and support of vegetation for range grazing.
IND	Industrial Service Supply waters are used for industrial activities that do not depend primarily on water quality. These uses may include, but are not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection and oil well depressurization.

Abbreviation	Beneficial Use
PROC	Industrial Process Supply waters are used for industrial activities that depend primarily on water quality. These uses may include, but are not limited to, process water supply and all uses of water related to product manufacture or food preparation.
NAV	Navigation waters are used for shipping, travel, or other transportation by private, commercial or military vessels.
POW	Hydropower Generation waters are used for hydroelectric power generation.
COMM	Commercial and sport fishing waters are used for commercial or recreational collection of fish or other organisms.
EST	Uses of water that support estuarine ecosystems including, but not limited to, preservation or enhancement of estuarine habitats, vegetation, fish, shellfish or wildlife.
WET	Uses of water that support wetland ecosystems including, but not limited to, preservation or enhancement of wetland habitats, vegetation, fish, shellfish, or wildlife, and other unique wetland functions which enhance water quality, such as providing flood and erosion control, stream bank stabilization, and filtration and purification of naturally occurring contaminants.
MAR	Use of water that support marine ecosystems including, but not limited to, preservation or enhancement of marine habitats, vegetation such as kelp, fish, shellfish or wildlife.
MIGR	Uses of water that support habitats necessary for migration, acclimatization between fresh and saltwater, or other temporary activities by aquatic organisms, such as anadromous fish.
SPWN	Use of water that supports high-quality aquatic habitats suitable for reproduction and early development of fish.
SHELL	Use of water that supports habitats suitable for the collection of filter-feeding shellfish for human consumption, commercial or sports purposes.
Source: California Water Boards, *Water Quality Control Plan for the San Diego Basin*, updated May 17, 2016.	

As shown in Table 4.10-3, *Study Area Water Body Beneficial Uses*, the Basin Plan identifies beneficial uses for the Cañada Gobernadora, San Juan Creek and Doheny Beach.

Table 4.10-3
Study Area Water Body Beneficial Uses

Beneficial Use	Cañada Gobernadora	San Juan Creek	Doheny Beach.
Municipal	NL	NL	NL
Groundwater	NL	NL	NL
Agriculture	E	E	NL
Industrial	E	E	NL
Industrial Processes	NL	NL	NL
Recreation 1	E	E	E
Recreation 2	E	E	E
Warm Waters	E	E	NL
Wild Waters	E	E	E
Rare Waters	NL	NL	E
Cold Water	E	E	NL
Marine	NL	NL	E
Abbreviations: E = Existing, NL = Not Listed Source: California Water Boards, *Water Quality Control Plan for the San Diego Basin*, updated May 17, 2016.			

Environmentally Sensitive Areas

The San Diego Regional Water Quality Control Board defines Environmentally Sensitive Areas (ESAs) as those areas that include, but are not limited to:

- All Clean Water Act (CWA) Section 303(d) impaired waters (see below).
- Areas designated as Areas of Special Biological Significance by the SWRCB in the Water Quality Control Plan for the San Diego Region (aka the Basin Plan).
- State Water Quality Protected Areas.
- Water bodies designated with the RARE Beneficial Use category by the SWRCB in the Basin Plan (RARE).
- Areas designated as preserves or their equivalent under the Natural Communities Conservation Planning Program (NCCP).
- Any other ESAs identified by the County.

There are no Environmentally Sensitive Areas within 10 miles of the project site, based on the Orange County Watersheds Environmental Data Portal.

Section 303(d) Water Bodies

Under Section 303(d) of the Clean Water Act, the SWRCB is required to develop a list of impaired water bodies. Each of the individual RWQCBs are responsible for establishing priority rankings and developing action plans, referred to as total maximum daily loads (TMDLs) to improve water quality of water bodies included in the 303(d) list. Approximately 14 miles downstream of the project site, the segment of San Juan Creek that empties into the Pacific Ocean and the mouth of San Juan Creek are listed on the Clean Water Act 2010 303(d) list of impaired waters. The Clean Water Act 303(d) listed pollutants in lower San Juan Creek are shown in Table 4.10-4, *2010 303(d) Listings for the San Juan Creek Watershed*.

Table 4.10-4
2010 303(d) Listings for the San Juan Creek Watershed

Water Body	Pollutant	Extent	Expected TMDL Completion Date
Pacific Ocean Shoreline, Lower San Juan HSA, at San Juan Creek	Bacteria Indicators: Enterococcus, Fecal Coliform, and Total Coliform	0.03 miles	2021
San Juan Creek (mouth)	Bacteria Indicator	1.02 miles and at mouth (6.3 acres)	2008
San Juan Creek	Indicator Bacteria	1.02 miles	2019
San Juan Creek	Dichlorodiphenyldichloroethylene (DDE)	1.02 miles	2019
San Juan Creek	Phosphorus	1.02 miles	2021
San Juan Creek	Selenium	1.02 miles	2021
San Juan Creek	Total Nitrogen as N	1.02 miles	2021
San Juan Creek	Toxicity	1.02 miles	2021

Source: Huitt-Zollars International, *Legacy at Coto Preliminary Water Quality Management Plan (WQMP)*, February 24, 2020.

Stormwater Management

Section 402 of the Clean Water Act established the National Pollution Discharge Elimination System (NPDES) to control water pollution by regulating point sources that discharge pollutants into Waters of the United States. In the State of California, the EPA has authorized the State Water Resources Control Board (SWRCB) to be the permitting authority to implement the NPDES program. The SWRCB issues two baseline general permits, one for industrial discharges and one for construction activities (General Construction Permit). Additionally, the NPDES Program includes the long-term regulation of storm water discharges from medium and large cities through the MS4 Permit Program.

Short-Term Storm Water Management

Storm water discharges from construction sites with a disturbed area of one or more acre are required to either obtain individual NPDES permits for storm water discharges or be covered by a General Construction Permit. Coverage under the General Construction Permit requires filing a Notice of Intent with the State Water Resources Control Board and preparation of Storm Water Pollution Prevention Plan (SWPPP). Each applicant under the Construction General Permit must ensure that a SWPPP would be prepared prior to grading and implemented during construction. The primary objective of the SWPPP is to identify, construct, implement, and maintain Best Management Practices (BMPs) to reduce or eliminate pollutants in storm water discharges and authorized non-storm water discharges from the construction site during construction. BMPs include programs, technologies, processes, practices, and devices that control, prevent, remove, or reduce pollution.

Long-Term Storm Water Management

The stormwater management regulatory requirements for the site include water quality requirements per the San Diego Regional Water Quality Board MS4 Permit, compliance with the Federal Emergency Management Agency (FEMA) floodplain requirements, flood control requirements imposed by local jurisdictions, and jurisdictional water regulations from the California Department of Fish and Wildlife (CDFW), San Diego Regional Water Quality Control Board (RWQCB), and United States Army Corps of Engineers (USACE).

The San Diego Regional Water Quality Control Board South OC MS4 Permit Order No. R9-2013-0001/NPDES No. CAS019266 designates the site as a redevelopment project that requires both water quality treatment and hydromodification mitigation. New and redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface (collectively over the entire project site) and consist primarily of one or more of the following uses":

- Restaurants. This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption.
- Parking Lots. This category is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce.
- Streets, Roads, Highways, Freeways, and Driveways. This category is defined as any paved impervious surface used for the transportation of automobiles, trucks, motorcycles, and other vehicles.

Under the South OC MS4 Permit, the site is required to treat the 85 percent 24-hour storm, 0.95 inches, at the site either by retention or biofiltration. Based on the findings of the geotechnical due diligence report, infiltration into native soils underlying the fill may be feasible if the groundwater level is low enough. If

infiltration is not feasible, the Permit states that the site can instead treat 150 percent of the 85 percent volume via biofiltration.

The site is not exempt from the San Diego Region hydromodification criteria because the site outlets to the non-exempt, natural channel in Cañada Gobernadora. The hydromodification control criteria states that the site must mitigate proposed development flows for 10 percent of the two-year through the 10-year to existing condition flows using a continuous simulation model such as the South Orange County Hydrology Model (SOHM).

Flood Management

As shown in Figure 4.10-1, *National Flood Hazard Map*, a FEMA Zone A floodplain overlaps a small area of the proposed building on the west of the site, as shown on FEMA FIRM 06059C0452J effective December 3, 2009. Zone A floodplains indicate that the area has a one percent annual exceedance probability flood risk with an unknown ponding depth. The development will have to meet FEMA requirements to maintain a minimum of one foot of freeboard between the floodplain and proposed building finished floor. In addition, if the proposed grading modifies a location within the floodplain, a Conditional Letter of Map Revision (CLOMR) must be submitted to FEMA to show the proposed change in the mapped floodplain.

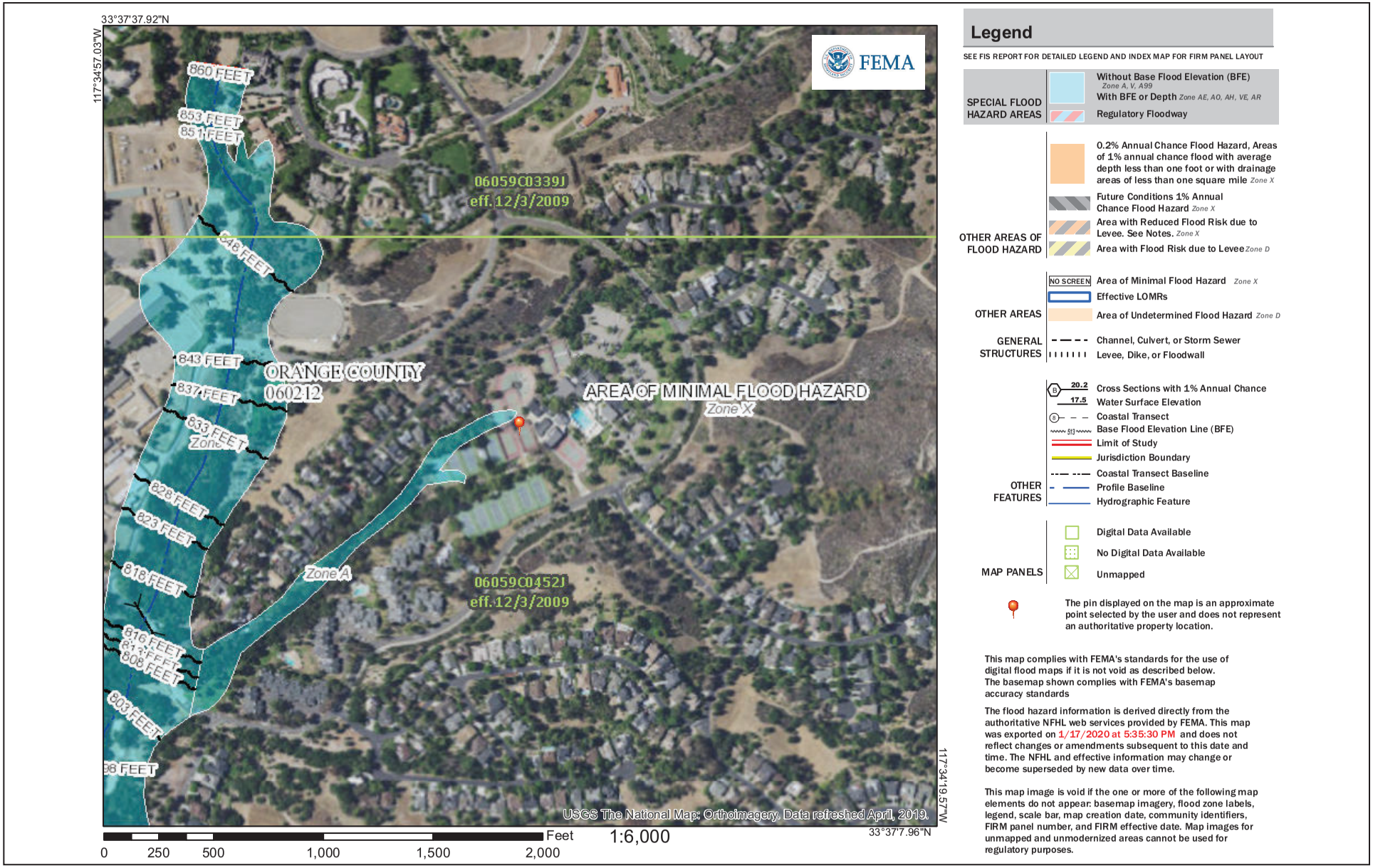
PROJECT IMPACTS

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

Less Than Significant Impact: The following analysis evaluates if the proposed project would conflict with beneficial uses or further impair any listed 303(d) Impaired Water Bodies established in the Regional Water Quality Control Board Basin Plan.

BENEFICIAL USES

The project site is expected to generate pollutants associated with roads, restaurant, parking lots and landscaping. Expected pollutants of concern would include bacteria, viruses, nutrients, pesticides, sediments, trash and debris, oil and grease. During construction, there would be the potential that degraded surface water runoff generated from the construction site could be conveyed into local drainage facilities. Depending on the constituents in the surface water, the water quality of project area surface water bodies could be reduced, which could conflict with beneficial uses established for the project area surface water bodies. The proposed project would disturb more than one acre of area and would, therefore, be required to obtain a NPDES State General Construction Permit from the State Water Resources Control Board. In accordance with the State General Construction Permit, the project Applicant would be required to file a Notice of Intent (NOI) to the Storm Water Report Tracking System and obtain a waste discharger identification number from the State Water Resources Control Board. Additionally, the General Construction Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would identify Best Management Practices (BMPs) to minimize degraded surface water runoff impacts. Such measures would include a site map that shows the construction site perimeter, existing and proposed buildings, parking areas, roadways, storm drain collection and discharge points before and after construction. Additionally, structural BMPs placement of such sandbags or waddles near drainages, use of rumble racks or wheel washers or other measures would be implemented to avoid sediment transport. The SWPPP would be reviewed and approved by the County of Orange for water quality construction activities onsite. Construction activities would also be required to comply with Division 13, Stormwater Management and Urban Runoff-County Regulations, of the Municipal



Source: Federal Emergency Management Agency (FEMA); January 17, 2020.

Code and Standard Conditions WQ04 and WQ05. Standard Condition WQ04 would ensure development of a SWPPP and compliance with applicable water quality controls during construction, and Standard Condition WQ05, which would require an Erosion and Sediment Control Plan. Compliance with the NPDES short-term regulatory requirements, Standard Condition WQ04, and Standard Condition WQ05 would reduce short-term construction related impacts to water quality to a less than significant level. No mitigation is required.

The long-term operation of the proposed project would generate surface water runoff that could contain pollutants that could conflict with project area surface water beneficial uses. The proposed project would be regulated under NPDES Municipal Stormwater Permits issued by the San Diego Regional Water Quality Control Board. The proposed project would be required to comply with County of Orange Stormwater Program requirements to reduce the amount of impervious areas and capture and treat or infiltrate stormwater runoff. The Stormwater Program's specific water pollutant control elements are documented in the Drainage Area Management Plan (DAMP). The DAMP satisfies the NPDES permit conditions for creating and implementing a stormwater management program. The intent of the DAMP is to reduce pollutant discharges to the maximum extent practicable for the protection of water quality and beneficial uses at receiving water bodies. DAMP contains guidance on both structural and non-structural BMP's for meeting these goals. With implementation of the DAMP requirements, the proposed project would be required to prepare a WQMP in accordance with the requirements of the non-point source NPDES Permit for Waste Discharge Requirements. The WQMP prepared for the proposed project would treat onsite low flows with modular wetland bioretention systems. Additionally, non-structural and structural BMP's would be implemented to maintain water quality, non-structural BMP's could include education of residents, common area landscape management, litter control, catch basin inspection, and street and parking lot sweeping. Structural BMP's could include storm drain system stenciling, design outdoor hazardous material storage areas to reduce pollutant introduction, design trash enclosures to reduce pollutant introduction. The proposed project would be required to comply with the following Standard Conditions of Approval:

- Standard Condition D01b would require drainage studies to ensure proper drainage and flood control management.
- Standard Condition D02b would ensure proper consent from upstream and/or Downstream property owners permitting drainage diversions and/or unnatural concentrations.
- Standard Condition D09a would require delineation of the flood plain on the grading plan to ensure proper flood protection.
- Standard Condition WQ01 would ensure implementation of a WQMP.
- Standard Condition WQ03 would ensure implementation WQMP BMP's and Operations and Maintenance Plans for all structural BMP's.

Compliance with Standard Conditions and WQMP non-structural and structural and treatment control measures would reduce long-term operation impacts to water quality to a less than significant level. No mitigation is required.

SECTION 303(d) IMPAIRED WATER BODIES

As shown previously in Table 4.10-4, *2010 303(d) Listings for the San Juan Creek Watershed*, Total Maximum Daily Loads (TMDLs) have been established or are in preparation for the project's receiving water bodies. Although it is unlikely that the construction and operation of the proposed project would generate elevated levels of bacteria, phosphorous, selenium, nitrogen or toxins that would be discharged or conveyed into Cañada Gobernadora, San Juan Creek or the Pacific Ocean. During construction, the proposed project

would be required to implement a SWPPP in compliance with Standard Condition WQ04 and in accordance with State Water Resources Control to maintain water quality. Additionally, non-structural, structural and treatment control measures would be implemented in accordance with the County of Orange Model Water Quality Management Plan. Compliance with SWRCB Construction General Permit requirements in conjunction with the implementation of the project WQMP would avoid further impairment to downstream impaired water bodies resulting in a less than significant impacts. No mitigation is required.

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

No Impact: The project area is not within an area that has a managed groundwater basin. The proposed project would have no activities that would extract groundwater or interfere with groundwater recharge activities. No mitigation is required.

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

1) Result in substantial erosion or siltation on- or offsite?

Less Than Significant Impact: During earthwork activities, there would be the potential that uncovered soils on the project site could be exposed to water erosion and/or wind erosion impacts. Additionally, there would be the potential that construction vehicles and construction equipment could transport sediment onto local streets and into local drainage systems. The proposed project would disturb more than one acre of area and would be required to obtain a General Construction Permit from the State Water Resources Control Board. The General Construction Permit would require preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) to avoid erosion and sediment transfer impacts. Additionally, the proposed project would be required to comply with the following:

- Division 13, Stormwater Management and Urban Runoff-County Regulations, of the County Municipal Code
- Standard Condition D01b
- Standard Condition D02b
- Standard Condition D03a
- Standard Condition D09a
- Standard Condition WQ01
- Standard Condition WQ03
- Standard Condition WQ04
- Standard Condition WQ05

Compliance with the Standard Conditions and NPDES Permit requirements including preparation of a SWPPP would reduce the potential for erosion and sediment transport discharged from the project site to a less then significant level. Therefore, implementation of the proposed project would not substantially alter the existing drainage. No mitigation is required.

2) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

Less Than Significant Impact: The project site currently drains southerly and westerly to existing drainage channels. As shown in Table 4.10-5, *Proposed Land Cover*, the construction of the proposed project would result in an increase in impervious area by over the current condition, which would increase the rate of surface water generated from the site. As part of the improvements for the proposed project, a new underground storm drain would be constructed to route flows around and through the project site. According the Hydrology Study prepared for the proposed project, the proposed drainage system would be able to accommodate increased surface water flows generated from the project site. Additionally, the proposed project would be required to comply with Standard Condition D01b, Standard Condition D02b, Standard Condition D03a, Standard Condition D05 and Standard Condition D09a. With compliance with the Standard Conditions, the proposed project would not 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 offsite. Potential impacts would be less than significant. No mitigation is required.

Table 4.10-5
Proposed Land Cover

Condition	Pervious (Acres)	Percentage	Impervious Area (Acres)	Percentage
Pre-Project Condition	1.28	33%	2.58	67%
Post Project Condition	0.77	20%	3.09	80%

Source: Huitt-Zollars International, *Legacy at Coto Preliminary Water Quality Management Plan (WQMP)*, February 24, 2020.

3) 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: Implementation of the proposed project would not exceed the capacity of planned and/or existing stormwater drainage facilities. Onsite drainage would be collected and treated and mitigated per current County of Orange requirements. The site is divided into four Drainage Management Areas DMAs; refer to Figure 3-11, *Preliminary Drainage Plan*. DMA 1 (A) consists of the northern portion of the site, subareas A1 and A2. DMA 2 (B) consists of the southwestern portion of the site, subarea B1. DMA 3 (C) consists of the southeastern portion of the site, subareas C1 and C2. Subarea D consists of two natural, self-retaining areas in the creek (D1 and D2) that will not be developed and will not require treatment. All DMAs discharge to the existing earthen drainage channels west of the site. Treatment in all DMAs is planned to be via proprietary modular wetland bioretention systems. Additionally, the proposed project would be required to comply with NPDES Permit requirements and Municipal Code regulations and Standard Condition D01b, Standard Condition D02b, Standard Condition D03a, Standard Condition D09a, Standard Condition WQ01, Standard Condition WQ03, Standard Condition WQ04, and Standard Condition WQ05. With compliance with NPDES Permit requirements, Municipal Code regulations and Standard Conditions potential water impacts would be less than significant. No mitigation is required.

4) Impede or redirect flood flows?

Less Than Significant Impact With Mitigation Incorporated: A FEMA Zone A floodplain overlaps a small area of the proposed building on the west of the site, as shown on FEMA FIRM 06059C0452J effective December 3, 2009. Zone A floodplains indicate that the area has a one percent annual exceedance probability flood risk with an unknown ponding depth. To ensure flood flows are not impeded or redirected, the proposed project would have to meet FEMA requirements to maintain a minimum of one foot of freeboard between the floodplain and proposed building finished floor. The proposed project would be required to implement Standard Condition D05, which would require the project to submit an Elevation Certificate to the Manager, Current Planning Services, identifying the base flood elevation and certifying that the planned elevation of the lowest floor, including basements, is at least one foot above the Base Flood Elevation. Additionally, the proposed project would be required to submit a Conditional Letter of Map Revision (CLOMR) to FEMA to show the proposed change in the mapped floodplain. With the implementation Standard Condition D05 and Mitigation Measure HWQ-1, potential flood flow impacts would be less than significant.

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

Less Than Significant Impact With Mitigation Incorporated: According to the County of Orange General Plan, the project site is not located near the coastline or near a body of stored water. Therefore, the project would not be at risk for a tsunami or seiche that could potentially release pollutants. However, the project would implement a Water Quality Management Plan (WQMP) that retains and treats surface water flows which would further reduce the risk for the release of pollutants. The project site would be raised above the 100-year flood plain which would reduce flood flows across the site and the potential conveyance of pollutants to the local drainage systems. The proposed project would be required to submit a Conditional Letter of Map Revision (CLOMR) to FEMA to show the proposed change in the floodplain. With the implementation of Standard Condition D05 and Mitigation Measure HWQ-1, potential flood flow impacts would be less than significant.

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

Less Than Significant Impact: Implementation of the proposed project would not conflict with beneficial uses established for receiving water bodies for the project, would not conflict with water quality objectives or further impair and existing impaired water bodies. The proposed project would implement a SWPPP, WQMP BMPs and would treat onsite low flows to protect beneficial uses for surface waters identified in the San Diego Regional Water Quality Control Board Basin Plan.

The California Sustainable Groundwater Management Act (SGMA) was passed in 2014. The law provides increased authority for local agencies to manage groundwater and requires that most groundwater basins be under sustainable management within 20 years in a manner that would be maintained without causing undesirable results. According to the County of Orange General Plan Figure VI-8, Orange County Basin, the project site is not within an area that has a managed groundwater basin. Therefore, implementation of the proposed project would not conflict or obstruct implementation of a sustainable groundwater management plan resulting in less than significant impacts. No mitigation is required.

STANDARD CONDITIONS OF APPROVAL

Standard Condition D01b: Prior to the issuance of any Grading Permits, the following drainage studies shall be submitted to and approved by the Director, OC Development Services, or designee:

A. A drainage study of the project including diversions, offsite areas that drain onto and/or through the project, and justification of any diversions; and

B. When applicable, a drainage study evidencing that proposed drainage patterns will not overload existing storm drains; and

C. Detailed drainage studies indicating how the project grading, in conjunction with the drainage conveyance systems including applicable swales, channels, street flows, catch basins, storm drains, and flood water retarding, will allow building pads to be safe from inundation from rainfall runoff which may be expected from all storms up to and including the theoretical 100-year flood.

Standard Condition D02b: Prior to the issuance of any Grading Permits, the Applicant shall in a manner meeting the approval of the Director, OC Development Services, or designee:

1. Design provisions for surface drainage; and

2. Design all necessary storm drain facilities extending to a satisfactory point of disposal for the proper control and disposal of storm runoff; and

3. Dedicate the associated easements to the County of Orange, if determined necessary.

Prior to the issuance of any Certificates of Use and Occupancy, said improvements shall be constructed in a manner meeting the approval of the Manager, Construction.

Standard Condition D03a: Prior to the issuance of any Grading Permit, and if determined necessary by the Director, OC Development Services, or designee, the Applicant shall record a letter of consent, from the upstream and/or downstream property owners permitting drainage diversions and/or unnatural concentrations. The form of the letter of consent shall be approved by the Director, OC Development Services, or designee, prior to recordation of the letter.

Standard Condition D05a: Prior to the issuance of a building permit per Zoning Code Section 7-9-113, the applicant shall submit an Elevation Certificate to the Manager, Current Planning Services, identifying the base flood elevation and certifying that the planned elevation of the lowest floor, including basements, is at least one (1) foot above the Base Flood Elevation (BFE). (NOTE: To eliminate FEMA requirements for flood insurance, the lowest elevation of any part of the structure, not only the lowest floor, must be above the BFE.)

Standard Condition D05b: Prior to the issuance of certificates of use and occupancy for any building, the applicant shall complete Section "E" of the Elevation Certificate, identifying the Base Flood Elevation (BFE) and certifying the as built lowest floor, including basements, as constructed, is at least one (1) foot above the BFE, in a manner meeting the approval of the Manager, Building Inspection Services. (NOTE: To eliminate FEMA requirements for flood insurance, the lowest elevation of any part of the structure, not only the lowest floor, must be above the BFE.)

Standard Condition D09a: Prior to the issuance of any Grading Permits, Applicant shall delineate on the grading plan the floodplain which affects the property, in a manner meeting the approval of the Director, OC Development Services, or designee.

Standard Condition WQ01: Prior to the recordation of any Final Subdivision Map (except those maps for financing or conveyance purposes only) or the issuance of any Grading or Building Permit (whichever comes first), the Applicant shall submit for review and approval by the Manager, Inspection Services Division, a Water Quality Management Plan (WQMP) specifically identifying Best Management Practices (BMPs) that will be used onsite to control predictable pollutant runoff. This WQMP shall identify, at a minimum, the routine structural and non-structural measures specified in the current Drainage Area Management Plan (DAMP). The WQMP may include one or more of the following:

- Discuss regional water quality and/or watershed programs (if available for the project);
- Address Site Design BMPs (as applicable) such as minimizing impervious areas, maximizing permeability, minimizing directly connected impervious areas, creating reduced or "zero discharge" areas, and conserving natural areas;
- Include the applicable Routine Source Control BMPs as defined in the DAMP; and
- Demonstrate how surface runoff and subsurface drainage shall be managed and directed to the nearest acceptable drainage facility (as applicable), via sump pumps if necessary.

Standard Condition WQ03: Prior to the issuance of a Certificate of Use and Occupancy, the Applicant shall demonstrate compliance with the WQMP in a manner meeting the satisfaction of the Manager, Inspection Services Division, including:

- Demonstrate that all structural Best Management Practices (BMPs) described in the project's WQMP have been implemented, constructed, and installed in conformance with approved plans and specifications;
- Demonstrate that the Applicant has complied with all non-structural BMPs described in the project's WQMP;
- Submit for review and approval an Operations and Maintenance (O&M) Plan for all structural BMPs for attachment to the WQMP;
- Demonstrate that copies of the project's approved WQMP (with attached O&M Plan) are available for each of the incoming occupants;
- Agree to pay for a Special Investigation from the County of Orange for a date (12) twelve months after the issuance of a Certificate of Use and Occupancy for the project to verify compliance with the approved WQMP and O&M Plan; and
- Demonstrate that the Applicant has agreed to and recorded one of the following: 1) the CC&R's (that must include the approved WQMP and O&M Plan) for the project Home Owner's Association; 2) a water quality implementation agreement that has the approved WQMP and O&M Plan attached; or 3) the final approved Water Quality Management Plan (WQMP) and Operations and Maintenance (O&M) Plan.

Standard Condition WQ04: Prior to the issuance of any Grading or Building Permits, the Applicant shall demonstrate compliance under California's General Permit for Stormwater Discharges Associated with Construction Activity by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) Number or other proof of filing in a manner meeting the satisfaction of the Director, OC Development Services, or designee. Projects subject to this requirement shall prepare and implement

a Stormwater Pollution Prevention Plan (SWPPP). A copy of the current SWPPP shall be kept at the project site and be available for County review on request.

Standard Condition WQ05: Prior to the issuance of any Grading or Building Permit, the Applicant shall submit an Erosion and Sediment Control Plan (ESCP) in a manner meeting approval of the Director, OC Development Services, or designee, to demonstrate compliance with local and state water quality regulations for grading and construction activities. The ESCP shall identify how all construction materials, wastes, grading or demolition debris, and stockpiles of soil, aggregates, soil amendments, etc. shall be properly covered, stored, and secured to prevent transport into local drainages or coastal waters by wind, rain, tracking, tidal erosion or dispersion. The ESCP shall also describe how the Applicant will ensure that all BMP's will be maintained during construction of any future public rights-of-way. A copy of the current ESCP shall be kept at the project site and be available for County review on request.

MITIGATION MEASURES

Mitigation Measure HWQ-1: Prior to grading permits for the proposed project, the Applicant shall submit a Letter of Map Revision to FEMA for approval identifying that the project site has been raised to where it is located outside of the 100-year flood plain.

REFERENCES

California Water Boards, *Water Quality Control Plan for the San Diego Basin*, updated May 17, 2016.

County of Orange, *Codified Ordinances of the County of Orange*, codified through Ordinance No. 16-002, enacted March 15, 2016 (Supplement No. 130).

County of Orange, *Drainage Area Management Plan*, July 1, 2003.

County of Orange, General Plan, 2015. https://www.ocpublicworks.com/ds/planning/generalplan. Retrieved 2020-06-09.

County of Orange, *Standard Conditions of Approval*.

Federal Emergency Management Agency, *Flood Insurance Rate Map FEMA FIRM 06059C0452J*, February 2020.

Huitt-Zollars International, *Legacy at Coto Preliminary Drainage Report,* February 24, 2020.

Huitt-Zollars International, *Legacy at Coto Preliminary Water Quality Management Plan (WQMP)*, February 24, 2020.

U.S. Army Corps of Engineers. "San Juan Creek Watershed Management Study: Feasibility Phase" (PDF). www.ocwatersheds.com. August 2002. Archived from the original (PDF) on 2006-03-13. Retrieved 2009-06-14.

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4.11 Land Use and Planning

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Physically divide an established community?	☐	☐	☐	☒
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

ENVIRONMENTAL ANALYSIS

The parking demand analysis was prepared as part of the Zoning Code requirements for senior living facilities and was prepared by Stantec Consulting Services Inc. in April 2020. The memorandum is presented in Appendix G.

a) Physically divide an established community?

No Impact: The project site is currently developed and situated within a suburban setting. The project site is within the vicinity of existing single-family and multiple land uses. The proposed project would remove the tennis college structures and facilities on the project site and replace them with a senior citizen living facility. The proposed project would be consistent with surrounding land uses and would not result in any adverse land use compatibility impacts. The project would not divide Coto de Caza, as it would not introduce any physical barriers between the project site and surrounding area. Therefore, no impacts would occur. No mitigation is required.

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

No Impact: The relevant planning programs for the project site would be the County of Orange General Plan, the Coto de Caza Specific Plan and the Orange County Zoning Code.

COUNTY OF ORANGE GENERAL PLAN LAND USE ELEMENT

The County of Orange General Plan Land Use Element designates the project site Suburban Residential (1B). In accordance with the General Plan, areas designated Suburban Residential (1B) are characterized by a wide range of housing types, from estates on large lots to attached dwelling units, including townhomes, condominiums and clustered arrangements. The proposed project would be attached housing which would be consistent with the type of housing allowed under the General Plan Land Use Element Suburban Residential (1B) land use category.

As shown previously in Table 3-4, the proposed project includes a wide range of amenities that would be only available to residents. The only amenity that would be available to other Coto de Caza residents would be the proposed bistro and walking pathway. The proposed bistro component of the proposed project would be considered a Neighborhood Commercial use.

Under the County General Plan, Neighborhood/Commercial uses are assumed to be consistent with Suburban Residential (1B) areas, subject to compliance to the Neighborhood Commercial Guidelines

provided in the General Plan. Table 4.11-1, *Neighborhood Commercial Guidelines Consistency*, provides a consistency analysis of the proposed bistro with Neighborhood Commercial Guidelines.

Table 4.11-1
Neighborhood Commercial Guidelines Consistency

Neighborhood Commercial Guideline	Consistency Analysis
1. To encourage the development of commercial activities in centers with unified planning, design, and facilities (such as parking, ingress and egress).	**Consistent:** The proposed bistro has been aesthetically integrated into the design of the senior living residential building. Available parking for the bistro would be provided at the adjacent Coto Valley Country Club.
2. To locate commercial development at intersections of primary and secondary streets wherever possible. When local commercial development must be located adjacent to major intersections, access should be from the lesser of the two arterials.	**Consistent:** The proposed bistro would be accessed by Avenida La Caza which is the primary roadway for residents within the project area. The access to the site has been designed to accommodate both pedestrian and vehicle access.
3. To locate commercial development so that wherever possible, it is centrally located within its service area.	**Consistent:** The proposed bistro would be in a location where it could be easily accessed by either walk up traffic or vehicular traffic.
4. To locate commercial sites at an optimal distance from regional and community commercial centers.	Not Applicable.
5. To locate, generally, neighborhood commercial centers one mile apart.	Not Applicable.
6. To encourage adequate pedestrian and bicycle connections to neighborhoods and adjacent retail and service uses.	**Consistent:** The proposed bistro would be located 0.10 miles from existing residential uses and could easily be accessed by walking or biking.
7. To accommodate all modes of transportation by incorporating appropriate design features and supporting development of a comprehensive trails and bike system.	**Consistent:** The proposed bistro would be located 0.10 miles from existing residential uses and could easily be accessed by walking, biking and by automobile for residents outside of the Village community within Coto de Caza.
8. To manage parking efficiently and provide easily accessible and well-designed bicycle parking.	**Consistent:** The project would provide dedicated bicycle parking near the proposed bistro. A total of 25 dedicated parking spaces would be available at the Coto Valley Country Club for the bistro. The proposed site plan has been designed to allow for adequate pedestrian and vehicle access to the project site.
9. To set a general standard of one acre of commercial development per 1,000 people in the service area. Because there are no absolute criteria for neighborhood commercial acreage needed to adequately service a given number of people, this standard should be tempered by the character of each particular area.	**Consistent:** There is currently a limited amount of neighborhood commercial areas located in Coto de Caza. The proposed bistro would provide a neighborhood use for residents in Coto de Caza.
10. To set a general standard of three to ten acres for neighborhood commercial developments.	Not Applicable.
11. To require the developer of a commercial center to provide a statistical demand analysis of the market service area at the time of the zoning request in order to assist in determining its adequacy and appropriateness.	Not Applicable.

Neighborhood Commercial Guideline	Consistency Analysis
12. To review regularly and evaluate excessive undeveloped commercial zoning for its appropriateness and its ability to serve the County.	Not Applicable.

COTO DE CAZA SPECIFIC PLAN, ORANGE COUNTY ZONING CODE

In accordance with Section 7-9-38 of the Orange County Zoning Code, senior living facilities are defined as providing care and services on a monthly basis or longer to residents aged sixty (60) years of age or older and may include: Independent living (IL) facilities that are intended for individuals who are presently able to manage an independent lifestyle, but foresee a future where more support will be necessary. IL residents are provided with assistance in the instrumental activities of daily living, such as: dining, housekeeping, security, transportation and recreation. IL dwelling units may have separate kitchens and garages.

The zoning for the project site is provided within the Coto de Caza Specific Plan. In accordance with the County Zoning Code Section 7-9-142, a senior living facility may be permitted in any district, planned community, or in any specific plan area zoned for multi-family residential or commercial uses subject to the approval of a use permit by the planning commission unless otherwise authorized by an administrative site development permit in accordance with the base district regulations. Development standards shall be per the base district unless the approving authority makes the appropriate findings to approve a modified development standard. Each senior living facility use permit or site development permit application shall be reviewed on a case-by-case basis and shall:

1) Demonstrate compatibility with adjacent development.
2) Provide a parking study that will be used to determine if a modification to the base district parking standards will be necessary.
3) Provide the location of all services and how they are accessed by residents and non-residents, including deliveries and including universal design features in compliance with the Americans with Disabilities Act (ADA).

Project Consistency

Senior Living Facility Definition: The proposed project would meet the intent of the County's Zoning Code definition of senior living facility, in that the project would be restricted to persons that are 60 years of age or older and would provide assistance to meet day-to-day household and recreation needs with a wide range of services and amenities.

Demonstrate Compatibility with Adjacent Development: The County of Orange General Plan designates the project site Suburban Residential (1B), which allows a wide range of housing types, from estates on large lots to attached dwelling units (townhomes, condominiums, and clustered arrangements). The proposed project is an attached housing project that would be an allowable housing type under the Suburban Residential (1B) land use designation.

The project site is currently developed and in a deteriorated condition. As shown in Table 4.11-2, *Surrounding Zoning Uses*, the project site is surrounded by areas that are zoned for medium density residential land uses; refer to Figure 3-5, *Development Map*. Existing land uses within the vicinity of the site include recreation, open space, single-family residential, and multiple-family residential land uses.

Table 4.11-2
Surrounding Zoning Uses

Direction	General Plan Designation	Zoning	Existing Land Use
North	Suburban Residential (1B)	Medium Density Residential	Open Space
East	Suburban Residential (1B)	Medium Density Residential	Coto de Caza Valley Country Club
South	Suburban Residential (1B)	Medium Density Residential	Open Space and Single-Family Residential Uses
West	Suburban Residential (1B)	Medium Density Residential	Tennis courts and Single-Family Residential Uses

The project has incorporated project design features to ensure compatibility with existing land uses. The project proposes a landscape setback around the perimeter of the site to create a buffer to adjacent land uses. The setback area would incorporate a combination of trees, shrubs along an existing arroyo, which would soften views and reduce the visual presence of the project along Avenida La Caza, creating a park-like setting around the project site. The project would be situated below grade along Via Alondra which would reduce the visual height at street level and would be comparable with heights of other existing residential structures in the project area. A heavy landscaped setback with trees, shrubs and a decomposed granite trail would be provided between Via Alondra and the project to complement existing open space and landscaping provided in the project area. Additionally, the project incorporates the following design features to ensure the operation of the project would be compatible with adjacent existing land uses in the project area:

- A self-contained underground parking facility would be provided, which would help avoid nuisance noises typically associated with large open surface parking areas. Additionally, the closest surface parking areas on the southern and eastern side of the project site is approximately 100 feet away from existing residential uses.
- All rooftop mounted HVAC equipment will be fully shielded or enclosed from the line of sight of adjacent residential uses. The shielding/parapet wall should be at least as high as the equipment and not less than six feet tall.
- All pool/spa equipment and mechanical pumps will be fully shielded from the line of sight of any adjacent residential property or onsite residential unit or enclosed within an equipment room.
- No outdoor music, audio equipment, sound amplifying equipment, or performance of live music will be permitted at the outdoor patio areas and pool deck on the project site.
- The secondary access to the project off of Via Alondra would be gated and shall be restricted to emergencies only. No resident drop-off or passenger staging would be permitted.
- All vehicles accessing the site, including trucks associated with deliveries and trash pick-up, will access the project site via Avenida La Caza.
- No truck loading/unloading activities or idling shall be allowed on the Via Alondra access.
- Delivery, loading/unloading activity, and trash pick-up hours will be limited to daytime (7:00 AM – 6:00 PM) hours only.
- Engine idling time for all delivery vehicles and moving trucks will be limited to five minutes or less. Signage will be posted in the designated loading areas to enforce the idling restrictions.

Parking Study: The proposed project would provide 101 parking spaces for residents, and 19 for employees and guests. An additional 25 parking spaces would also be available at the adjacent Coto Valley Country Club. A parking study was prepared for the proposed project based on the project's former residential unit count of 110 residential units. The parking study utilized Institute of Traffic Engineering (ITE) parking rate for Senior Adult Housing – Attached (Land Use: 252) of 0.66 spaces per unit. This rate includes all parking demand comprised of resident, staff, and guest vehicles. Similarly, the ITE parking rate for the Shopping Center (Land Use: 820) of 4.1 spaces per 1,000 square feet of gross leasable area (GLA) was also used. As shown in Table 4.11-3, *Project Parking Demand*, based on the ITE parking rates discussed above, the proposed project requires a total of 68 parking spaces—67 spaces for the residential use, and an additional one space for the specialty retail use. The project proposes to provide 120 onsite parking spaces which exceeds the parking demand by 52 parking spaces, a surplus of 76 percent.

Table 4.11-3
Project Parking Demand

Category	Units	Parking Rate	Parking Demand
Senior Adult Housing Attached	101 DU	0.66	67
Shopping Center	0.188 TSF	4.1	1
Total Parking			**68**

Abbreviations: DU = Dwelling Unit, TSF = Thousand Square Feet
Source: Stantec Consulting Services Inc., *Parking Analysis Memorandum*, April 13, 2020.

Americans with Disabilities Act (ADA): The proposed project has been designed to be compliant with the American Disabilities Act to facilitate ADA access within the building. As shown on Figure 3-6a, *Site Plan*, ADA parking spaces have been incorporated into the project to facilitate access from the parking area to the residential building. As part of the County of Orange building review of the project, the project would be required to demonstrate that it would be compliant with the Americans with Disabilities Act (ADA).

Base Zoning District Site Requirements: The zoning for the project site is established in the Coto de Caza Specific Plan. The project site is located within Planning Area 20 and zoned for Community Center/Commercial uses. In accordance with Section 7-9-142, the project site development standards must be in accordance with the base district regulations. As shown in Table 4.11-4, *Community Center/Commercial Requirements*, the proposed project would be consistent with the Community Center/Commercial site requirements.

Overall, the proposed project would be consistent with the County General Plan, Coto de Caza Specific Plan and the County Code and therefore, would not conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project adopted for purposes of avoiding or mitigating an environmental effect. Potential impacts would be less than significant. No mitigation is required.

Table 4.11-4
Community Center/Commercial Requirements

Site Development Standard	Coto de Caza Specific Plan Community Center/ Commercial Requirement	Proposed Project
Building Height	40 Feet	40 Feet
Site Coverage	50 Percent	29 Percent
Front Yard Setback	20 Feet	20 Feet
Side Yard Setback	20 Feet	20 Feet
Rear Yard Setback	20 Feet	20 Feet

STANDARD CONDITIONS OF APPROVAL

No Standard Conditions of Approval are required.

MITIGATION MEASURES

No Mitigation Measures are required.

REFERENCES

County of Orange, *County of Orange General Plan, Land Use Element*, October 2015.

Planner's Annex, *Coto de Caza Specific Plan (Amendment 3)*, adopted August 8, 1995.

Stantec Consulting Services Inc., *Parking Analysis Memorandum*, April 13, 2020.

4.12 Mineral Resources

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

ENVIRONMENTAL ANALYSIS

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact: According to Figure VI-3, Resources Element, of the County General Plan, no mineral resources have been identified within the project site. Further, the site is designated for Suburban Residential (1B) and Community Center/Commercial and is not planned for mineral resource extraction. Additionally, the project site has been disturbed with previous development and has not historically been associated with mineral resources. Therefore, implementation of the proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state, and no impacts would occur. No mitigation is required.

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact: According to Figure VI-3, Resources Element, of the County General Plan, implementation of the proposed project would not 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. Therefore, no impacts would occur. No mitigation is required.

STANDARD CONDITIONS OF APPROVAL

No Standard Conditions of Approval are required.

MITIGATION MEASURES

No Mitigation Measures are required.

REFERENCES

County of Orange, *County of Orange General Plan, Resources Element*, July 2014.

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4.13 Noise

Would the project result in:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☒	☐	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

ENVIRONMENTAL ANALYSIS

The following analysis is based on a Noise Study prepared by RK Engineering Group (RK) in February 25, 2020 and is presented in Appendix H.

Background

NOISE LEVELS

Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz). Sound pressure level is measured on a logarithmic scale with the 0 B level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of three dBA, and a sound that is 10 dBA less than the ambient sound level has no effect on ambient noise. Because of the nature of the human ear, a sound must be about 10 dBA greater than the reference sound to be judged as twice as loud. In general, a three dBA change in community noise levels is noticeable, while a one to two dB change is generally not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while arterial streets are in the 50-60+ dBA range.

SOUND ATTENUATION

Noise levels typically attenuate (or drop off) at a rate of six dBA per doubling of distance from point sources (i.e., industrial machinery). Additionally, noise levels may also be reduced by intervening structures; generally, a single row of buildings between the receptor and the noise source reduces the noise level by about five dBA, while a solid wall or berm reduces noise levels by approximately seven dBA. The manner in which older homes in California were constructed (approximately 30 years old or older) generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows. The exterior-to-

interior reduction of newer residential units and office buildings construction to California Energy Code standards is generally 30 dBA or more (Harris, Miller, Miller and Hanson, 2006).

NOISE METRICS

One of the most frequently used noise metrics that considers both duration and sound power level is the equivalent noise level (Leq). The Leq is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). Typically, Leq is summed over a one-hour period. Lmax is the highest RMS (root mean squared) sound pressure level within the measuring period, and Lmin is the lowest RMS sound pressure level within the measuring period. The time period in which noise occurs is also important since noise that occurs at night tends to be more disturbing than that which occurs during the day. Community noise is usually measured using Day-Night Average Level (Ldn), which is the 24-hour average noise level with a 10 dBA penalty for noise occurring during nighttime (10:00 PM to 7:00 AM) hours, or Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a five dBA penalty for noise occurring from 7:00 PM to 10:00 PM and a 10 dBA penalty for noise occurring from 10:00 PM to 7:00 AM Noise levels described by Ldn and CNEL usually do not differ by more than one dB. Daytime Leq levels are louder than Ldn or CNEL levels; thus, if the Leq meets noise standards, the Ldn and CNEL are also met.

Regulatory Programs

FEDERAL

The Federal Noise Control Act (1972) addressed the issue of noise as a threat to human health and welfare. To implement the Federal Noise Control Act, the U.S. Environmental Protection Agency (EPA) undertook a number of studies related to community noise in the 1970s. The EPA found that 24-hour averaged noise levels less than 70 dBA would avoid measurable hearing loss, levels of less than 55 dBA outdoors and 45 dBA indoors would prevent activity interference and annoyance (EPA 1972). The U.S. Department of Housing and Urban Development (HUD) published a Noise Guidebook for use in implementing the Department's noise policy. In general, HUD's goal is exterior noise levels that are less than or equal to 55 dBA Ldn. The goal for interior noise levels is 45 dBA Ldn.

STATE

Title 24 of the California Code of Regulations (CCR) establishes standards governing interior noise levels that apply to all new single-family and multi-family residential units in California. These standards require that acoustical studies be performed before construction at building locations where the existing Ldn exceeds 60 dBA. Such acoustical studies are required to establish mitigation measures that will limit maximum Ldn levels to 45 dBA in any habitable room. Although there are no generally applicable interior noise standards pertinent to all uses, many communities in California have adopted a Ldn of 45 as an upper limit on interior noise in all residential units.

In addition, the State of California General Plan Guidelines (OPR 2003), provides guidance for noise compatibility. The guidelines also present adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution.

COUNTY OF ORANGE NOISE REGULATIONS

The project is required to comply with the noise standards and thresholds established in the County of Orange Municipal Code. The County of Orange follows the State of California Office of Planning and

Research (OPR) Noise and Land Use Compatibility Guidelines (Guidelines) for recommended interior and exterior noise level standards. The Guidelines help identify and prevent the creation of incompatible land uses due to noise.

County of Orange Municipal Code Noise Standards

The County of Orange Municipal Code Noise Ordinance requires that a project shall not create loud, unnecessary, or unusual noise that disturbs the peace or quiet of any neighborhood, or that causes discomfort or annoyance to any person of normal sensitiveness. Noise standards are defined in Division 6 Noise Control of the Municipal Code and are applicable to the project site and surrounding noise sensitive uses. Table 4.13-1, *County of Orange Municipal Code Exterior Noise Standards*, shows the exterior noise standards from the County of Orange Municipal Code Division 6 Noise Control Section 4-6-5 Exterior Noise Standards for the project site and surrounding residential land uses.

Table 4.13-1
County of Orange Municipal Code Exterior Noise Standards

Exterior Residential Noise Standard	Time Period
55 dB (A)	7:00 AM – 10:00 PM
50 dB (A)	10:00 PM – 7:00 AM
Source: RK Engineering Group, Inc., *Legacy at Coto Noise Impact Study,* February 25, 2020.	

It shall be unlawful for any person at any location to create any noise, or to allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, when the foregoing causes the noise level:

- The noise standard for a cumulative period of more than 30 minutes in any hour;
- The noise standard plus four dB for a cumulative period of more than 15 minutes in any hour;
- The noise standard plus 10 dB for a cumulative period of more than five minutes in any hour;
- The noise standard plus 15 dB for a cumulative period of more than one minute in any hour; and
- The noise standard plus 20 dB for any period of time.

Construction Noise Regulation

Section 4-6-7 of the County's municipal code states that the following activities shall be exempted from the provisions of the noise code:

> *Noise sources associated with construction, repair, remodeling, or grading of any real property, provided said activities do not take place between the hours of 8:00 PM and 7:00 AM on weekdays, including Saturday, or at any time on Sunday or a Federal holiday.*

PROJECT DESIGN FEATURES

The following recommended project design features include standard rules and requirements, best practices and recognized design guidelines for reducing noise levels. Design features are assumed to be part of the conditions of the project and integrated into its design. These are organized in Table 4.13-2, *Project Design Features*, according to operational phase and construction phase.

Table 4.13-2
Project Design Features

No.	Design Feature
Operational Design Features	
OD-1	The project will be required to incorporate building construction techniques hat achieve the minimum interior noise standard of 45 dBA CNEL for all residential units.
OD-2	The project shall comply with California Title 24 building insulation requirements for exterior walls, roofs and common separating assemblies (e.g., floor/ceiling assemblies and demising walls), which shall be reviewed by the City prior to issuance of a building permit. A final acoustical study may be required to demonstrate compliance with building code standards.
OD-3	Party wall and floor-ceiling assembly designs must provide a minimum STC (Sound Transmission Class) of 50, based on lab tests. Field tested assemblies must provide a minimum noise isolation class (NIC) of 45.
OD-4	Floor-ceiling assembly designs must provide for a minimum impact insulation class (IIC) of 50, based on lab tests. Field tested assemblies must provide a minimum FIIC of 45.
OD-5	Entry doors from interior corridors must provide an STC of 26 or more.
OD-6	Penetrations or openings in sound rated assemblies must be treated to maintain required ratings.
OD-7	All exterior windows, doors, and sliding glass doors shall have a positive seal.
OD-8	All rooftop mounted HVAC equipment shall be fully shielded or enclosed from the line of sight of adjacent residential uses. Shielding/parapet wall should be at least as high as the equipment.
OD-9	All pool/spa equipment and mechanical pumps shall be fully shielded from line of sight of any adjacent residential property or onsite residential unit or enclosed within an equipment room.
OD-10	The project access on Via Alondra shall be restricted to emergency access only. All vehicles accessing the site, including trucks associated with deliveries and trash pick-up, shall access the project site via Avenida La Caza.
OD-11	No truck loading/unloading activities or idling shall be allowed on the Via Alondra emergency access drive aisle near the northwest corner of the site.
OD-12	Delivery, loading/unloading activity, and trash pick-up hours shall be limited to daytime (7:00 AM – 6:00 PM) hours only. Signage should be posted in the designated loading areas to enforce the hour restrictions.
OD-13	Limit engine idling time for all delivery vehicles and moving trucks to five minutes or less. Signage should be posted in the designated loading areas to enforce the idling restrictions.
Construction Design Features	
CD-1	Construction-related noise activities shall comply with the requirements set forth in the County of Orange Municipal Code Section 4-6-7.
CD-2	Construction, repair, demolition, remodeling, or do not take place between the hours of 8:00 PM and 7:00 AM on weekdays, including Saturday, or at any time on Sunday or a Federal holiday.

PROJECT IMPACTS

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant Impact With Mitigation Incorporated. The following analysis evaluated potential temporary and permanent increases in ambient noise associated with implementation of the proposed project.

EXISTING NOISE ENVIRONMENT

The existing noise environment for the project site and surrounding areas has been established based on noise measurement data collected by RK Engineering Group. Noise measurement data indicates that ambient noise consists of environmental noise that includes noise from leaves rustling and chirping birds, very minimal traffic noise propagating from the adjacent roadways, onsite administrative activities, as well as activities from the surrounding properties create the main sources of ambient noise at the project site and surrounding area.

Short-Term Noise Measurements

Four (4) 10-minute noise measurements were recorded at the surrounding property lines. Short-term noise measurements are conducted during normal daytime hours and considered samples of typical ambient conditions. The Leq, Lmin, Lmax, L_2, L_8, L_{25}, and L_{50}, statistical data were reported over the 10-minute period.

The information was utilized to define the noise characteristics for the project. The noise measurement locations are shown on Figure 4.13-1, *Short-Term Noise Monitoring Locations*. The following details and observations are provided for the short-term noise measurements. The results of the short-term (ST) measurements are presented in Table 4.13-3, *Short-Term Noise Measurement Results*.

Table 4.13-3
Short-Term Noise Measurement Results

Site No.	Time Started	Leq	Lmin	Lmax	L_2	L_8	L_{25}	L_{50}
ST-1	10:39 AM	45.6	40.3	63.9	50.3	47.2	45.4	43.9
ST-2	10:55 AM	45.2	39.1	64.9	51.5	47.5	45.1	43.5
ST-3	11:20 AM	43.6	37.5	66.3	48.7	44.5	42.4	41.2
ST-4	11:39 AM	46.1	37.7	73.1	49.8	42.3	40.3	39.0

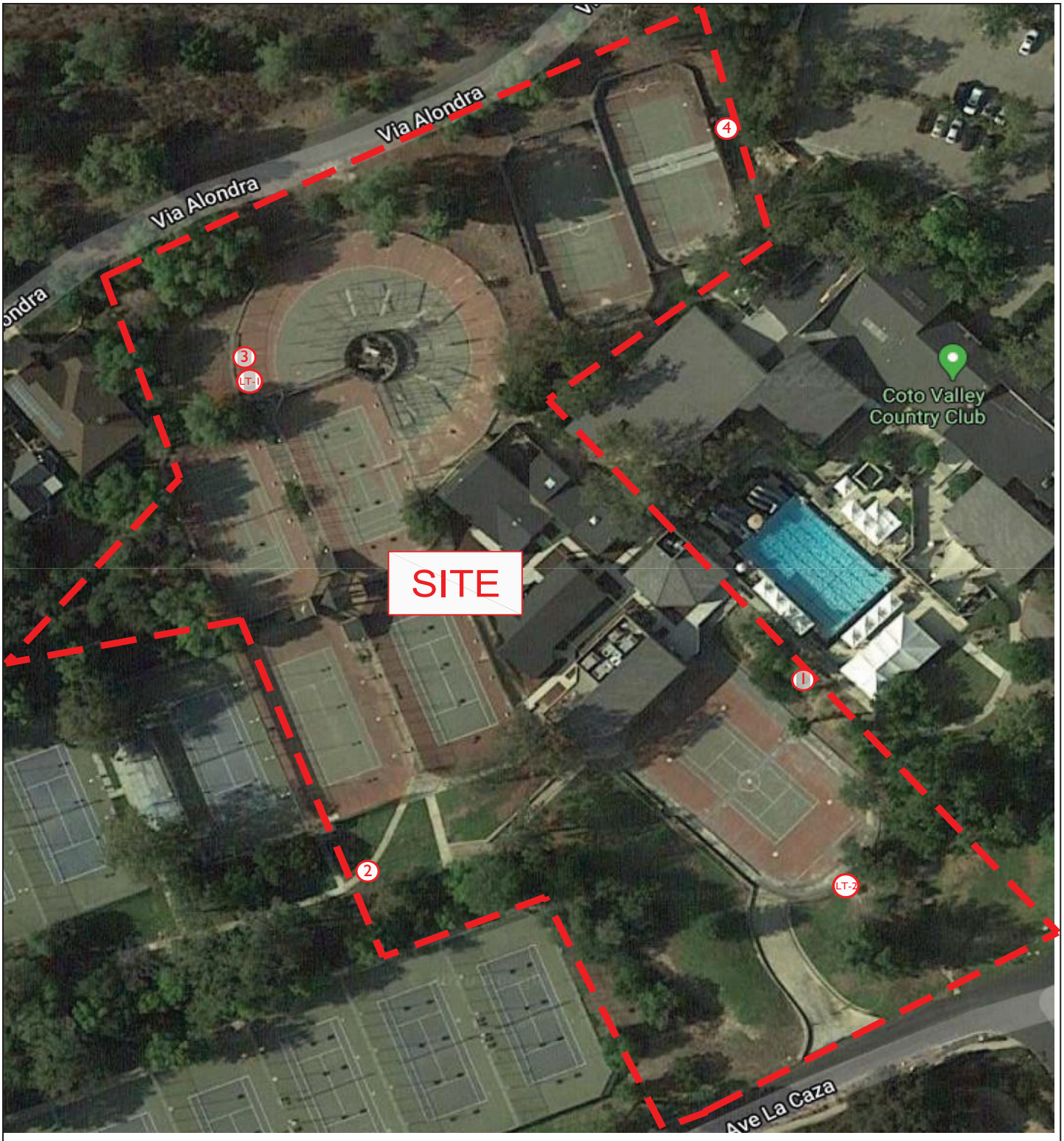
Note: For short-term noise measurement results, the noise measurements were conducted for 10-minute intervals during normal daytime conditions on January 8, 2020.
Source: RK Engineering Group, Inc., *Legacy at Coto Noise Impact Study,* February 25, 2020.

ST-1 Measurement taken at the eastern property line at approximately five feet from the property line. Ambient Noise includes traffic noise from Avenida La Caza, noise from tennis court and birds chirping.

ST-2 Measurement taken at eastern tennis court at approximately five feet from the fence at approximately 90 feet from the eastern property line. Ambient Noise includes traffic noise from Avenida La Caza, noise from tennis court and birds chirping.

ST-3 Measurement taken at the tennis court at approximately 60 feet from the eastern property line and at approximately 90 feet from the northern property line. Ambient Noise includes noise from tennis court and landscape maintenance.

ST-4 Measurement taken at the western tennis court at approximately five feet from the fence at approximately 130 feet from the northern property line. Ambient Noise includes traffic noise from Via Alondra and parking noise.



Legend:

1 = Short Term (10-min) Noise Monitoring Location

LT-1 = Short Term (10-min) Noise Monitoring Location

Source: RK Engineering Group, Inc.; February 25, 2020.

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Short-Term Noise Monitoring Locations

VCS Environmental

Figure 4.13-1

Long-Term Noise Measurements

To determine the existing noise level environment, RK Engineering Group conducted two (2) 24-hour noise measurements at the project study area. The noise monitoring locations were selected based on the proximity and location to adjacent sensitive receptors and provide a reasonable baseline assessment of the ambient noise environment at the site and surrounding area. The location of the long-term measurements is shown on Figure 4.13-2, *Long-Term Noise Measurement Locations*.

- Long-term noise monitoring location one (LT-1) was taken along the tennis court at approximately 60 feet from the western property line and at approximately 90 feet from the northern property line.
- Long-term noise monitoring location two (LT-2) was taken along the southern tennis court at approximately 100 feet from Avenida La Caza.

Long-term noise monitoring locations represent the existing noise levels near the adjacent noise sensitive land uses. Long-term noise measurement results are summarized in Table 4.13-4, *24-Hour Noise Measurement Results*.

Table 4.13-4
24-Hour Noise Measurement Results

Time	Leq (dBA)	Time	Leq (dBA)
LT-1[1]			
12:00 AM	41.7	12:00 PM	43.0
1:00 AM	38.8	1:00 PM	42.3
2:00 AM	39.8	2:00 PM	42.8
3:00 AM	38.9	3:00 PM	48.0
4:00 AM	38.7	4:00 PM	52.1
5:00 AM	40.6	5:00 PM	43.5
6:00 AM	43.5	6:00 PM	42.6
7:00 AM	45.8	7:00 PM	40.7
8:00 AM	45.8	8:00 PM	39.7
9:00 AM	50.1	9:00 PM	40.4
10:00 AM	44.3	10:00 PM	39.4
11:00 AM	43.1	11:00 PM	40.4
		24-Hour CNEL	***48.4***
LT-2[2]			
12:00 AM	39.2	12:00 PM	44.5
1:00 AM	38.8	1:00 PM	43.8
2:00 AM	40.0	2:00 PM	43.8
3:00 AM	39.1	3:00 PM	46.7
4:00 AM	38.6	4:00 PM	44.8
5:00 AM	40.5	5:00 PM	43.3
6:00 AM	44.0	6:00 PM	42.2
7:00 AM	44.8	7:00 PM	40.8
8:00 AM	48.4	8:00 PM	39.8
9:00 AM	59.3	9:00 PM	39.9
10:00 AM	50.7	10:00 PM	39.3
11:00 AM	44.9	11:00 PM	40.5
		24-Hour CNEL	***49.9***

Notes:
[1] LT-1 was taken along the tennis court at approximately 60 feet from the western property line and at approximately 90 feet from the northern property line. LT-1 was recorded on January 8, 2020.
[2] LT-2 was taken along the southern tennis court at approximately 100 feet from the Avenida La Caza road. LT-2 was recorded on January 8, 2020.
Source: RK Engineering Group, Inc., *Legacy at Coto Noise Impact Study,* February 25, 2020.

Existing Traffic Noise Levels

Table 4.13-5, *Existing Traffic Noise Level Results*, shows the modeled existing traffic related CNEL noise levels calculated at 50 feet from the centerline of roadway segments adjacent to the site. The distances to the 55, 60, 65, and 70 dBA CNEL noise contours are also shown. The noise levels were calculated using traffic volumes presented from the *Legacy Club Traffic Impact Analysis*. The traffic noise levels do not take into account the effect of any noise barriers or topography that may reduce traffic noise levels. The existing roadway noise levels provide a baseline of the existing traffic noise environment.

Table 4.13-5
Existing Traffic Noise Level Results

Roadway[1]	Segment	CNEL at 50ft. (dBA)	Distance to Contour (Ft)[2]			
			70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
Avenida La Caza	Via Pajaro to Via Pajaro	48.4	2	4	9	18

Notes:
[1] Noise levels calculated from centerline of subject roadway.
[2] Refer to Appendix I for projected noise level calculations.
Source: RK Engineering Group, Inc., *Legacy at Coto Noise Impact Study,* February 25, 2020.

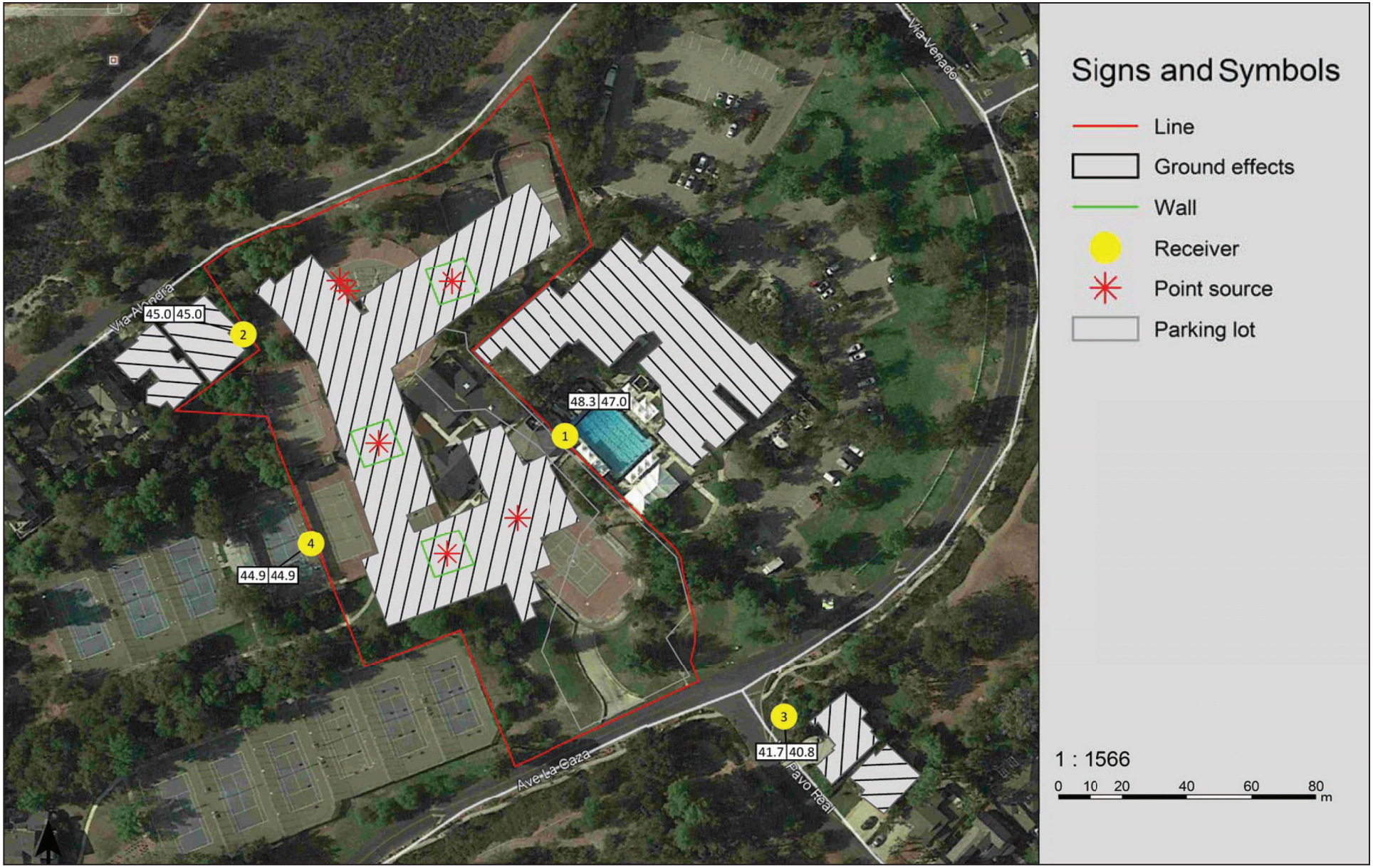
OPERATIONAL NOISE IMPACTS

This assessment analyzes the anticipated noise levels generated by the project and impacts caused by changes to the ambient environment. The main sources of noise generated by the project would include onsite operational activities from vehicular traffic noise circulating within the parking lot, HVAC equipment, pool equipment and exhaust vent noise. Noise level impacts are compared to the County of Orange noise standards.

Stationary Source Noise Impacts

Onsite stationary noise impacts are assessed at all adjacent property lines surrounding the project site. Project operational activities are analyzed for long-term noise impacts associated with the day-to-day operation of the project including parking lot noise, HVAC equipment, pool equipment noise and exhaust vent noise.

Parking lot noise would occur from vehicle engine idling and exhaust, doors slamming, tires screeching, people talking, and the occasional horn honking. The project will take primary vehicular access only from Avenida La Caza and the parking lot noise would occur on the southern and eastern side of the project site and is conservatively assessed from the first parking space to southern residential properties; approximately 100 feet away. Secondary emergency vehicular access is provided from Via Alondra along the northern site boundary.



Source: RK Engineering Group, Inc.; February 25, 2020.

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Long-Term Noise Measurement Locations

HVAC equipment will be located on the roof of the building. The closest rooftop HVAC units should be located at least 160 feet away from the nearest property line to the west. All rooftop HVAC equipment are fully shielded or enclosed from the line of sight of the adjacent uses. As shown in Figure 3-6e, *Roof Plan*, the shielding/parapet wall would be as high as five feet, five inches and would adequately shield roof top equipment.

Pool equipment would be located north of the site near the pool area. Noise from pool equipment includes operational noise from pool/spa pump, filter and heater equipment (mechanical equipment) on the site.

Exhaust vent for the kitchen would be located on the southeastern side of the building. The kitchen vent should be located at approximately at least 300 away feet from the southern residential property and 90 feet away from eastern property line.

Daytime Stationary Source Noise Impacts

The results of the daytime noise impact analysis are shown in the Table 4.13-6, *Daytime Stationary Noise Impacts*, and are graphically illustrated on Figure 4.13-3, *Project Noise Level Contours*. The noise analysis considers all project noise sources operating simultaneously during daytime (7:00 AM to 10 PM) hours at the nearest adjacent property lines. The required County noise standard for all surrounding land uses is 55 dBA from 7:00 AM to 10:00 PM. Noise levels generated by the project would not exceed the County's daytime noise standards at the adjacent property lines. As shown in Table 4.13-6, the change in existing ambient daytime noise levels as a result of the project would be range from approximately 4.4 dBA to 9.5 dBA during daytime hours and would not exceed the County of Orange daytime noise standard and potential daytime stationary noise impacts would be less than significant.

Table 4.13-6
Daytime Stationary Noise Impacts

Receptor	Location	Daytime Exterior Noise Level dBA[1]					
		Existing Lowest Hourly Ambient Measurement (Leq)[1]	Project Noise Contribution (Leq)	Combined Noise Level Existing Plus Project (Leq)	Change in Noise Level as a Result of Project (dBA)	County of Orange Noise Level Criteria (Leq)	Noise Level Exceeds Standard (?)
Receiver at PL-1	East	39.3	48.3	48.8	9.5	55.0	No
Receiver at PL-2	Northwest	39.4	45.0	46.1	6.7	55.0	No
Receiver at PL-3	South	39.3	41.7	43.7	4.4	55.0	No
Receiver at PL-4	West	39.4	44.9	46.0	6.6	55.0	No

Note:
[1] The lowest measured average Leq has been used as a conservative calculation.
Source: RK Engineering Group, Inc., *Legacy at Coto Noise Impact Study,* February 25, 2020.

Noise levels cannot be added or subtracted by simple plus or minus addition because decibels are measured on a logarithmic scale. When two (2) sounds of equal SPL are combined, they will produce an SPL of three db greater than the original single SPL. In other words, sound energy must be doubled to produce a three dB increase. If two (2) sounds differ by approximately 10 dB, the higher sound level is the predominant sound.

Nighttime Stationary Source Noise Impacts

The results of the nighttime noise impact analysis are shown in the Table 4.13-7, *Nighttime Stationary Noise Impacts*, and are graphically illustrated on Figure 4.13-3, *Project Noise Level Contours*. The noise analysis considers all project noise sources operating simultaneously with the exception of exhaust vent and pool equipment noise during nighttime (10:00 PM to 7:00 AM) hours at the nearest adjacent property lines. The required County noise standard for all surrounding land uses is 50 dBA from 10:00 PM to 7:00 AM. Noise levels generated by the project would not exceed the County's nighttime noise standards at the adjacent property lines. The change in existing ambient nighttime noise levels as a result of the project would be range from approximately 4.2 dBA to 9.0 dBA during daytime hours and would not exceed the County of Orange nighttime noise standard and potential nighttime stationary noise impacts would be less than significant.

Table 4.13-7
Nighttime Stationary Noise Impacts

Receptor	Location	Nighttime Exterior Noise Level dBA[1]					
		Existing Lowest Hourly Ambient Measurement (Leq)[1]	Project Noise Contribution (Leq)	Combined Noise Level Existing Plus Project (Leq)	Change in Noise Level as a Result of Project (dBA)	County of Orange Noise Level Criteria (Leq)	Noise Level Exceeds Standard (?)
Receiver at PL-1	East	38.6	47.0	47.6	9.0	50.0	No
Receiver at PL-2	Northwest	38.7	45.0	45.9	7.2	50.0	No
Receiver at PL-3	South	38.6	40.8	42.8	4.2	50.0	No
Receiver at PL-4	West	38.7	44.9	45.8	7.1	50.0	No

Note:
[1] The lowest measured average Leq has been used as a conservative calculation.
Source: RK Engineering Group, Inc., *Legacy at Coto Noise Impact Study,* February 25, 2020.

Future Traffic Noise Impacts

The potential offsite noise impacts caused by the increase in vehicular traffic from the operation of the proposed project on the nearby roadways were calculated for direct and cumulative project conditions. As shown in Table 4.13-8, *Future Traffic Noise Level*, the project site and surrounding residential areas adjacent to roadways currently experience traffic related noise levels within the 60 dBA CNEL limit for residential areas. The project is expected to increase the existing roadway noise level to 50.6 CNEL. The change in the traffic noise level on Avenida La Caza does not exceed the 60 dBA CNEL limit. Therefore, the project will not cause a significant change in the existing traffic noise level at the surrounding residential homes at 50 feet from the centerline of the roadway and future traffic noise impacts would be less than significant.

Table 4.13-8
Future Traffic Noise Level

Roadway	Segment	CNEL at 50 Feet (dBA)			Does Project Generate a Significant Impact?
		Existing	Existing Plus Project	Change in Roadway Noise Level as a Result of Project	
Avenida La Caza	Via Pajaro to Via Pajaro	48.4	50.6	2.2	No

Source: RK Engineering Group, Inc., *Legacy at Coto Noise Impact Study,* February 25, 2020.

Source: RK Engineering Group, Inc.; February 25, 2020.

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Project Noise Level Contours

VCS Environmental

Figure 4.13-3

To ensure land use compatibility and to further reduce operational noise to a less than significant level, the proposed project has incorporated the listing of operational and construction project design features shown in Table 3-8, *Summary of Construction Activities*.

Noise/Land Use Compatibility

The project's noise/land use compatibility setting is reviewed to determine future noise levels to habitable exterior and interior areas on the project site. This section of the analysis is intended to satisfy the County of Orange General Plan Noise Element Objectives and Policies which helps to ensure the resident's quality of life is not affected adversely by high noise levels. The project's noise/land use compatibility is not necessarily applicable to CEQA, as recent court rulings have indicated that CEQA is primarily concerned with the project's impact of the environment, not the environment's impact on a project. Based on the existing measured 24-hour CNEL noise levels, the project site is currently experiencing noise levels ranging from 48.4 to 49.9 dBA. The project site would experience noise levels well below the recommended 65 dBA compatibility limit for residential uses. Therefore, the project is considered compatible with the existing site and surrounding uses and no additional analysis would be required to demonstrate compliance with the interior noise standards

Construction Noise Impacts

Temporary construction noise and vibration impacts have been assessed from the project site to the surrounding adjacent land uses. The degree of construction noise will vary depending on the type of construction activity taking place and the location of the activity relative to the surrounding properties. Section 4-6-7 of the County's Municipal Code states that the following activities shall be exempted from the provisions of the noise code:

> *Noise sources associated with construction, repair, remodeling, or grading of any real property, provided said activities do not take place between the hours of 8:00 PM and 7:00 AM on weekdays, including Saturday, or at any time on Sunday or a Federal holiday.*

Although construction activity is exempt from the noise standards in the County's Municipal Code, CEQA requires that potential noise impacts still be evaluated for significance. For purposes of this analysis, the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment (2006) criteria will be used. The FTA provides reasonable criteria for assessing construction noise impacts based on the potential for adverse community reaction. For residential uses, the daytime noise threshold is 80 dBA Leq for an eight-hour period. In compliance with the County's Municipal Code, it is assumed construction would not occur during the noise-sensitive nighttime hours of 8:00 PM to 7: 00 AM.

Typical Construction Noise Levels

Table 4.13-9, *Typical Construction Noise Levels*, shows typical construction noise levels compiled by the Environmental Protection Agency (EPA) for common type construction equipment. Typical construction noise levels are used to estimate potential project construction noise levels at the adjacent sensitive receptors.

Table 4.13-9
Typical Construction Noise Levels

Type	Noise Levels (dBA) at 50 Feet
Earth Moving	
Compactors (Rollers)	73 – 76
Front Loaders	73 – 84
Backhoes	73 – 92
Tractors	75 – 95
Scrapers, Graders	78 – 92
Pavers	85 – 87
Trucks	81 – 94
Materials Handling	
Concrete Mixers	72 – 87
Concrete Pumps	81 – 83
Cranes (Movable)	72 – 86
Cranes (Derrick)	85 – 87
Stationary	
Pumps	68 – 71
Generators	71 – 83
Compressors	75 – 86
Impact Equipment	
Pneumatic Wrenches	82 – 87
Jack Hammers, Rock Drills	80 – 99
Pile Drivers (Peak)	95 – 105
Other	
Vibrators	68 – 82
Saws	71 – 82
Note: Referenced Noise Levels from the Environmental Protection Agency (EPA). Source: RK Engineering Group, Inc., *Legacy at Coto Noise Impact Study,* February 25, 2020.	

Construction Noise Impact Analysis

This assessment analyzes potential noise impacts during all expected phases of construction, including site preparation, demolition, grading, building construction, paving, and architectural coating. Noise levels are calculated based on an average distance of equipment over an eight-hour period to the nearest adjacent property. Table 4.13-10, *Project Construction Noise Levels – Residential Uses to the West*, show the noise level impacts to the eastern (residential) property lines. As shown in Table 4.13-10 project construction noise levels would exceed the recommended 80 dBA eight-hour construction noise threshold provided by the FTA for adverse community reaction at the adjacent residential uses. Potential construction noise mitigation measures would be incorporated into the construction activities for the proposed project. As shown in Table 4.13-10, with the incorporation of Mitigation Measures N-1 to N-7, potential construction noise levels would be reduced below the recommended eight-hour construction noise threshold provided by the FTA for adverse community reaction at the adjacent residential uses and potential construction noise impacts would be less than significant.

Table 4.13-10
Project Construction Noise Levels – Residential Uses to the West

Phase	Equipment	Quantity	Equipment Noise Level at 50 feet (dBA Leq)	Combined Noise Level (dBA Leq)
Demolition	Concrete/Industrial Saws	1	74.8	84.6
	Excavators	3	76.7	
	Rubber Tired Dozers	2	77.7	
Grading	Excavators	2	76.7	87.6
	Graders	1	81	
	Rubber Tired Dozers	1	77.7	
	Tractors/Loaders/Backhoes	3	80	
Building Construction	Cranes	1	72.6	86.3
	Forklifts	3	71.0	
	Generator Sets	1	77.6	
	Tractors/Loaders/Backhoes	3	80.0	
	Welders	1	70.0	
Paving	Cement and Mortar Mixers	2	74.8	84.3
	Pavers	1	74.2	
	Paving Equipment	2	73.0	
	Rollers	2	73.0	
	Tractors/Loaders/Backhoes	1	80.0	
Architectural Coating	Air Compressors	1	73.7	73.7
Worst-Case Construction Phase Noise Level - Leq (dBA) – **Unmitigated**				87.6
FTA Construction Noise Criteria (Detailed Assessment: 8-Hour Leq)				80
Worst-Case Construction Phase Noise Level - Leq (dBA) – **Mitigated**				77.0
Noise level exceeds FTA criteria after mitigation?				No
Source: RK Engineering Group, Inc., *Legacy at Coto Noise Impact Study,* February 25, 2020.				

Construction Noise – On-Road Trucks

Roadway noise impacts may occur from heavy truck traffic strictly utilizing Avenida La Caza roadway to haul material to and from the site. The noise impact from the increased truck traffic on the local circulation system is analyzed and based on the County of Orange noise/land use compatibility CNEL noise levels. Table 4.13-11, *Construction Noise Roadway Impact Analysis*, shows the results of the Construction Noise Roadway Impact Analysis. As shown in Table 4.13-10, construction truck traffic is within the noise/land use compatibility limit of 65 dB CNEL for the residential uses along Avenida La Caza roadway. The change in existing roadway noise levels as a result of the construction traffic would be approximately 12.1 dBA. Noise levels generated by the project construction traffic would not exceed the County's 65 dBA CNEL noise/land use compatibility noise standards at the residential uses along Avenida La Caza and potential construction roadway noise impacts would be less than significant. No mitigation is required.

Table 4.13-11
Construction Noise Roadway Impact Analysis

Roadway	Segment	CNEL at 50 Feet (dBA)			Orange County Residential CNEL Noise Limit	Noise Level Exceeds Standard?
		Existing Conditions	Existing plus Project Conditions	Change as a Result of Project		
Avenida La Caza	Via Pajaro to Via Pajaro	48.4	60.5	12.1	65	No
Source: RK Engineering Group, Inc., *Legacy at Coto Noise Impact Study,* February 25, 2020.						

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

Less Than Significant Impact With Mitigation Incorporated. There are three main types of vibration propagation: surface, compression, and shear waves. Surface waves, or Rayleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wavefront, similar to ripples produced by throwing a rock into a pool of water. P-waves, or compression waves, are body waves that carry their energy along an expanding spherical wavefront. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wavefront. However, unlike P-waves, the particle motion is transverse, or side-to-side and perpendicular to the direction of propagation.

As vibration waves propagate from a source, the vibration energy decreases in a logarithmic nature and the vibration levels typically decrease by six VdB per doubling of the distance from the vibration source. As stated above, this drop-off rate can vary greatly depending on the soil but has been shown to be effective enough for screening purposes, in order to identify potential vibration impacts that may need to be studied through actual field tests.

ESTIMATED CONSTRUCTION NOISE VIBRATION

Operational activities are separated into two different categories. The vibration can be transient or continuous in nature. Each category can result in varying degrees of ground vibration, depending on the equipment used on the site. Operation of equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings in the vicinity of the project area site respond to these vibrations with varying results ranging from no perceptible effects at the low levels to slight damage at the highest levels. The thresholds from the *Caltrans Transportation and Construction Induced Vibration Guidance Manual* shown in Table 4.13-12, *Vibration Annoyance Potential Criteria*, provides general guidelines as to the maximum vibration limits for when vibration becomes potentially annoying.

Table 4.13-12
Vibration Annoyance Potential Criteria

Human Response	PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Barely Perceptible	0.04	0.01
Distinctly Perceptible	0.25	0.04
Strongly Perceptible	0.90	0.10
Severe	2.00	0.40

Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/ frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.
Source: RK Engineering Group, Inc., *Legacy at Coto Noise Impact Study,* February 25, 2020.

The *Caltrans Transportation and Construction Induced Vibration Guidance Manual* provides general thresholds and guidelines as to the vibration damage potential from vibratory impacts. Table 4.13-13, *Vibration Damage Potential Threshold Criteria*, provides general vibration damage potential thresholds.

Table 4.13-13
Vibration Damage Potential Threshold Criteria

Structure and Condition	PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely Fragile Historic Buildings Ruin Ancient Monuments	0.12	0.08
Fragile Buildings	0.20	0.10
Historic and Some Old Buildings	0.50	0.25
Older Residential Structures	0.50	0.30
New Residential Structures	1.00	0.50
Modern Industrial/Commercial Buildings	2.00	0.50
Source: RK Engineering Group, Inc., *Legacy at Coto Noise Impact Study,* February 25, 2020.		

POTENTIAL VIBRATION IMPACTS

To determine the vibratory impacts during construction, reference construction equipment vibration levels were utilized and then extrapolated to the façade of the nearest adjacent structures. The nearest sensitive receptors are the residential structures located adjacent to the western property line. All structures surrounding the project site are "new residential structures" (i.e., structures comprised of modern building techniques and materials) No historical or fragile buildings are known to be located within the vicinity of the site, which may be more susceptible to potential damage from vibration.

The construction of the proposed project is not proposing the use of substantial vibration inducing equipment or activities, such as pile drivers or blasting. The main sources of vibration impacts during construction of the project would be the operation of equipment such as bulldozer activity during demolition, loading trucks during grading and excavation, and vibratory rollers during paving. The construction vibration assessment utilizes the referenced vibration levels and methodology set-forth within the *Caltrans Transportation and Construction Induced Vibration Guidance Manual*. Table 4.13-14, *Typical Construction Vibration Levels*, shows the referenced vibration levels.

Table 4.13-14
Typical Construction Vibration Levels

Equipment	Peak Particle Velocity (PPV) (inches/second) at 25 feet	Approximate Vibration Level (LV) at 25 feet
Piledriver (impact)	1.518 (upper range)	112
	0.644 (typical)	104
Piledriver (sonic)	0.734 upper range	105
	0.170 typical	93
Clam shovel drop (slurry wall)	0.202	94
Hydromill	0.008 in soil	66
(slurry wall)	0.017 in rock	75
Vibratory Roller	0.210	94
Hoe Ram	0.089	87
Large bulldozer	0.089	87
Caisson drill	0.089	87

Equipment	Peak Particle Velocity (PPV) (inches/second) at 25 feet	Approximate Vibration Level (LV) at 25 feet
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58
Source: RK Engineering Group, Inc., *Legacy at Coto Noise Impact Study,* February 25, 2020.		

Table 4.13-15, *Construction Vibration Impact Analysis*, shows the project's construction-related vibration analysis at the nearest structures to the project construction area. Construction impacts are assessed from the closest area on the project site to the nearest adjacent structure. As shown in Table 4.13-15, project related construction activity would not cause any potential damage to the nearest structures. The annoyance potential of vibration from construction activities would range from "distinctly perceptible" to "strongly perceptible". To minimize temporary construction related vibration impacts, Mitigation Measures N-1 through N-7 would be implemented to reduce potential construction vibration impacts to less than significant.

Table 4.13-15
Construction Vibration Impact Analysis

Construction Activity	Distance to Nearest Structure (ft)	Duration	Calculated Vibration Level - PPV (in/sec)	Damage Potential Level	Annoyance Criteria Level
Large Bulldozer	25	Continuous/Frequent	0.089	Extremely Fragile Buildings, Ruins Ancient Monuments	Distinctly Perceptible
Vibratory Roller	25	Continuous/Frequent	0.210	Fragile Buildings	Strongly Perceptible
Loaded Trucks	25	Continuous/Frequent	0.076	No Impacts	Distinctly Perceptible
Caisson Drilling	25	Continuous/Frequent	0.089	Extremely Fragile Buildings, Ruins Ancient Monuments	Distinctly Perceptible
Source: RK Engineering Group, Inc., *Legacy at Coto Noise Impact Study,* February 25, 2020.					

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact: The project site is not located within an airport influence area and is not within an airport land use compatibility plan. There are no public airports or private airstrips within two miles of the project site. The nearest airport would be John Wayne Airport, located approximately 17 miles from the project site. The project site would not be exposed to excessive overhead aircraft noise impacts. No mitigation is required.

STANDARD CONDITIONS OF APPROVAL

Standard Condition N02: Except when the interior noise level exceeds the exterior noise level, the Applicant shall sound attenuate all nonresidential structures against the combined impact of all present and projected noise from exterior noise sources to meet the interior noise criteria as specified in the Noise Element and Land Use/Noise Compatibility Manual. Prior to the issuance of any Building Permits, the Applicant shall submit to the Director, OC Development Services, or designee, an acoustical analysis report prepared under the supervision of a County-certified acoustical consultant which describes in detail the exterior noise environment and the acoustical design features required to achieve the interior noise standard and which indicates that the sound attenuation measures specified have been incorporated into the design of the project.

Standard Condition N08: Prior to the issuance of any Building or Grading Permits, the Applicant shall obtain the approval of the Director, OC Development Services, or designee, of an acoustical analysis report and appropriate plans which demonstrate that the noise levels generated by this project during its operation shall be controlled in compliance with Orange County Codified Ordinance, Division 6 (Noise Control). The report shall be prepared under the supervision of a County Certified Acoustical Consultant and shall describe the noise generation potential of the project during its operation and the noise mitigation measures, if needed, which shall be included in the plans and specifications of the project to assure compliance with Orange County Codified Ordinance, Division 6 (Noise Control).

Standard Condition N10: A. Prior to the issuance of any Grading Permits, the project proponent shall produce evidence acceptable to the Director, OC Development Services, or designee, that:

- All construction vehicles or equipment, fixed or mobile, operated within 1,000 feet of a dwelling shall be equipped with properly operating and maintained mufflers.
- All operations shall comply with Orange County Codified Ordinance Division 6 (Noise Control).
- Stockpiling and/or vehicle staging areas shall be located as far as practicable from dwellings.

B. Notations in the above format, appropriately numbered and included with other notations on the front sheet of the project's permitted grading plans, will be considered as adequate evidence of compliance with this condition.

MITIGATION MEASURES

Mitigation Measure N-1: Obtain a construction work permit from the County of Orange prior to starting construction.

Mitigation Measure N-2: Two weeks before construction activities begin, the project shall notify all residential uses located within 500 feet of the construction site regarding the construction schedule for the proposed project and a sign shall also be posted in a readily visible location at the project site. All notices and signs shall indicate the dates and duration of construction activities, as well as provide a telephone number where residents can inquire about the construction process and register complaints to a designated construction noise disturbance coordinator.

Mitigation Measure N-3: The project shall provide temporary noise barrier shielding along all property lines of the project site to reduce construction noise levels to below 80 db. . The temporary barrier should be at least twelve (12) feet high with a minimum STC rating of 25 and shall be installed at the first phase of construction and prior to performing any demolition, excavation or grading activities. The temporary noise barrier wall should present a solid face area and include sound absorptive material or blankets which can be installed in multiple layers for improved noise insulation. The specifications in detail of the temporary

noise barrier will be included in the Construction Management Plan submitted to the Orange County Development Services Department.

Mitigation Measure N-4: The project shall require all contractors implement construction best management practices to reduce construction noise levels. Best management practices would include the following:

- All construction equipment shall be equipped with muffles and other suitable noise attenuation devices (e.g., engine shields).
- Grading and construction contractors shall use quieter equipment as opposed to noisier equipment (such as rubber-tired equipment rather than track equipment), to the maximum extent feasible.
- If feasible, electric hook-ups shall be provided to avoid the use of generators. If electric service is determined to be infeasible for the site, only whisper-quiet generators shall be used (i.e., inverter generators capable of providing variable load.
- Use electric air compressors and similar power tools rather than diesel equipment, where feasible.
- Locate staging area, generators and stationary construction equipment as far from the adjacent residential homes as feasible.
- Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than five minutes.

Mitigation Measure N-5: The project shall implement a noise monitoring program during construction. The monitoring program shall report the continuous daily construction noise levels along the project's west property line and south of Avenida La Caza near the adjacent residential homes. Noise monitoring should be performed at ground level and behind the noise barrier wall. The monitoring program shall notify construction management personnel when noise levels approach the upper limits of the eight-hour Leq exceedance threshold (80 dBA). Construction activity should cease prior to noise levels exceeding the eight-hour threshold. Weekly construction noise monitoring reports will be submitted to the Orange County Development Services Department. Noise level measurements shall be made pursuant to Section 4-6-3 of the Orange County Municipal Code Noise Control Ordinance.

Mitigation Measure N-6: All construction traffic and personnel shall use Avenida La Caza to access the site. No construction traffic or staging shall be allowed on Via Alondra.

Mitigation Measure N-7: No impact pile driving activities shall be permitted on the project site during construction. If impact pile driving is required, a follow-up noise and vibration impact assessment shall be conducted prior to the start of any pile driving activity.

REFERENCES

California Department of Transportation, *Transportation and Construction Induced Vibration Guidance Manual*, September 2013.

County of Orange, *Codified Ordinances of the County of Orange,* codified through Ordinance No. 16-002, enacted March 15, 2016. (Supplement No. 130).

County of Orange, *County of Orange General Plan,* July 2014.

County of Orange, *Standard Conditions of Approval*.

County of Orange, *Municipal Code Ordinance No. 19-002*, adopted March 12, 2019 – Division 6 – Noise Control.

RK Engineering Group, Inc., *Legacy at Coto Noise Impact Study*, February 25, 2020.

Stantec Consulting Services Inc., *Legacy at Coto Traffic Study*, April 13, 2020.

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4.14 Population and Housing

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

ENVIRONMENTAL ANALYSIS

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less Than Significant Impact: The current population of Coto de Caza is 14,799 persons. The proposed project would remove the former Vic Braden Tennis College and replace it with a 101-unit senior citizen living facility. Implementation of the proposed project would increase the population within Coto de Caza by approximately 140 persons. This would represent less than one percent increase over the existing population within Coto de Caza. The proposed project would not involve the construction of any offsite roadways or infrastructure that indirectly facilitate additional growth within the project area. The proposed senior living residential project would be permitted under the County's Zoning Code subject to approval of a conditional use permit and site development permit and would not require and land use change approvals. Therefore, implementation of the proposed project would not result in substantial unplanned population growth in the area resulting in less than significant impacts. No mitigation is required.

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

No Impact: As of 2019, Coto de Caza has a total population of 14,845 persons and 4,736 residential dwelling units. The proposed project would not displace any existing housing that would require replacement housing. The construction of the proposed project would generate short-term employment opportunities. It is anticipated that the employees for the proposed project would be from the local area and would not generate a need for new housing construction and no impacts would occur. No mitigation is required.

STANDARD CONDITIONS OF APPROVAL

No Standard Conditions of Approval are required.

MITIGATION MEASURES

No Mitigation Measures are required.

REFERENCES

County of Orange, *County of Orange General Plan,* October 2015.

Planner's Annex, *Coto de Caza Specific Plan (Amendment 3)*, adopted August 8, 1995.

Southern California Association of Governments, *Orange County 2019 Local Community Profile*, 2020.

4.15 Public Services

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. 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:				
1) Fire protection?	☐	☐	☒	☐
2) Police protection?	☐	☐	☒	☐
3) Schools?	☐	☐	☐	☒
4) Parks?	☐	☐	☒	☐
5) Other public facilities?	☐	☐	☒	☐

ENVIRONMENTAL ANALYSIS

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:

1) Fire protection?

Less Than Significant Impact: The proposed project would remove the existing buildings and tennis facilities and construct a two-story 101-unit active senior living facility. According to the California Department of Forestry and Fire Protection, the project site is located in a Very High Fire Hazard Severity Zone and in a State Responsibility Area. Presently, a small number of people occupy administrative offices on the project site. The construction and operation of the proposed project could potentially increase the demand for fire protection and/or emergency services calls because of an increase in the number of people who would live on the project site. The Orange County Fire Authority (OCFA) would provide fire protection and emergency services for the proposed project as well as for all of Coto de Caza. According to OCFA, the project site is located in the northern portion of Coto de Caza, which is considered to be an urban/suburban area. The closest fire station to the project site is OCFA Station 40 located at 25082 Vista del Verde, Coto de Caza, approximately 1.67 miles south of the project site. OCFA Station 40 has one Fire Captain, one Fire Apparatus Engineer, and one Firefighter on staff daily. Any project which increases population can potentially increase the workload at its associated station. OCFA uses a fair share approach to fund staffing, facilities and equipment needs.

OCFA's Standard of Cover for fire services, such as Coto de Caza, are listed below. Response times are from receipt of the service call to a unit on scene:

- The first unit to arrive on scene within seven minutes 20 seconds from receipt of call to on scene of incident 80 percent of the time.
- First-in engines should arrive on-scene to medical aids and/or fires within nine minutes and 49 seconds, 80 percent of the time.
- First-in truck companies should arrive on-scene to fires within 11 minutes and 37 seconds, 80 percent of the time.
- First-in paramedic companies should arrive on-scene at all medical aids within nine minutes and 30 seconds 80 percent of the time.

As part of the design for the proposed project, a Fuel Modification Plan and Fire Master Plan have been prepared. The following fire safety plans have been prepared and submitted to Orange County Fire Authority for approval.

The Fuel Modification Plan for the proposed project proposes a 20-foot Zone A Non-Combustible Zone that is only allowed for non-combustible construction and 0-153 Zone B Wet Zone extending from Zone A, that would consists of permanently irrigated fully landscaped drought tolerant, deep rooted high moisture plant material. Additionally, a Restricted Plant Zone is proposed for the portion of the project adjoining Via Alondra. Within this area groupings of trees would be prohibited, and only individual trees spaced 30 feet would be allowed. Understory of existing Oak Trees are required to cleared and maintained. The Fire Master Plan demonstrate the effectiveness of emergency response and firefighting operations and ensures the proper installation and maintenance of fire access roadways, the proper sitting of hydrants, adequate water supply, and access to structures.

Based on correspondence with William Blumberg of the OCFA, the proposed project would be subject to the following requirements and standards:

- Prior to approval of any subdivision or comprehensive plan approval for a project, the designated site developer may be required to enter into a Secured Fire Protection Agreement with the Orange County Fire Authority. This Agreement shall specify the developer's pro-rata fair share funding of capital improvements necessary to establish adequate fire protection facilities and equipment, and/or personnel. Said agreement shall be reached as early as possible in the planning process, preferably for each phase or land use sector of the project, rather than on a parcel by parcel basis. The obligation must be satisfied prior to the issuance of the first building permit.
- The project is subject to review by the County and the OCFA for various construction document plan checks for the applicable fire life safety codes and regulations. The project will be subject to the current editions of the CBC, CFC and related codes.
- Structures of this size and occupancy are required to have automatic fire sprinkler systems designed per NFPA 13 as required in the current CBC, CFC.
- A water supply system to supply fire hydrants and automatic fire sprinkler systems is required. Fire flow and hydrant spacing shall meet the minimums identified in the codes. Please refer to the California Fire Code Appendix section. These tables are also located in OCFA Guideline B09, Attachment 23.

- This project is in a fuel modification zone and is subject to review by the County and the OCFA. Please refer to OCFA Guideline C-05.
- Fire department access shall be provided all around the building.
- If the project scope includes or requires the installation of traffic signals on public access ways, these improvements shall include the installation of optical preemption devices.
- Attic spaces shall be fully sprinklered.
- It is unlawful to occupy any portions of this apartment building until City building department and OCFA have conducted final inspection and sign off In addition, we would like to point out that all standard conditions with regard to development, including water supply, built in fire protection systems, road grades and width, access, building materials, and the like will be applied to this project at the time of plan submittal.
- In addition, we would like to point out that all standard conditions with regard to development, including water supply, built in fire protection systems, road grades and width, access, building materials, and the like will be applied to this project at the time of plan submittal.

With implementation of the Fuel Modification Plan and Fire Safety Plan and compliance with above fire code requirements and standards potential fire protection impacts would be less than significant. No mitigation is required.

2) Police protection?

Less Than Significant Impact: Coto de Caza is within the Orange County Sheriff's Department Southeast Operations jurisdiction for police services. The closest Sheriff station is the Saddleback Station, located at 20202 Windrow, Lake Forest, California 92630, approximately 7.7 miles north of the proposed project. The station has 22 full-time deputies that that patrol the service area 24 hours of day. The target time to respond to a service call request is five minutes. For the month of May 2020, there were 70 calls to Coto de Caza with an average response time of six minutes and 45 seconds.

The proposed project would increase the number of residents, visitors and workers compared to the current use of the project site. Therefore, the volume of service calls could potentially be increased. A personnel communication with Sargent Castellano, Southeast Operations Administration, indicated that based on current staffing levels, the Sheriff's Department would have the ability to adequately service the project and would not cause the need for new or expanded Orange County Sheriff's Department facilities. In accordance with the Safety Element of the County of Orange General Plan, the proposed project would be required to participate in Public Education/Information and Neighborhood Watch Crime Prevention Programs. Additionally, Coto de Caza contracts its own security service to guard gates leading into the community. Based on current Sheriff's Department staffing levels, along with Coto de Caza onsite security service and Neighborhood Watch Crime Prevention Programs, potential police protection impacts would be less than significant. No mitigation is required.

3) Schools?

No Impact: The proposed project would establish an active senior living facility. The proposed project would not contribute to an increase in the school-aged child population since future residents would be limited to only senior citizens because the facility would be age restricted. Therefore, there would be no impacts to local school district facilities. No mitigation is required.

4) Parks?

Less Than Significant Impact: The proposed project would not contribute to a substantial increase in the overall population, necessitating either construction or expansion of a park facility. The closest parks to the project site are the Coto de Caza Dog Park (approximately 750 feet west of the site) and the Live Oak Park (approximately 2,000 feet southwest of the site). The existing parkland within Coto de Caza should meet the needs of the senior population of the proposed project. Therefore, impacts would be less than significant. No mitigation is required.

5) Other public facilities?

Less Than Significant Impact: The proposed project would not contribute to a substantial increase in the overall population, necessitating either construction or expansion of a hospital, community-based clinic, or other health services facility or program. Additionally, as a senior living facility, many of the resident's needs would be met through onsite services. Impacts would be less than significant. No mitigation is required.

STANDARD CONDITIONS OF APPROVAL

No Standard Conditions of Approval are required.

MITIGATION MEASURES

No Mitigation Measures are required.

REFERENCES

California Department of Forestry and Fire Protection. *Very High Fire Hazard Severity Zones in Unincorporated LRA Map*, accessed on November 2019.

County of Orange, *County of Orange General Plan*, *Safety Element,* July 2014.

Google. 2019. Google Earth© website.

Orange County Fire Authority, Correspondence with William Blumberg, Management Assistant, dated June 11, 2020.

Orange County Fire Authority, *Standards of Coverage*, accessed on November 2019.

Orange County Sheriff's Department, personnel communication with Sargent Castellano, Southeast Operations Administration, June 11, 2020.

4.16 Recreation

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

ENVIRONMENTAL ANALYSIS

a) 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: The project site is a former tennis club that has not been in operation for several years. Therefore, it is not considered an existing recreation facility. The project site is within the vicinity of existing recreation uses, including the Coto Valley Country Club, Coto de Caza Equestrian Center and the Coto de Caza Golf & Racquet Club. The proposed project has incorporated several recreation facilities into the design for its future residents, including a fitness center, cinema, activity rooms, swimming pool, lounge, deck, and patios. Additionally, the project includes an outdoor pedestrian trail around the property. These onsite recreation facilities would reduce the proposed project's demand for existing recreation facilities in the area and would not accelerate substantial deterioration of existing recreation facilities. Potential impacts associated with increasing use of existing and recreation facilities would be less than significant. No mitigation is required.

b) 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: The proposed project proposes the construction of indoor and outdoor recreation facilities for future residents. Potential impacts associated with the construction of the proposed recreation facilities have been evaluated as part of the proposed project and with the incorporation of Standard Conditions of Approval and mitigation measures, potential impacts associated with the project including the proposed recreation facilities would be less then significant. No mitigation is required.

STANDARD CONDITIONS OF APPROVAL

No Standard Conditions of Approval are required.

MITIGATION MEASURES

No Mitigation Measures are required.

REFERENCES

County of Orange, *County of Orange General Plan*, July 2014.

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4.17 Transportation

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☐	☒
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☒	☐	☐
d. Result in inadequate emergency access?	☐	☒	☐	☐

ENVIRONMENTAL ANALYSIS

The following analysis is based on a Traffic Study prepared by Stantec Consulting Services Inc. in April 2020 and is presented in Appendix I.

Background

Traffic criteria are based on two primary measures. The first is "capacity," which establishes the vehicle carrying ability of a road segment, and the second is "volume." The volume measure is either a traffic count (in the case of existing volumes) or a traffic forecast for a future point in time. The volume-to-capacity (V/C) ratio corresponds with a level of service (LOS). Traffic LOS is designated A through F, with LOS A representing free flow conditions, and LOS F representing severe traffic congestion.

Both the V/C and LOS are used in identifying impacts. Certain LOS values are deemed acceptable by the various governing jurisdictions within the traffic analysis study area and increases in the V/C ratio which cause or contribute to the LOS being unacceptable are defined as an adverse impact. LOS D is the performance standard applied in this study for the intersections in the study area.

Peak hour intersection performance for this analysis is measured by the intersection capacity utilization (ICU) methodology. Significant impacts are defined for this analysis as an increase of 0.01 or more in the ICU value per the Orange County GMP Transportation Implementation Manual. An increase of 0.01 or more at an intersection operating at LOS D or better is not considered a significant impact.

Existing Setting

The study area includes six intersections located in the gated community of Coto de Caza in unincorporated Orange County. The study area was determined in consultation with the County of Orange Department of Public Works. The primary roadway providing access to the study area is Coto de Caza Drive, which is a private road within the gated community of Coto de Caza and is configured with four vehicle lanes with a raised median and left-turn pockets at intersections.

The study area includes one intersection (Via Pajaro and Plano Trabuco Road) at the north gate, one intersection (Coto de Caza Drive and Plano Trabuco Road) at the west gate, two intersections along Coto de Caza Drive, and two intersections where Via Pajaro intersects with Vista del Verde (west of the project) and with Via Venado (east of the project). The study intersections are all stop-controlled, either an all-way stop control (AWSC) or two-way stop control (TWSC) as follows:

- Coto de Caza Drive and Vista Del Verde (AWSC)
- Coto de Caza Drive and Trigo Trail (TWSC)
- Coto de Caza Drive and Plano Trabuco Road (TWSC)
- Via Pajaro and Plano Trabuco Road (TWSC)
- Via Pajaro and Via Venado (AWSC)
- Vista Del Verde and Via Pajaro (AWSC)

Coto de Caza Drive is a private road within the gated community of Coto de Caza and is configured with four vehicle lanes with a raised median and left-turn pockets at intersections. Existing traffic volumes at the study intersections are shown in Figure 4.17-1, *Existing Traffic Volumes*. As shown in Table 4.17-1, *Intersection LOS Summary – Existing Conditions*, all intersections in the study area currently operates at LOS B or better.

Table 4.17-1
Intersection LOS Summary – Existing Conditions

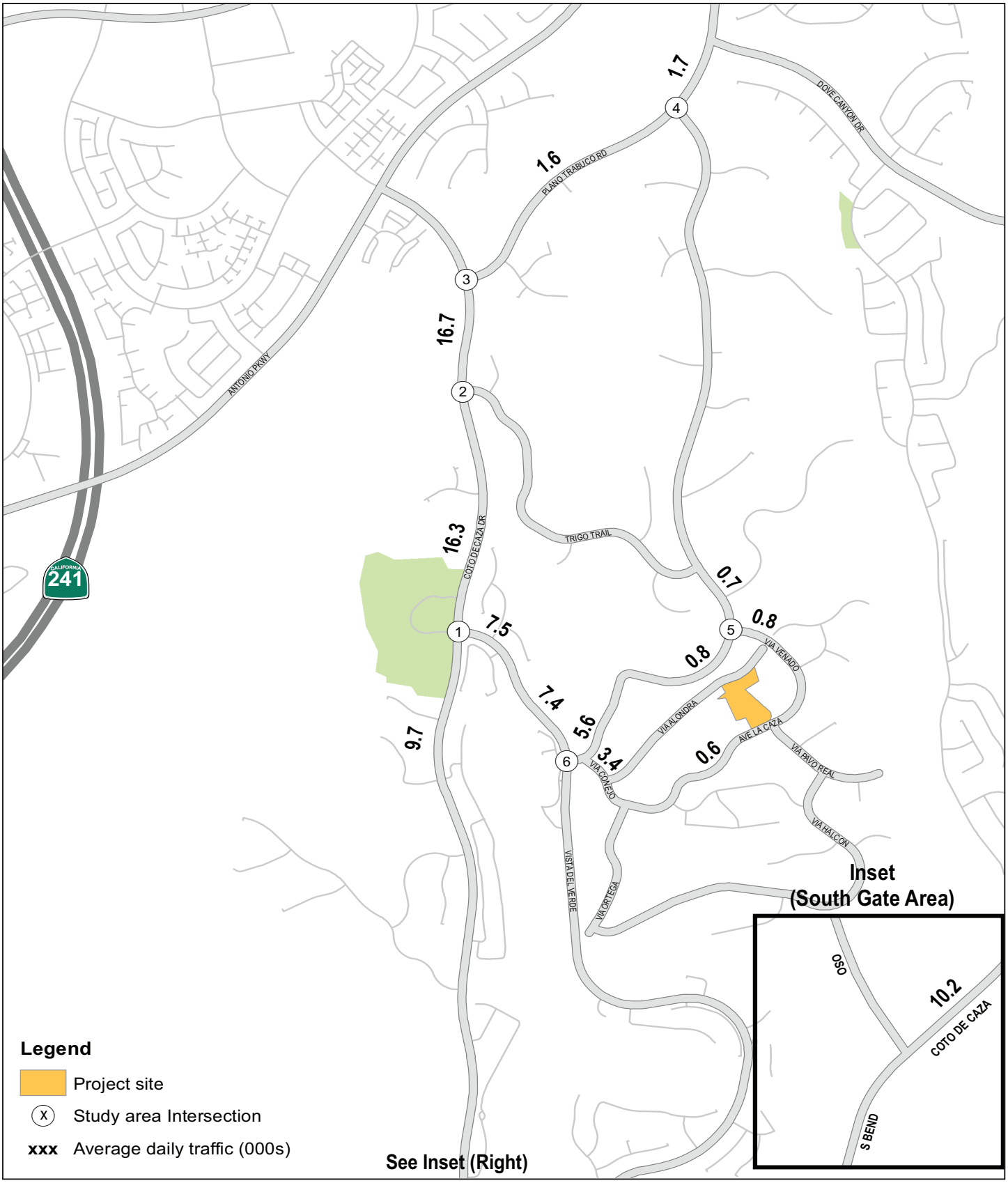
Intersection No.	Intersection Location	Existing			
		AM		PM	
		ICU	LOS	ICU	LOS
1	Coto de Caza Drive and Vista Del Verde	0.62	B	0.51	A
2	Coto de Caza Drive and Trigo Trail	0.37	A	0.29	A
3	Coto de Caza Drive and Plano Trabuco Road	0.41	A	0.30	A
4	Via Pajaro and Plano Trabuco Road	0.19	A	0.14	A
5	Via Pajaro and Via Venado	0.09	A	0.11	A
6	Vista Del Verde and Via Pajaro	0.37	A	0.34	A

Source: Stantec Consulting Services Inc., *Legacy at Coto Traffic Study*, April 13, 2020.

PROJECT TRIP GENERATION

Trip generation estimates for the project are based on trip rates provided in the Institute of Transportation Engineers (ITE) Trip Generation Manual 10th Edition for Senior Adult Attached Housing category (251). Based on these standardized rates, as shown in Table 4.17-2, *Project Trip Generation Summary*, the project would generate approximately 22 AM peak hour trips, 28 PM peak hour trips, and a total of 382 daily trips.

The trips generated by the project will use Coto de Caza Drive and Via Pajaro to access the surrounding circulation system. Based on the site's location in relation to the various Coto de Caza entry gates, it is estimated that the majority of the project trips, approximately 85 percent would use the entrance to Coto de Caza at the Antonio Parkway, the west gate into the community.



Source: Stantec Consulting Services Inc.; April 13, 2020.

LEGACY AT COTO
Initial Study/Mitigated Negative Declaration

Existing Traffic Volumes

VCS Environmental

Figure 4.17-1

Table 4.17-2
Project Trip Generation Summary

Land Use	Amount	Unit	AM Peak Hour			PM Peak Hour			ADT
			In	Out	Total	In	Out	Total	
Trip Rates									
Senior Adult Housing – Attached (252)		DU	0.07	0.13	0.20	0.14	0.12	0.26	3.70
Specialty Retail Center		TSF	0.72	0.48	1.20	1.80	1.80	3.60	40.00
Trip Generation									
Senior – Attached Housing	101		7	13	20	14	12	26	374
Specialty Retail	0.188		1	1	2	1	1	2	8
Total			8	14	22	15	13	28	382

Abbreviations: ADT - Average Daily Traffic, DU - Dwelling Units, TSF - Thousand square feet
Note: Specialty Retail Peak hour trips are rounded up.
Source: Stantec Consulting Services Inc., *Legacy Club Traffic Study*, April 13, 2020.

As shown in Figure 4.17-2, *Project Trip Distribution*, approximately 95 percent of the project trips would travel west along Avenida La Caza/Via Conejo/Via Pajaro/Vista Del Verde, with 85 percent continuing north on Coto de Caza Drive to the west gate and 10 percent continuing south on to Coto de Caza Drive to the south gate, and five percent of the project trips would travel east along Avenida La Caza/Via Venado/Via Pajaro to the north gate. Figure 4.17-3, *Project Trips*, illustrates the total project average daily traffic trips generated by the project and the anticipated traffic distribution.

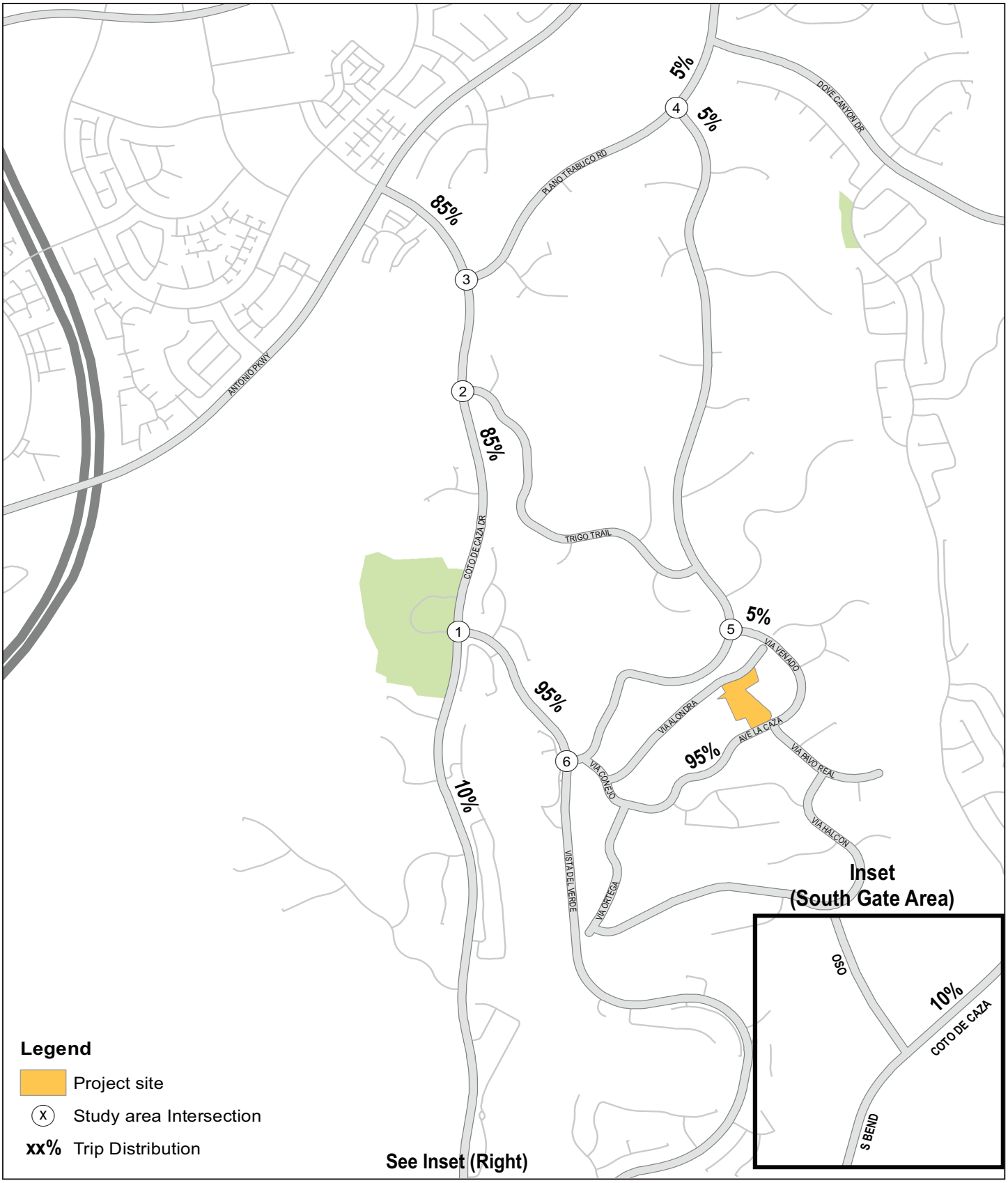
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less Than Significant Impact: To evaluate potential traffic impacts on the study area existing circulation system, existing-plus-project peak hour volumes were derived by adding the project generated peak hour trips shown in Table 4.17-3, *Intersection LOS Summary – Existing Plus Project Conditions*, to the existing intersection turning movement volumes for each of the study intersections. The ADT volumes for existing-plus-project conditions for the study area circulation system are illustrated in Figure 4.17-4, *Existing Plus Project Conditions*.

Table 4.17-3
Intersection LOS Summary – Existing Plus Project Conditions

Int No.	Intersection Location	Existing				Existing plus Project				Difference	
		AM		PM		AM		PM			
		ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM
1	Coto de Caza Dr & Vista Del Verde	0.62	B	0.51	A	0.63	B	0.53	A	0.01	0.02
2	Coto de Caza Dr & Trigo Trail	0.37	A	0.29	A	0.37	A	0.29	A	0.00	0.00
3	Coto de Caza Dr & Plano Trabuco Rd	0.41	A	0.30	A	0.41	A	0.30	A	0.00	0.00
4	Via Pajaro & Plano Trabuco Rd	0.19	A	0.14	A	0.19	A	0.14	A	0.00	0.00
5	Via Pajaro & Via Venado	0.09	A	0.11	A	0.09	A	0.11	A	0.00	0.00
6	Vista Del Verde & Via Pajaro	0.37	A	0.34	A	0.39	A	0.35	A	0.02	0.01

Source: Stantec Consulting Services Inc., *Legacy at Coto Traffic Study*, April 13, 2020.



Source: Stantec Consulting Services Inc.; April 13, 2020.

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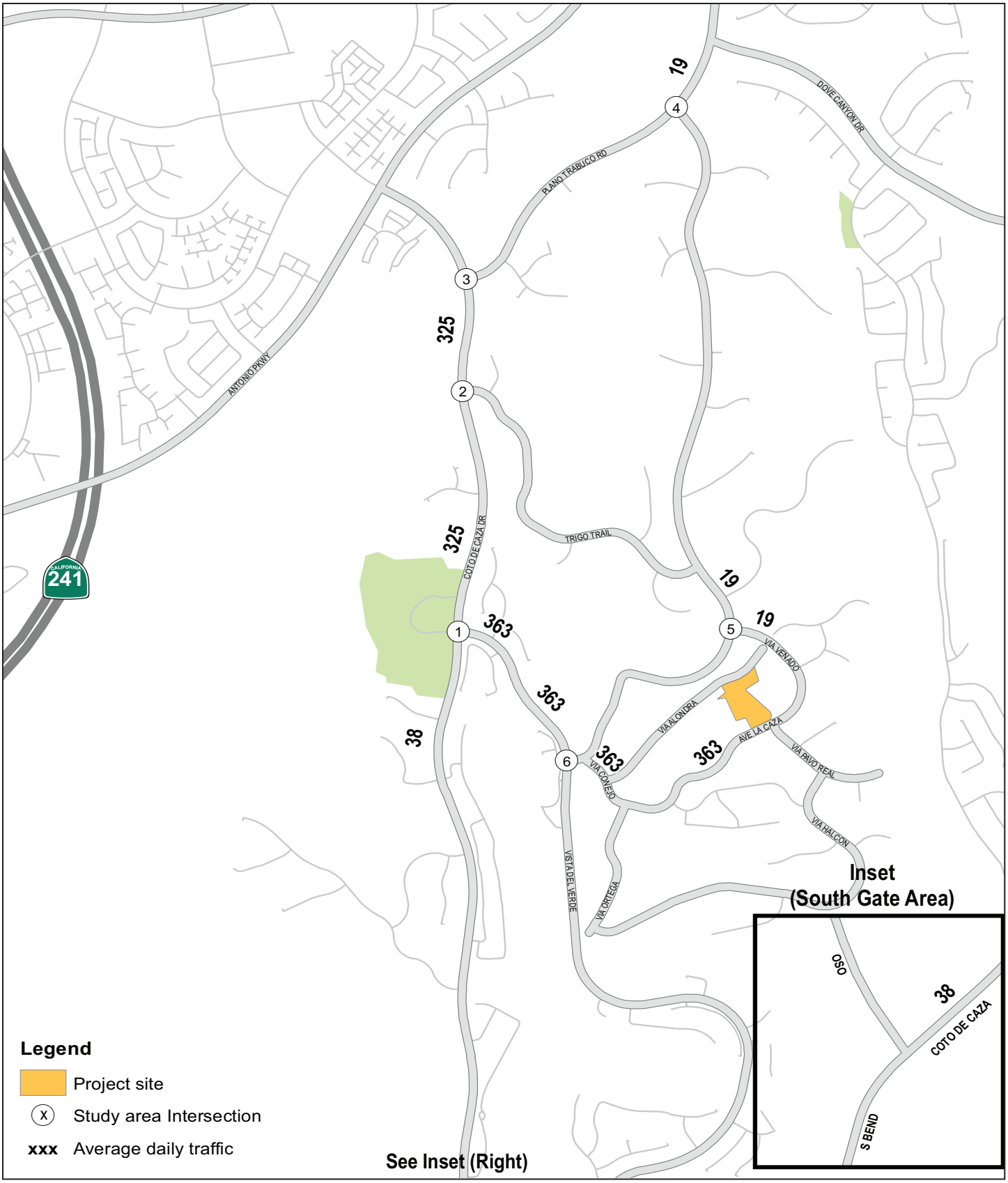
Project Trip Distribution

VCS Environmental

Figure 4.17-2



Source: Stantec Consulting Services Inc.; April 13, 2020.

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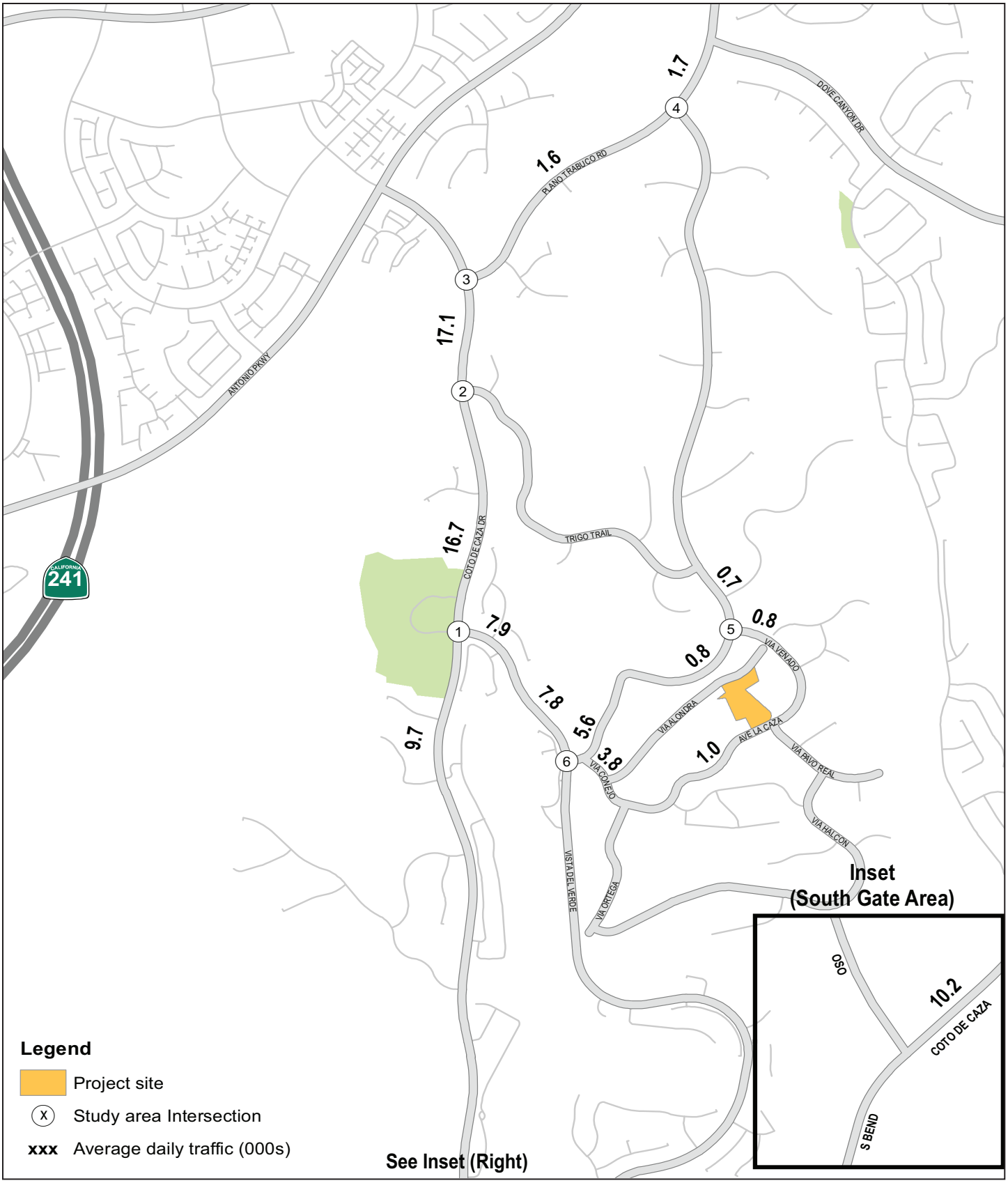
Project Trips

VCS Environmental

Figure 4.17-3



Source: Stantec Consulting Services Inc.; April 13, 2020.

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Existing Plus Project Conditions

VCS Environmental

Figure 4.17-4

Peak hour ICU and LOS that correspond with the existing traffic and existing-plus-project traffic forecasts are shown in Table 4.17-3, which provides a comparison between the no-project and the with-project conditions. The evaluation of study intersections based on the existing lane configurations is prepared using ICU methodology.

The County of Orange has adopted LOS D as the maximum threshold for significance. A significant impact is defined as an increase of 0.01 or more in the ICU value for intersections operating at LOS D or worse. The project does not change the ICU value for four of the study intersections but increases the ICU value by 0.01 or 0.02 for two study intersections. However, each of these intersections continue to operate at LOS A or B during the peak hours; therefore, the project would have no significant impact on the study intersections based on the ICU analysis.

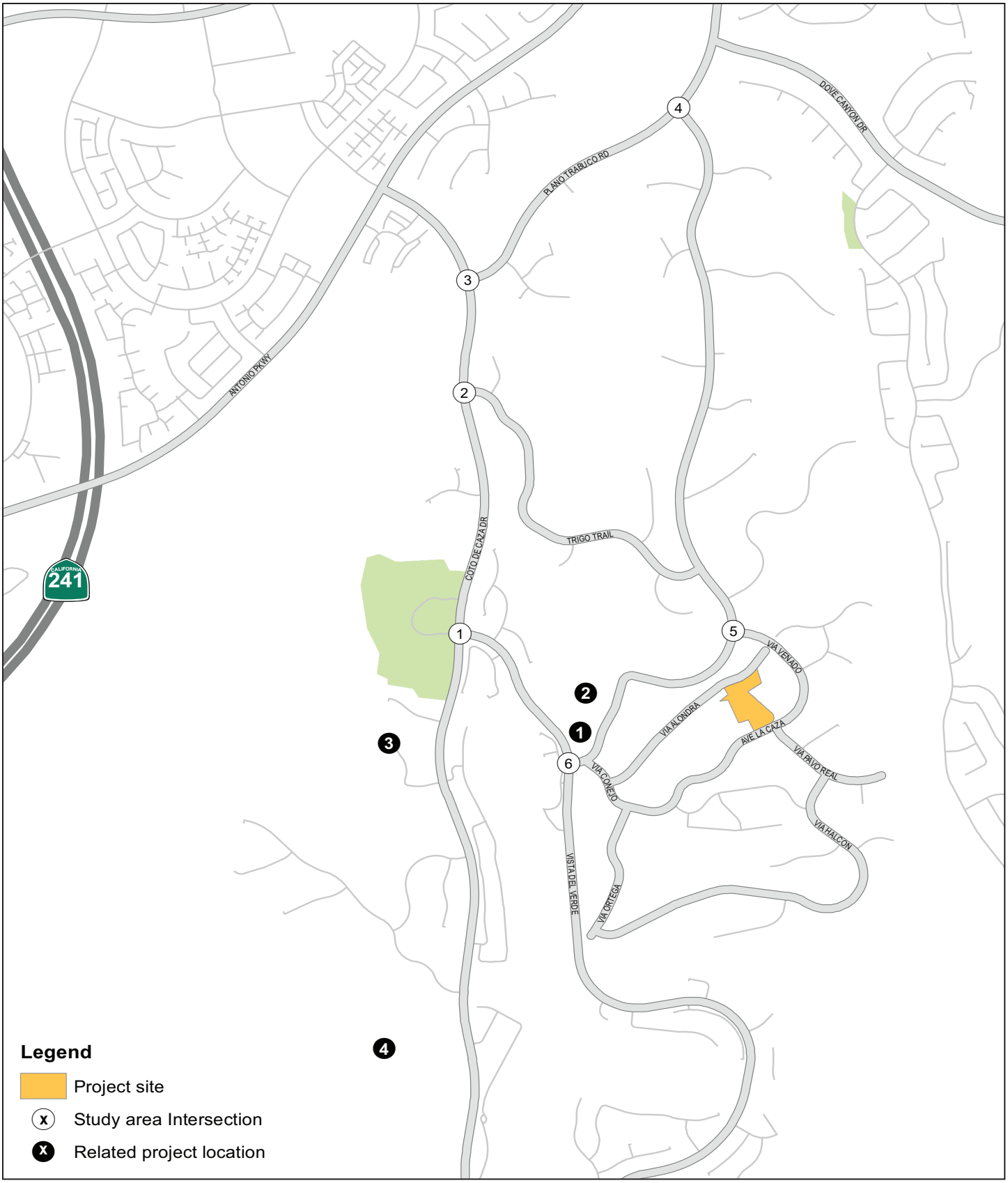
CUMULATIVE TRAFFIC IMPACTS

A list of projects was provided by the County that includes the approved, pending and/or proposed developments in the area. These projects are located in the City of Rancho Santa Margarita, Coto de Caza and other portions of unincorporated Orange County. Four projects in Coto de Caza are shown in Table 4.17-4, *Cumulative Project Summary*, were determined to affect the study area based on their proximity to the proposed project. A map showing the location of those four cumulative projects is provided in Figure 4.17-5, *Cumulative Project Locations*. Table 4.17-4 displays the location of the four cumulative projects in the study area, as well as their land use, project size, and the AM and PM peak hour trips generated by each project. These new trips generated by each of the cumulative projects were added to the existing conditions volumes to determine if the cumulative projects will impact traffic conditions.

Table 4.17-4
Cumulative Project Summary

Land Use	AM Peak Hour			PM Peak Hour			Traffic Study
	In	Out	Total	In	Out	Total	
1. Coto de Caza General Store Project							Yes
Retail 16,704 SF	36	22	58	48	47	95	
2. Coto de Caza Equestrian Center/Oak Grove Project							Yes
Single-Family 13 DU	2	8	10	8	6	14	
3. Via Terracaleta Project							Yes
Single-Family 7 DU	1	4	5	4	3	7	
4. Lyon Subdivision							Yes
Single-Family 25 DU	5	14	19	16	9	25	
Source: Stantec Consulting Services Inc., *Legacy at Coto Traffic Study*, April 13, 2020.							

The four cumulative projects were determined to affect the study area. The new trips generated by each of these cumulative projects were added to the existing conditions volumes, to determine if the cumulative projects will add to traffic congestion and create an impact.



Source: Stantec Consulting Services Inc.; April 13, 2020.

LEGACY AT COTO
Initial Study/Mitigated Negative Declaration

Cumulative Project Locations

VCS Environmental

Figure 4.17-5

The ADT volumes for cumulative traffic conditions and AM and PM peak hour traffic volumes without project are illustrated in Figures 4-4, 4-5 and 4-6 of the Traffic Study (Appendix J). The peak hour ICU and the corresponding LOS can be found in Table 4.17-5, *Intersection LOS Summary – Cumulative Conditions*, which provides a comparison between cumulative conditions without and with the proposed project based on existing lane configurations. As shown in Table 4.17-5, the project with cumulative projects would not change the ICU value for three of the study intersections but increases the ICU value by 0.01 or 0.02 at the remaining three study intersections. Compared to the with-project traffic condition, one additional intersection would experience an ICU value increase. Under cumulative traffic conditions, the intersection of Casa de Caza Drive and Plano Trabuco Road would experience an increase of 0.01 ICU value increase during the AM and PM peak hours. However, each of these intersections would continue to operate at LOS A or B during the peak hours; therefore, the project would have no significant impact on the study intersections based on the ICU analysis. Even with the cumulative volumes added from other projects in the area of Coto de Caza, the project has less than significant impacts on the study intersections under cumulative conditions, and no mitigation is required.

Table 4.17-5
Intersection LOS Summary – Cumulative Conditions

Int No.	Intersection Location	Cumulative Conditions No-Project				Cumulative Conditions With-Project				Difference	
		AM		PM		AM		PM			
		ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	AM	PM
1	Coto de Caza Dr & Vista Del Verde	0.65	B	0.55	A	0.66	B	0.57	A	0.01	0.02
2	Coto de Caza Dr & Trigo Trail	0.38	A	0.30	A	0.38	A	0.30	A	0.00	0.00
3	Coto de Caza Dr & Plano Trabuco Rd	0.41	A	0.30	A	0.42	A	0.31	A	0.01	0.01
4	Via Pajaro & Plano Trabuco Rd	0.19	A	0.14	A	0.19	A	0.14	A	0.00	0.00
5	Via Pajaro & Via Venado	0.09	A	0.11	A	0.09	A	0.11	A	0.00	0.00
6	Vista Del Verde & Via Pajaro	0.37	A	0.34	A	0.39	A	0.35	A	0.02	0.01

Source: Stantec Consulting Services Inc., *Legacy at Coto Traffic Study*, April 13, 2020.

b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

No Impact: On September 27, 2013, Governor Brown signed Senate Bill 743 (SB743) (Steinberg, 2013). Among other things, SB743 creates a process to change the methodology to analyze transportation impacts under CEQA (Public Resources Code Section 21000 and following), which could include analysis based on project vehicle miles traveled (VMT) rather than impacts to intersection Level of Service. On December 30, 2013, the State of California Governor's Office of Planning and Research (OPR) released a preliminary evaluation of alternative methods of transportation analysis. The intent of the original guidance documentation was geared first towards projects located within areas that are designated as transit priority areas, to be followed by other areas of the State. OPR issued other draft discussion documents in March 2015 and January 2016, suggesting some new revisions to the state CEQA Guidelines. In November 2017, OPR submitted the proposed amendments to the CEQA Guidelines to the State's Natural Resources Agency (that include a proposed new Guidelines Section 15064.3 which governs how VMT-based analyses of potential traffic impacts should be conducted). In December 2018, the California Natural Resources Agency certified and adopted amendments to the CEQA Guidelines implementing SB743 with a required implementation date of July 1, 2020. However, projects commenced and circulated for public review prior to this date are not required to prepare VMT-bases analyses. (See CEQA Guidelines Section 15004(c)) The

analysis in this study utilizes existing, long-established protocols in accordance with CEQA and the County's CEQA thresholds to evaluate traffic impacts. No impacts would occur, and no mitigation is required.

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

Less Than Significant Impact With Mitigation Incorporated: The construction and operation of the proposed project would occur on the project site and would not involve any construction or long-term operational activities on a public roadway that would increase traffic hazards. The project would be required to implement Standard Condition T07 which requires that the project demonstrate that there would be adequate site distance at all project area intersections. The proposed project would require the movement of heavy construction equipment within the project area during mobilization and demobilization periods. During mobilization and demobilization of heavy construction equipment, turning movements into the project site could require temporary lane closures. The lane closures would occur during non-peak traffic periods, and if needed, flag men would be provided to safely direct traffic. With the implementation of Mitigation Measures T-1 and T-2, potential hazards associated with the mobilization and demobilization of construction equipment would be less than significant.

d) Result in inadequate emergency access?

Less Than Significant Impact With Mitigation Incorporated: Temporary activities associated with construction of project driveways and with the extension of infrastructure into the project site could result in temporary partial lane closures along Avenida La Caza and Via Alondra.

The construction activities for the proposed project would not involve any activities that would result in inadequate emergency access to the project. During construction, there could be the potential for temporary lane closures to allow for utility connections. However, the temporary lane closures would be for approximately two weeks and would be implemented in accordance with recommendations provided in the California Temporary Traffic Control Handbook to ensure emergency access would be maintained at all times.

Based on the project traffic report, the operation of the proposed project would not generate a substantial amount of traffic that would cause congestion or queuing along project area roadways that would adversely affect emergency access to the project site. The proposed project would involve the construction of new structures and access ways. The project would be required to design, construct and maintain structures and access ways in compliance with local, regional, state requirements related to emergency access. OCFA would review and ensure that adequate emergency access and adequate emergency response times are maintained.

As indicated above, the project would be required to implement Mitigation Measure T-2 which requires detour and access plans be prepared and implemented to ensure the safe movement of vehicles and pedestrians during the construction period. With the implementation of Mitigation Measure T-2, emergency access impacts during construction would be less than significant.

STANDARD CONDITIONS OF APPROVAL

Standard Condition T07: Prior to the issuance of any Grading Permits, the Applicant shall provide adequate sight distance per Standard Plan 1117 at all street intersections, in a manner meeting the approval of the Director, OC Development Services, or designee. The Applicant shall make all necessary revisions to the plan to meet the sight distance requirement such as removing slopes or other encroachment from the limited use area in a manner meeting the approval of the Director, OC Development Services, or designee.

MITIGATION MEASURES

Mitigation Measure T-1: Construction equipment mobilization and demobilization activities shall occur during non-peak traffic periods. Daily construction activities will be permitted in accordance with the County Noise Ordinance to the approval of the Director of OC Development Services, or designee.

Mitigation Measure T-2: The Contractor shall be responsible for preparing adequate detour and access plans, including use of a flagman if necessary, to ensure the safe movement of vehicles and pedestrians during the construction period.

REFERENCES

County of Orange, *County of Orange General Plan, Transportation Element,* July 2014.

County of Orange, *Standard Conditions of Approval*.

Stantec Consulting Services Inc., *Legacy at Coto Traffic Study*, April 13, 2020.

4.18 Tribal Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. 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:				
1) 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	☐	☐	☒	☐
2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

ENVIRONMENTAL ANALYSIS

California Assembly Bill 52 (AB52) established a formal consultation process for California tribes within the CEQA process. AB52 specifies that any project may affect or cause a substantial adverse change in the significance of a tribal cultural resource would require a lead agency to "begin consultation with a California Native American tribe that is traditional and culturally affiliated with the geographic area of the proposed project." Section 21074 of AB52 also defines a new category of resources under CEQA called "tribal cultural resources." Tribal cultural resources are defined as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is either listed on or eligible for the California Register of Historical Resources or a local historic register, or if the lead agency chooses to treat the resource as a tribal cultural resource.

The County initiated tribal consultation for the purposes of AB52 for the proposed project on May 21, 2020. Those tribes that have requested to be listed on the County's notification list for the purposes of AB52 were notified in writing via certified mail. As part of this process, the County has provided notification to each of these listed tribes the opportunity to consult with the County regarding the proposed project.

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

1) 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)?

Less Than Significant Impact: The proposed project site is not listed nor 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). Therefore, implementation of the proposed project would not cause an adverse change to historical resources and no adverse impacts would occur.

2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less Than Significant Impact With Mitigation Incorporated: A cultural resources records search was conducted at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton on December 4, 2018. Refer to Appendix C. The review consisted of an examination of the U.S. Geological Survey's (USGS') Cañada Gobernadora 7.5-minute quadrangle map to evaluate the Project's Area of Potential Effects (APE) for any cultural resources sites that were recorded or cultural resources studies that were prepared for properties within and near the area of potential impact.

Although the project site is not located within a general area of sensitivity for cultural resources, the grading activities associated with construction of the proposed project would encounter previously undisturbed native soils and could have the potential to encounter unknown cultural resources. The project would be required to comply with Standard Condition A04, which would ensure that an archaeologist observes grading activities, salvage and catalogue archaeological resources as necessary, and establishes procedures for archaeological resource surveillance, as well as procedures for temporarily halting or redirecting work.

In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5; Health and Safety Code Section 7050.5; Public Resources Code Section 5097.94 and Section 5097.98 must be followed.

Therefore, with compliance with Standard Condition A04 and Mitigation Measure TCR-1 potential impacts to historical resources would be less than significant.

STANDARD CONDITIONS OF APPROVAL

Standard Condition A04: Prior to the issuance of any Grading Permit, the Applicant shall provide written evidence to the Director, OC Development Services, or designee, that Applicant has retained a County-certified archaeologist, to observe grading activities and salvage and catalogue archaeological resources, as necessary. The archaeologist shall be present at the pre-grade conference, shall establish procedures for archaeological resource surveillance, and shall establish, in cooperation with the Applicant, procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the artifacts

as appropriate. If the archaeological resources are found to be significant, the archaeological observer shall determine appropriate actions, in cooperation with the project Applicant, for exploration and/or salvage.

Prior to the release of the grading bond, the Applicant shall obtain approval of the archaeologist's follow-up report from the Manager, Harbors, Beaches and Parks (HBP)/Coastal and Historical Facilities. The report shall include the period of inspection, an analysis of any artifacts found and the present repository of the artifacts. Applicant shall prepare excavated material to the point of identification. Applicant shall offer excavated finds for curatorial purposes to the County of Orange, or its designee, on a first refusal basis. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the Manager, HBP/Coastal and Historical Facilities. Applicant shall pay curatorial fees if an applicable fee program has been adopted by the Board of Supervisors, and such fee program is in effect at the time of presentation of the materials to the County of Orange or its designee, all in a manner meeting the approval of the Manager, HBP/Coastal and Historical Facilities.

MITIGATION MEASURES

Mitigation Measure TCR-1: If evidence of subsurface tribal cultural resources is found during construction, excavation, and/or other construction activities in that area, construction activities shall cease and the construction contractor shall contact the Director, OC Development Services/Planning, or designee. With direction from the Manager, an archaeologist certified by the County of Orange shall be retained to evaluate the discovery prior to resuming grading in the immediate vicinity of the find. If warranted (as determined by the Director, OC Development Services/Planning, or designee, in consultation with the archaeologist), the archaeologist shall contact the Native American Heritage Commission to determine the appropriate Native American monitor for the find. The archaeologist and Native American Monitor shall collect the resource and prepare a technical report describing the results of the investigation. The test-level report shall evaluate the site including discussion of significance (depth, nature, condition, and extent of the resources), final mitigation recommendations, and cost estimates.

REFERENCES

County of Orange, *County of Orange General Plan, Resources Element*, July 2014.

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4.19 Utilities and Service Systems

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

ENVIRONMENTAL ANALYSIS

a) Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less Than Significant Impact: Implementation of the proposed project would require the removal of onsite utilities from the project site. As part of the construction activities for the proposed project, new onsite utility service systems would be constructed that would connect to existing utility systems currently provided in the project area. The onsite utilities would be exposed during the grading activities and would not result in additional impacts beyond those associated with the grading impacts. Construction connections to offsite utility systems would involve minor trenching. Potential impacts would be short-term and construction BMPs would be in place to minimize construction related impacts. Each utility service provider would coordinate on the design/installation and would ensure that utility service would comply with construction standards and that adverse impacts to the environment are avoided. Therefore, less than significant impacts would result. No mitigation required.

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

Less Than Significant Impact: The project site is within service area of the Santa Margarita Water District. Existing eight-inch water pipelines are located along Avenida La Caza and Vis Alondra that provide water service to the project site. The project site currently has water demands for onsite administrative offices as well as for landscape irrigation. Implementation of the proposed project would incrementally increase the demand for water. As shown in Table 4.19-1, *Estimated Project Water Demands*, the proposed project including water demand amenities (Age Qualified Residential) would have a water demand of 46,722 gallons per day.

Table 4.19-1
Estimated Project Water Demands

Land Use	Units	Demand Factor	Gallons Per Day (gpd)
Age Qualified Residential	101 units	450 gpd/unit	45,450
Bistro	113 sq. ft.	225 gpd/1,000 sq. ft.	25.425
Bar	123 sq. ft.	225 gpd/1,000 sq. ft.	27.675
Dog Spa	168 sq. ft.	225 gpd/1,000 sq. ft.	37.800
Fitness Center (First Floor)	704 sq. ft.	225 gpd/1,000 sq. ft.	158.400
Restaurant	1,847 sq. ft.	225 gpd/1,000 sq. ft.	415.575
Boutique Movie Cinema	615 sq. ft.	225 gpd/1,000 sq. ft.	138.375
Fitness Center (Second Floor)	704 sq. ft.	225 gpd/1,000 sq. ft.	158.400
Wine and Sports Club	1,378 sq. ft.	225 gpd/1,000 sq. ft.	310.050
		Total	**46,722**
Source: Santa Margarita Water District, *Demand Standards*, accessed November 2019.			

Water Districts such as the Santa Margarita Water District are required to prepare and update every five years Urban Water Management Plans (UWMP). The UWMP identifies long-term resource planning to ensure that adequate water supplies are available to meet existing and future water needs. The UWMP includes a water supply and demand assessment that compares the total water supply sources available to the water supplier with the long-term total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and a drought lasting multiple consecutive water years. The water service reliability assessment is based regional and local planning programs that provide population projections within the service area of the urban water supplier. The most recent UWMP for SMWD was prepared in 2015. Below, is a comparison between the supply and demand within SMWD service area for projected years between 2020 and 2040 under a normal water year, single dry year, and multiple dry year; refer to Table 4.19-2, *Normal Year Demand Comparison*, Table 4.19-3, *Single Dry Year Demand Comparison*, and Table 4.19-4, *Multiple Dry Years Demand Comparison*.

Table 4.19-2
Normal Year Demand Comparison

Unit	2020	2025	2030	2035	2040
Supply Totals	40,785	41,511	41,330	39,865	39,715
Demand Totals	37,273	37,992	37,816	36,360	36,210
Difference	+3,512	+3,519	+3,514	+3,505	+3,505
Source: Santa Margarita Water District, Urban Water Management Plan; Adopted 2016.					

Table 4.19-3
Single Dry Year Demand Comparison

Unit	2020	2025	2030	2035	2040
Supply Totals	40,785	41,511	41330	39,865	39,714
Demand Totals	38,764	39,512	39,329	37,814	37,658
Difference	+2,021	+1,999	+2,001	+2,051	+2,057
Source: Santa Margarita Water District, Urban Water Management Plan; Adopted 2016.					

Table 4.19-4
Multiple Dry Years Demand Comparison

Unit	2020	2025	2030	2035	2040
First Year					
Supply Totals	40,785	41,511	41,330	39,865	39,715
Demand Totals	38,018	38,752	38,572	37,087	36,934
Difference	+2,767	+2,759	+2,758	+2,778	+2,781
Second Year					
Supply Totals	40,785	41,511	41,330	39,865	39,715
Demand Totals	38,764	39,512	39,329	37,814	37,658
Difference	+2,021	+1,999	+2,001	+2,051	+2,057
Third Year					
Supply Totals	40,785	41,511	41,330	39,865	39,715
Demand Totals	40,628	41,411	41,219	39,632	39,469
Difference	+157	+100	+111	+233	+246

As shown in the above in the Tables, the SMWD would have adequate water supplies for land uses within its service area under a normal year, single dry year, and multiple dry years. As indicated previously, the projected water demand projects are based on approved land use plans and associated population projections. The proposed project and associated population increase would be consistent with County of Orange General Plan. The water demands for the proposed project would be accounted for in the mostly recently adopted UWMP. Therefore, the project would have sufficient water supplies under normal, dry and multiple dry years and potential impacts regards to water supplies would be less than significant.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less Than Significant Impact: The SMWD currently provides sewer service to the project site. The SMWD owns and operates the Chiquita Water Reclamation Plant (CWRP) which serves Coto de Caza. The CWRP currently has a total treatment capacity of 19 million gallons per day as a result of a four million gallons per day (MGD) expansion in 2018 to increase the total production of recycled water for landscape irrigation to meet projected demands from future development. The wastewater demands within SMWD service area are included in the total water supply and water demands projections provided in the most UWMP.

The estimated wastewater demands for the project are shown in Table 4.19-5, *Estimated Project Wastewater Demands*. As indicated above the proposed project would be consistent with the County's General Plan and the water demands, including wastewater demands would be accounted for in the SMWD's most recent UWMP. There would be adequate water supplies and treatment capacity to meet the wastewater demands for the project. As part of the final design, the project would prepare master sewer plan and submit to the SMWD for approval. The master plan would show the sizes, directions of flow, and relative locations of all sanitary sewer mains, manholes, to adequately serve the project. t Potential impacts associated with providing wastewater treatment services to the proposed project would be less than significant.

Table 4.19-5
Estimated Project Wastewater Demands

Land Use	Units	Demand Factor	Gallons Per Day (gpd)
Multi-Family Residential	101 units	175 gpd/unit	17,675
Bistro	113 sq. ft.	225 gpd/1,000 sq. ft.	25.425
Bar	123 sq. ft.	225 gpd/1,000 sq. ft.	27.675
Dog Spa	168 sq. ft.	225 gpd/1,000 sq. ft.	37.800
Fitness Center (First Floor)	704 sq. ft.	225 gpd/1,000 sq. ft.	158.400
Restaurant	1,847 sq. ft.	225 gpd/1,000 sq. ft.	415.575
Boutique Movie Cinema	615 sq. ft.	225 gpd/1,000 sq. ft.	138.375
Fitness Center (Second Floor)	704 sq. ft.	225 gpd/1,000 sq. ft.	158.400
Wine and Sports Club	1,378 sq. ft.	225 gpd/1,000 sq. ft.	310.050
		Total	18,947
Source: Santa Margarita Water District, *Demand Standards,* accessed November 2019			

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less Than Significant Impact: The construction of the proposed project would generate various types of debris during the operation of the project. Solid waste generated would consist mostly of typical household and commercial trash from residents and visitors. Solid waste disposal service would be provided by CR&R Waste Services, Waste Management, and/or Golden State Disposal. Solid waste produced from the proposed project would either be transported to the Prima Deshecha Landfill, which has a permitted daily capacity of 4,000 tons per day (tpd) and is expected to be in service until approximately 2102; or (2) the Frank R. Bowerman Landfill located at 11002 Bee Canyon Access Road, Irvine, California 92602, which is permitted for 11,500 tpd maximum and is expected to be in service until approximately 2053. It is estimated the proposed project would generate approximately 609.78 pounds per day of solid waste as shown in Table 4.19-6, *Estimated Project Generated Solid Waste (Operational)*.

The construction of the proposed project would also generate various types of debris during the clearing of the site and demolition of the existing buildings. Based on the project's Air Quality and Greenhouse Modeling, it is estimated that 5,043 tons of construction debris would be removed from the project site.

Table 4.19-6
Estimated Project Generated Solid Waste (Operational)

Land Use	Units	Demand Factor	Pounds Per Day
Multi-Family Residential	101 units	5.31 lb/unit/day	536
Bistro	113 sq. ft.	13 lb/1,000 sq. ft.	1.47
Bar	123 sq. ft.	13 lb/1,000 sq. ft.	1.60
Dog Spa	168 sq. ft.	13 lb/1,000 sq. ft.	2.18
Fitness Center (First Floor)	704 sq. ft.	13 lb/1,000 sq. ft.	9.15
Restaurant	1,847 sq. ft.	13 lb/1,000 sq. ft.	24.01
Boutique Movie Cinema	615 sq. ft.	13 lb/1,000 sq. ft.	8.00
Fitness Center (Second Floor)	704 sq. ft.	13 lb/1,000 sq. ft.	9.15
Wine and Sports Club	1,378 sq. ft.	13 lb/1,000 sq. ft.	17.91
		Total	**609.78**

Source: CalRecycle, *Estimated Solid Waste Generation Rates*, accessed November 2019.

The amount of solid waste generated from the operation of the project would represent 0.007 percent of the amount of solid waste disposal permitted by the Prima Deshecha Landfill and 0.002 percent permitted at the Frank R. Bowerman Landfill. The construction debris generated from construction would be transported to landfills over the course of construction and demolition activities. On average, 25 haul truck trips would occur per day over the duration of the construction and demolition phases which would result in approximately 252.66 tons of construction debris per day. The 252.66 tons of construction debris would represent 6.3 percent of the amount of solid waste disposal permitted by the Prima Deshecha landfill and 2.2 percent permitted at the Frank R. Bowerman Landfill.

The amount of solid waste generated from the operation and construction of the project would not exceed the capacity of local facilities or exceed State and local standards; therefore, potential solid waste disposal impacts would be less than significant. No mitigation is required.

Solid waste would be disposed of in a proper facility depending on the type of solid waste.

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

No Impact: The proposed project would produce solid waste associated with the demolishing and construction stages as well as during operation. The Proposed Project as business would be required to comply with state and local statutes and regulations related to solid waste. Applicable regulations include California's Integrated Waste Management Act of 1989 (AB939) which required cities and counties throughout the state to divert 50 percent of all solid waste from landfills through source reduction, recycling, and composting; 2008 modifications of AB939 to reflect a per-capita requirement rather than tonnage; AB341 which increased the statewide goal for waste diversion to 75 percent by 2020; and the California Solid Waste Reuse and Recycling Access Act (AB1327) which requires local agencies to adopt an ordinance to set aside areas for collecting and loading recyclable materials in development projects.

In accordance with the California Department of Resources Recycling and Recovery disposal requirements, Best Management Practices would be employed to reduce solid waste disposal such as the recycling of all plastic bags, containers, and green waste composting, chipping, and shredding. Additionally, through the County of Orange Waste and Recycling Program, the County offers waste prevention recommendations and recycling facilities for construction and demolition debris.

With implementation of the Best Management Practices and compliance with California Department of Resources Recycling and Recovery disposal requirements, potential solid waste disposal impacts would be less than significant. Implementation of the proposed project would not conflict with the ability to comply with these regulations. No mitigation is required.

STANDARD CONDITIONS OF APPROVAL

No Standard Conditions of Approval are required.

MITIGATION MEASURES

No Mitigation Measures are required.

REFERENCES

Arcadis U.S., Inc., *2015 Urban Water Management Plan – Santa Margarita Water District*, June 2016.

CalRecycle, Facility/Site Summary Details: Frank R. Bowerman Sanitary Landfill (30-AB-0360), accessed November 2019.

CalRecycle, Facility/Site Summary Details: Prima Deshecha Sanitary Landfill (30-AB-0019), accessed November 2019.

County of Orange, *County of Orange General Plan, Land Use Element*, October 2015.

Orange County Waste and Recycling, website accessed November 2019.

Planner's Annex, *Coto de Caza Specific Plan (Amendment 3)*, adopted August 8, 1995.

Santa Margarita Water District, website accessed November 2019.

4.20 Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

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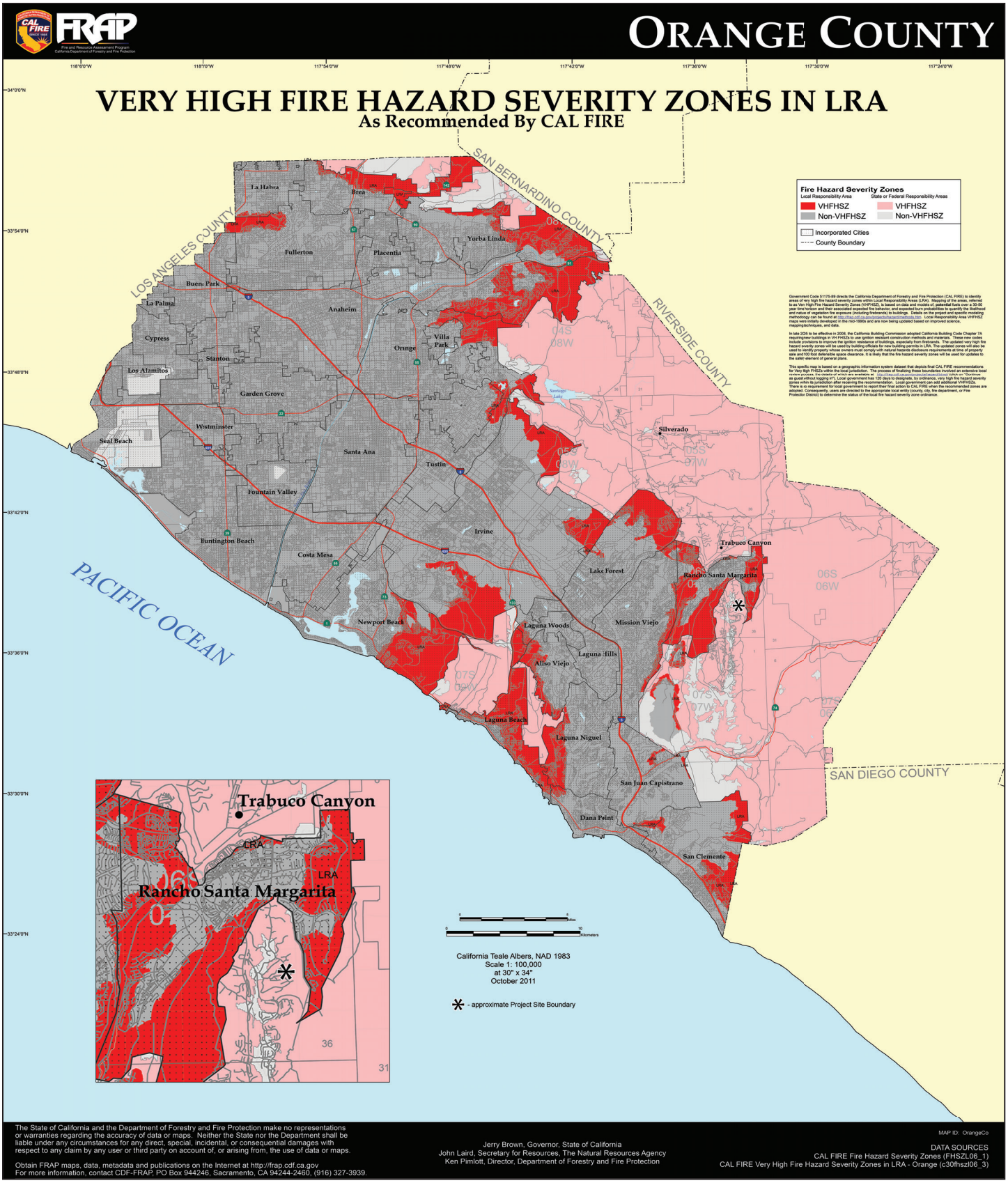
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact: A wildland fire is a non-structural fire that occurs in vegetative fuels. Wildland fires can occur in undeveloped areas and spread to urban areas where the landscape and structures are not designed and maintained to be ignition resistant. The potential for wildland fires represents a hazard where development is adjacent to open space or within proximity to wildland fuels or designated Fire Hazard Safety Zones. The County of Orange General Plan and the California Department of Forestry and Fire Protection identifies the project site is within an area that has been designated as a High Fire Hazard Area; refer to Figure 4.20-1a, *Fire Hazard Severity Zones*. Additionally, as shown in Figure 4.20-1b, *Fire Hazard Severity Zones*, the California Department of Forestry and Fire Protection identifies that the project site is within a Very High Fire Hazard Severity Zone and in a State Responsibility Area.

A State Responsibility Area (SRA), under Title 14 of the Natural Resources of the California Code of Regulations (CCR), the California Department of Forestry and Fire Protection (CAL FIRE) has the primary responsibility for implementing wildfire planning and protection for State Responsibility Area (SRA) lands. CAL FIRE develops fire safe regulations and issues fire safe clearances for land within the SRA. Under an agreement with the State, Orange County Fire Authority (OCFA) would provide fire protection, emergency medical services and rescue services within SRA as well as for the proposed project.

There is not an adopted emergency evacuation plan or pre-designated evacuation routes for Coto de Caza. Under the California Standardized Incident Command System (ICS), evacuation is a law enforcement function. The Orange County Sheriff's Department would be in charge of evacuating neighborhoods in the event of a fire that threatens homes. These evacuations would be decided within the Incident Command structure in consultation with the fire department, law enforcement, public works, and local government liaisons in order to establish when and where they would occur. Under the Ready Set Go program instituted



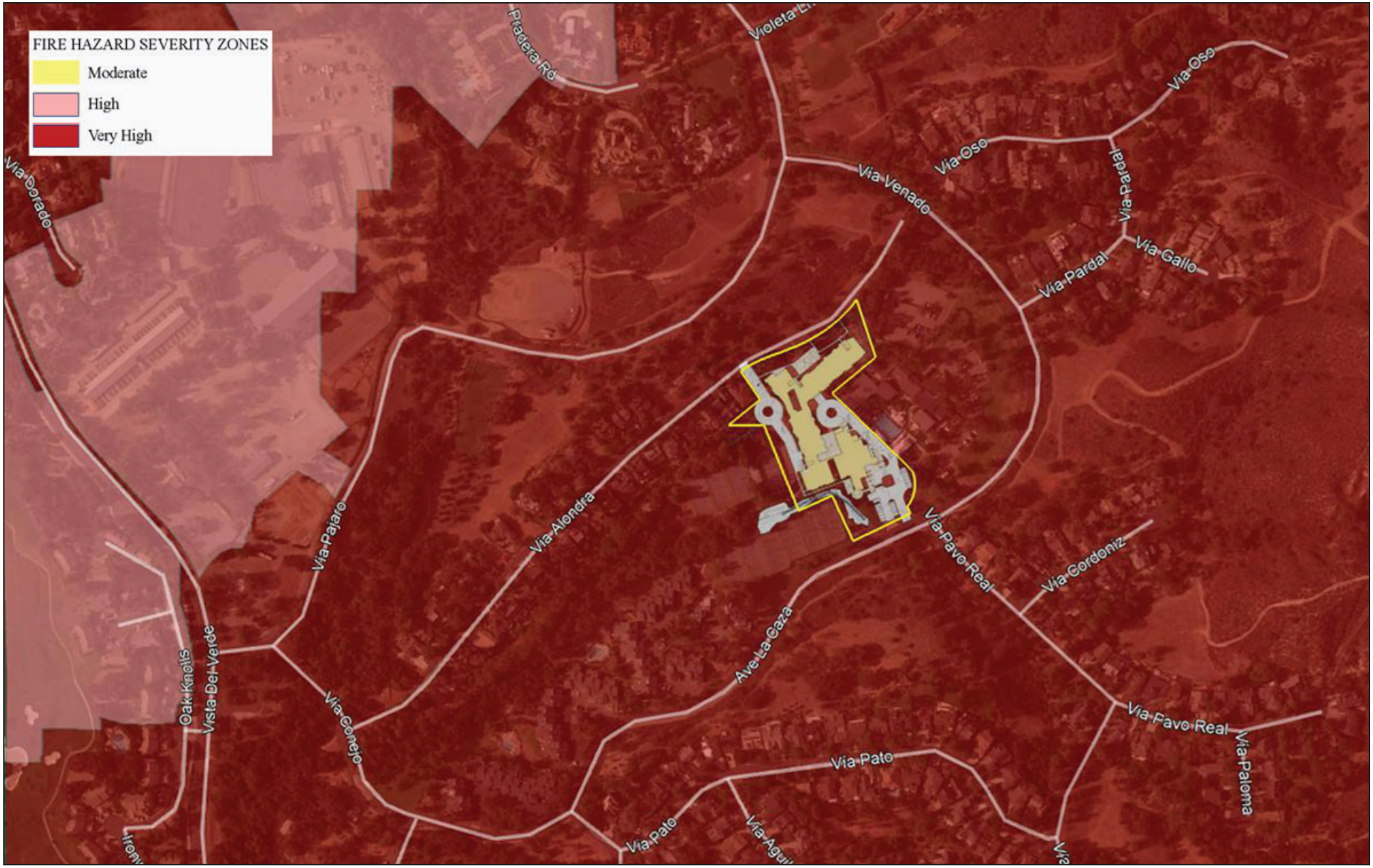
Source: California Department of Forestry and Fire Protection (CALFIRE); January 2020.

LEGACY AT COTO
Initial Study/Mitigated Negative Declaration

Fire Hazard Severity Zones

VCS Environmental

Figure 4.20-1a



Source: Firesafe Planning Solutions; April 2020.

LEGACY AT COTO
Initial Study/Mitigated Negative Declaration

Fire Hazard Severity Zones

VCS Environmental

Figure 4.20-1b

in Orange County, citizens are encouraged to evacuate prior to an evacuation recommendation, advisory or order. Prior to issuance of occupancy permits, the applicant would work with the Orange County Sheriff's Department and the Orange County Fire Authority to confirm the standard for triggering voluntary evacuations and would establish a predecessor trigger for the Legacy at Coto project that would be approved by the County of Orange. To ensure safe evacuation an evacuation plan has been prepared for Legacy residents. Residents of the project would be evacuated before voluntary or mandatory evacuation orders are issued during a wildland fire. A special monetary fund would be established to charter buses from a charter bus company to evacuate residents. The use of the bus would be funded by the project and all residents would be required to be evacuated by bus if an emergency occurs. An adequate amount of buses would be provided to ensure seating for all Legacy residents. Additionally, the funds would be used to house residents at local hotels until any danger passes. Additional safety qualified staff would also be provided during red flag warning days to assist residents. Fire drills would be practiced twice a year to ensure all residents and staff are well trained on the procedure. During an emergency, the primary access to the project would be from a fire safety compliant driveway accessed from Avenida La Caza. Secondary emergency access to the project would be provided from the north end of Via Alondra. Additionally, as part of the project, a restricted access vehicle connection from Via Alondra to Via Venado would be provided only for fire safety purposes. The primary evacuation routes for the greater Coto community would be through a series of internal neighborhood roadways, which would connect with the primary egress roads, Coto de Caza Drive and Plano Trabuco Road, which intersects with the County's primary and major evacuation routes.

All Legacy residents would be required to be evacuated by buses. The early evacuation of the residents by bus would reduce the overall amount vehicles on roads that would be used for evacuation, which would reduce potential traffic congestion and potentially increase response times to evacuate Coto de Caza. It is assumed that all residents would be evacuated by bus. The employees of Legacy and in the event some residents that are not able to be bused, would need to be evacuated with own vehicles.

Based on the project traffic report, the proposed project would not generate a substantial amount of traffic that would cause congestion or queuing along project area roadways that might be used for evacuation. The increased traffic from the proposed project would be a negligible increase in vehicles evacuating compared to the overall amounts of vehicles that would be evacuated from Coto de Caza under the current condition.

Because there are no adopted emergency response plans or emergency evacuation plans for Coto de Caza implementation of the proposed project would not impair any adopted emergency response plans or emergency evacuation plans. The proposed project would implement a pre-evacuation program to evacuate residents before voluntary or mandatory evacuation, which reduce traffic congestion and evacuation delays and enhance emergency responses to the project area resulting in less than significant impacts. No mitigation is required.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Less Than Significant Impact: Topography influences the movement of air and the direction of a fire course. Additionally, wind events magnify the risks of wildfire and would have the potential to expose inhabitants to elevated pollutant concentrations. Wildland fires have occurred in Orange County, particularly in the fall, ranging from small localized fires to fires covering thousands of acres. The most severe fires have typically occurred during Santa Ana wind conditions. The project site is not contiguous to wildland slope areas that could act as conduit for wildland fire. The closest natural open space area is

located approximately 150 feet to the east between project site and the Sonriente Trail. Situated between the project and the open space are fuel modification zones and improved roadways that would function as fire breaks. Additionally, the proposed project would have surrounding roadways and driveways which would also act as fire breaks. The uncontrolled spread of a wildfire in the vicinity of the project site would be minimized because of the non-combustible materials provided in the fuel modification plan surrounding the project site. Likewise, areas posing a significant fire hazard risk are subject to the Public Resources Code, Sections 4291-4299, which require property owners to conduct maintenance to reduce the fire danger. Required fire maintenance includes, but is not limited to, maintaining 100 feet of defensible space along all sides of a structure or up to property line; removing dead or dying vegetative materials, trees, and/or shrubs; constructing fire breaks or other appropriate vegetation management techniques around fire-sensitive land uses (i.e., hospitals, adult residential care facilities, schools, storage tanks, and hazardous materials facilities); and maintaining vegetative clearings near electrical transmission or distribution lines.

The principal pollutant of concern from wildland fire would be particulate matter. The wind within the Coto de Caza area is most often from the west for approximately nine months, from February to November, with a peak percentage occurring in May. As indicated, the closest natural open space area is to the east. Most likely, wildland fire particulate matter generated from this area during this period would be blown to the west, away from the project site. Between November to February, the wind is most often from the east. Because this time period is generally considered the wet season, it is not considered a high fire hazard risk time. Therefore, due to slope, prevailing winds, and location, the proposed project would not exacerbate wildland fire risks and potential impacts would be less than significant. Not mitigation is required.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Less Than Significant Impact: To minimize the risk for wildland fire impacts the proposed project has prepared a Fuel Modification Plan and a Fire Safety Plan. The Fuel Modification Plan program brings fire-safe landscaping and construction features together to improve community safety and reduce property loss during wildfire emergencies .The Fuel Modification Plan for the proposed project proposes a 20-foot Zone A Non-Combustible Zone that is only allowed for non-combustible construction and a 0 to153-foot Zone B Wet Zone extending from Zone A, that would consist of permanently irrigated fully landscaped drought tolerant, deep rooted high moisture plant material. Additionally, a Restricted Plant Zone is proposed for the portion of the project adjoining Via Alondra.

Fire Master Plans are general guidelines pertaining to the creation and maintenance of fire department access roadways, access walkways to and around buildings, and hydrant quantity and placement as required by the 2019 California Fire and Building Codes (CFC and CBC) and as amended by local ordinance. The Fire Master Plan demonstrates the project's effectiveness for emergency response and firefighting operations and ensure proper installation and maintenance of fire access roadways, the proper sitting of hydrants, adequate water supply, and access to structures.

The proposed project would not require the construction of any infrastructure that would increase fire risk. The project includes the construction of water infrastructure and other utility improvements that would aid in fire suppression and not any overhead power lines that could increase the risk for wildland fires. The proposed project includes an internal circulation system, that would not include any changes too existing roadways that would exacerbate fire risk. Therefore, the proposed project would not require the installation or maintenance of associated infrastructure that would exacerbate fire risk or result in temporary or ongoing impacts to the environment and potential impacts would be less than significant. Not mitigation is required.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less Than Significant Impact: Landslides, including mud flows and debris flows can be triggered by erosion and downslope runoff caused by rain following a fire. According the geotechnical report, landslides or other forms of natural slope instability are not a hazard to the project site and the project site is not within a landslide hazard area. A FEMA Zone A floodplain overlaps a small area of the proposed building on the west of the site. Zone A floodplains indicate that the area has a one percent annual exceedance probability flood risk with an unknown ponding depth. To ensure flood flows are not impeded or redirected, the proposed project would have to meet FEMA requirements to maintain a minimum of one foot of freeboard between the floodplain and proposed building finished floor. Because the project site does not contain any steep slopes that are prone to downslope landslides or would result in any changes that would increase the potential for flooding, the proposed project would not expose people or structures to significant risks, including downslope landslides, as a result of runoff, post-fire instability or drainage changes impacts would be less than significant. Not mitigation is required.

STANDARD CONDITIONS OF APPROVAL

No Standard Conditions of Approval are required.

MITIGATION MEASURES

No Mitigation Measures are required.

REFERENCES

California Department of Forestry and Fire Protection, *Orange County Fire Hazard Severity Zones in SRA*, November 2007.

County of Orange, *County of Orange General Plan, Safety Element,* July 2014.

4.21 Mandatory Findings of Significance

Would the project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b. 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)?	☐	☒	☐	☐
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

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

Less Than Significant Impact With Mitigation Incorporated: The project site is located within an urbanized setting. There are no sensitive vegetation communities, plant or wildlife species on the project site. The project site is located near open space drainages that are classified as Waters of the U.S. and State. The construction activities for the proposed project would avoid impacts to these waters. Implementation of the proposed project would not result in direct impacts to sensitive vegetation communities, plans, wildlife or their habitat.

Cultural resource surveys conducted at the project site determined that the Vic Braden Tennis College was not a historical structure under CEQA. Additionally, no recorded cultural resource sites are known to exist on the project site. To avoid impacts to unknown cultural resources that could be present on the project site, the proposed project would be required to comply with Standard Condition A04, which would ensure that an archaeologist observe grading activities, salvage and catalogue archaeological resources as necessary, and establish procedures for archaeological resources surveillance, as well as procedures for temporarily halting or redirecting work. Additionally, Standard Condition A07 would ensure that a paleontologist observe grading activities, salvage and catalogue fossils as necessary, and establish

procedures for paleontological resource surveillance, as well as procedures for temporarily halting or redirecting work. Also, Mitigation Measures CR-1 and TCR-1 would reduce potential impacts to unknown human remains and tribal cultural resources, in the unlikely event they are encountered during construction. With implementation of Standard Conditions A04, A07 and Mitigation Measures CR-1 and TCR-1, potential impacts to unknown cultural resources and tribal cultural resources would be less than significant.

b) 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 With Mitigation Incorporated: A cumulative impact may be significant if a project's incremental effect, though individually limited, is cumulatively considerable. Cumulatively considerable means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects and the effects of probable future projects. Cumulative impacts can occur as a result of the intersections of the interactions of environmental change from multiple projects that could affect the same environmental resources, such as traffic, noise and air quality.

A summary related projects in the vicinity of the project site which was used in the cumulative analysis is presented in Table 4.21-1, *Related Cumulative Projects*.

Table 4.21-1
Related Cumulative Projects

Address/Applicant	Land Use	Distance from Project Site
City of Rancho Santa Margarita		
31931 Dove Canyon Drive/Paloma Square	120 Townhomes	1.34 miles
30152 Aventura/Applied Medical Building	26,865 SF manufacturing/warehouse building expansion	1.74 miles
Coto de Caza		
23432 Vista Del Verde/Oak Grove Residential Project	13 single-family homes; amendment of the Coto de Caza Specific Plan	0.37 miles
23472 Vista Del Verde/Coto de Caza General Store	3 commercial buildings; 10,199 SF retail, 1,800 SF dining, and 5,012 office	0.32 miles
Fairway Lane & Coto de Caza Drive/Lyon Subdivision	25 single-family lots (minimum 2 acres)	1.13 miles
Via Terracaleta Area Plan	6 new single-family homes, 1 single-family home reconstruction	0.74 miles
Coto Valley Country Club	Alternative to off-street parking requirements. Land use remains unchanged.	Adjacent to eastern site boundary
Unincorporated Orange County		
Ortega Highway/The Preserve at San Juan	72 single-family homes	7.0 miles
Wagon Wheel Creek Restoration Plan	Stabilization of Wagon Wheel Creek for resource management purposes in order to protect remaining oak and sycamore woodland and other riparian vegetation; protection of the park and the recreational resources from flooding and to limit erosion hazards;	3.2 miles

Address/Applicant	Land Use	Distance from Project Site
	and ensuring of public safety within Riley Wilderness Park.	
Aliso Creek Trail Slope Repairs	Restoration of 2,000 linear feet of bike trail that was damaged due to heavy rainstorms and erosion over several years.	4.3 miles
Abbreviations: SF=Square Feet Source: Email from County of Orange, *Cumulative Projects List*, January 7, 2020.		

The analysis provided in Section 4.0, *Environmental Analysis*, identifies that no impacts would occur to agriculture and forestry resources and mineral resources. Therefore, the proposed project would not contribute considerably to cumulative impacts.

The analysis determined that potential impacts to energy, greenhouse house gas emissions, land use and planning, population and housing, public services, recreation, utilities and service systems and wildfire would be less than significant and did not require mitigation. Therefore, while the project would contribute to cumulative impacts, the project contribution would not be considerable.

Impacts related to related to aesthetics light and glare, air quality construction emissions, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, transportation, and tribal resources were determined to be potentially significant, and would require Standard Conditions, Mitigation Measures, or both to reduce impacts to a less than significant level. Therefore, the proposed project could contribute considerably to significant cumulative impacts in these environmental issue areas. These environmental issue areas are discussed in further detail below.

AESTHETICS

To ensure spillover lighting impacts onto adjoining properties are avoided, the proposed project would be required to implement Standard Condition LG01 which would ensure that all exterior lighting would be confined to the project site, avoiding spillover lighting impacts to adjoining properties. With implementation of Standard Condition LG01-1, potential light and glare impacts would be less than significant, and the proposed project would not result in a cumulatively considerable contribution to impacts related to light and glare spillover impacts. Related cumulative projects in the project area would be evaluated for potential aesthetic impacts and would be required to comply with applicable site development and design standards to minimize potential aesthetic impacts. With implementation of Standard Condition LG01, potential light and glare aesthetic impacts would be less than significant and, the proposed project when considered with the related cumulative projects identified in Table 4.21-1 would not result in a significant cumulatively considerable contribution to aesthetic impacts.

AIR QUALITY

The context for assessing cumulative air impacts from short-term construction activities includes quantifying emissions and comparing the emissions to the applicable SCAQMD screening thresholds. As discussed in Section 4.3, *Air Quality*, the proposed project's construction emissions would be below SCAQMD thresholds. Further, the proposed project would be required to implement Condition of Approval 4.3-1, which would require dust suppression techniques to prevent fugitive dust from creating a nuisance offsite. With implementation of Condition of Approval 4.3-1, short-term construction air emissions would be less than significant, and the proposed project would not result in a cumulatively considerable contribution to impacts related to short-term air quality emissions.

BIOLOGICAL RESOURCES

No special status animal species were observed on the project site. However, five special status wildlife species were determined to have low to moderate potential to occur within the project area. Additionally, there was low potential for special status plant species to occur. The proposed project would be required to implement Mitigation Measures BIO-1, BIO-2 and BIO-3 which requires pre-construction surveys be conducted before the start of grading activities. With the implementation of Mitigation Measures BIO-1, BIO-2 and BIO-3 potential impacts to special status species would be avoided and the project would not result in a cumulatively considerable contribution to impacts to special status species. All jurisdictional features on the project site would be avoided, no direct impacts to any riparian habitat or other sensitive natural community would occur. Therefore, the proposed project would not contribute to the loss of sensitive vegetation communities or wetland habitat. The surrounding land uses limit the potential for the project to support regional wildlife movement. The surrounding land uses limit the potential for the project site to support regional wildlife movement Therefore, no impacts to migratory wildlife corridors are expected to occur. Therefore, the proposed project would not contribute to the loss of wildlife movement corridors. To avoid impacts to avoid impacts nesting migratory bird, the proposed project would be required to implement Mitigation Measure BIO-3 which requires pre-construction surveys be conducted to avoid impacts to migratory birds that might nest in the project area. With implementation if Mitigation Measure BIO-3 potential impacts to nesting migratory birds would be avoided and the project would not result in a cumulatively considerable contribution to impacts to migratory birds. Related cumulative projects would be required to comply state and federal laws that provide for the protection of biological resources and where needed would need to implement measure to minimize impacts to biological resources. Compliance with local, state and federal laws would reduce the potential impacts to less than significant. Therefore, the proposed project considered with the related projects would not result in significant cumulative impacts to biological resources.

CULTURAL RESOURCES

The context for assessing cumulative impacts to local archeological and paleontological resources is to determine whether the project would result in a loss of these resources that could diminish or eliminate important information relevant to the County of Orange and/or the surrounding area. The proposed project would be required to comply with Standard Conditions A04 and A07, which would require an archaeologist/ paleontologist to evaluate any discovered potential archaeological/paleontological resources, and appropriate steps to preserve or curate the artifact and halt or redirect work. This would eliminate any potential loss of important archaeological or paleontological information that may be buried under the project site. With regard to a potential discovery of human remains during construction, the project would be required to comply with Mitigation Measure CR-1 which requires grading and construction activities to cease pursuant to State Health and Safety Code Section 7050.5 until the County Coroner has made the necessary findings as to origin and disposition pursuant to Section 5097.98 of the California Public Resources Code. Therefore, the proposed project would not result in a cumulatively considerable contribution to impacts related to a cumulative loss of important archaeological or paleontological resources, and/or disturbed human remains. Related cumulative projects would be required to comply state and federal laws that provide for the protection of cultural resources and where needed would need to implement measure to minimize impacts to cultural resources. Compliance with local, state and federal laws would reduce the potential impacts to less than significant. Therefore, the proposed project considered with the related projects would not result in significant cumulative impacts to cultural resources.

GEOLOGY AND SOILS

Like other areas in southern California, the proposed project could be subject to seismic shaking impacts. The proposed structure would be required to be designed to meet the County's construction development standards and the seismic design parameters of the California Uniform Building Code. The proposed project would be required to implement Standard Condition G01, which would ensure that the geotechnical report for the proposed project complies with County requirements and regulations provided in the County Municipal Code. With compliance of Standard Condition G01, potential seismic shaking impacts would be less than significant. Therefore, the proposed project would not contribute to a cumulatively considerable impact with regards to seismic shaking impacts. Related cumulative projects would be required to comply with California Building Code requirements to minimize potential geologic and seismic impacts and would be required to implement erosion control plans to minimize potential erosion and sedimentation impacts. To avoid potential impacts to paleontological resources, the proposed project would be required to comply with Standard Condition A07, which would ensure that a paleontologist observe grading activities, salvage and catalogue paleontological resources as necessary, and establish procedures for paleontological resource surveillance, as well as procedures for temporarily halting or redirecting work. With compliance with Standard Condition A07, potential impacts to paleontological resource would be less than significant and the project would not result in a significant cumulatively impacts to paleontological resources. Therefore, the proposed project considered with the related projects would not result in significant cumulative geologic impacts.

HAZARDS AND HAZARDOUS MATERIALS

There would be the potential that existing structures on the project site could contain asbestos containing building materials and lead which could be inadvertently released into the environment during building demolishing activities. To avoid the inadvertent release of asbestos and lead containing building materials into the air, the proposed project would be required to implement Mitigation Measure HAZ-1, which requires asbestos and lead surveys be prepared prior to demolishing activities and in the event asbestos and lead containing building materials are present, be removed and disposed in accordance with local, state and federal regulations. With compliance with Mitigation Measure HAZ-1, the potential handling of hazardous materials would be less than significant. Therefore, the proposed project would not contribute to a cumulatively considerable impact with regards to the release of hazardous materials into the environment. Related cumulative projects would be evaluated for potential hazards and potential release of hazardous substances into the environment. The related projects would be required to comply with local, state and federal laws and regulations regarding the handling, storage and transporting of hazardous materials. Compliance with local, state and federal laws would reduce the potential impacts to less than significant. Therefore, the proposed project considered with the related projects would not result in significant cumulative hazard or hazardous material impacts.

HYDROLOGY AND WATER QUALITY

A portion of the project site is within Flood Zone A. Additionally, construction activities associated with the proposed project could have the potential to generate degraded surface water impacts which could adversely affect downstream receiving water bodies. The proposed project would be required to implement NPDES and Municipal Code regulations, as well as Standard Conditions D01b, D02b, D03a, D09a, WQ01, WQ03, WQ04, WQ05 and Mitigation Measure HWQ-1 to ensure that impacts related to long-term water quality and flood management would be less than significant. Therefore, the proposed project would not contribute to a cumulatively considerable impact with regards to hydrology and water quality. Related cumulative projects would be evaluated for potential hydrology impacts and would be required to ensure they are not within a flood hazard area or would impede flood flows. Additionally, related projects would

be required to comply with County of Orange NPDES MS4 Storm Water Permit requirements to maintain water quality. Therefore, the proposed project considered with the related cumulative projects would not result in significant cumulative hydrology or water quality impacts.

NOISE

The proposed project's long-term operational mobile and stationary noise impacts were determined to be less than significant with implementation of Standard Conditions N02 and N08, which would require that all residential dwellings be sound attenuated against present and projected noise levels to meet interior noise standard of 45 dBA CNEL and exterior noise standard of 65 dBA and prepare an acoustical report and appropriate plans that shows compliance with County Noise Control Ordinance The proposed project would result in a temporary increase in noise levels during construction activities. The proposed project would be required to implement Standard Conditions N10 and Mitigation Measures N-1 to N-7, which would reduce construction noise impacts to a less than significant level. Therefore, the proposed project's short-term noise contribution would not be considerable. Related cumulative projects would be required to comply with applicable noise and vibration standards, and regulations to minimize noise and vibration impacts. Therefore, the proposed project considered with the related cumulative projects would not result in significant cumulative noise impacts.

TRANSPORTATION/TRAFFIC

As discussed in Section 4.17, *Transportation*, the project would increase traffic within the study area. The project's long-term cumulative traffic impacts were determined to be less than significant with implementation of Standard Condition T07 and Mitigation Measures T-1 and T-2. Cumulative projects would be required to comply with the applicable traffic design standards, regulations, and mitigation measures on a project-by-project basis to ensure significant cumulative traffic impacts do not occur. Therefore, project-related traffic impacts would be significantly cumulatively considerable with regard to potential transportation and traffic impacts.

TRIBAL CULTURAL RESOURCES

To avoid significant impacts to unknown tribal resources that be present on the project site, the proposed project would be required to comply with Standard Condition A04 and Mitigation Measure TCR-1, which requires halting construction activities and proper consultation with the County of Orange and Native American Heritage Commission if subsurface tribal cultural resources are found during construction, excavation, and/or other construction activities in the area. This would eliminate any potential loss of important tribal cultural resources that may be discovered at the project site. Compliance with Standard Condition A04 and Mitigation TCR-1 would ensure that a cumulative loss of tribal cultural resources as a result of the project would not occur. Therefore, the proposed project would not result in a cumulatively considerable contribution to impacts related to tribal cultural resources, and impacts would be less than significant. Related cumulative projects in the area would be required to comply with the provisions of AB52, which would reduce cumulative impacts in regard to tribal cultural resources. Therefore, the proposed project considered with the related cumulative projects would not result in significant cumulative noise impacts.

c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact With Mitigation Incorporated: Potential impacts that could cause substantial adverse effects on human beings were analyzed in this Initial Study include, but are not limited to; air quality, greenhouse gas emissions, geology hazards, hazardous materials, seismic hazards,

hydrology/water quality, noise and wildfire. Each issue area found that there would be either no impacts, impacts would be less than significant, or impacts would be less than significant with mitigation incorporated. The proposed project would comply with local and regional planning programs, applicable codes, and ordinances, State and Federal laws and regulations, standard conditions of approval and mitigation measures to ensure that long-term operation activities and short-term construction activities associated with the proposed project would not result in direct, or indirect adverse impacts to human beings.

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5.0 INVENTORY OF STANDARD CONDITIONS AND MITIGATION MEASURES

5.1 Inventory of Standard Conditions of Approval

AESTHETICS

Standard Condition LG01: Prior to issuance of any Building Permit, the applicant shall demonstrate that all exterior lighting has been designed and located so that all direct rays are confined to the property in a manner meeting the approvals of the Director, OC Development Services/Planning, or designee.

AIR QUALITY

Condition of Approval 4.3-1: Prior to issuance of any Grading Permit, the Director, OC Development Services, or designee shall confirm that the project stipulates that, in compliance with SCAQMD Rule 402 and Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or other dust prevention measures, as specified in the SCAQMD's Rules and Regulations. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance offsite that are applicable to the project. Implementation of the following measures would reduce short-term fugitive dust impacts on nearby sensitive receptors:

- All active portions of the construction site shall be watered every three hours during daily construction activities and when dust is observed migrating from the project site to prevent excessive amounts of dust;
- Pave or apply water every three hours during daily construction activities or apply nontoxic soil stabilizers on all unpaved access roads, parking areas, and staging areas. More frequent watering shall occur if dust is observed migrating from the site during site disturbance;
- Any onsite stockpiles of debris, dirt, or other dusty material shall be enclosed, covered, or watered twice daily, or non-toxic soil binders shall be applied;
- All grading and excavation operations shall be suspended when wind speeds exceed 25 miles per hour;
- Disturbed areas shall be replaced with ground cover or paved immediately after construction is completed in the affected area;
- Gravel bed trackout aprons (three inches deep, 25 feet long, 12 feet wide per lane and edged by rock berm or row of stakes) shall be installed to reduce mud/dirt trackout from unpaved truck exit routes;
- Onsite vehicle speed shall be limited to 15 miles per hour;
- Visible dust beyond the property line which emanates from the project shall be prevented to the maximum extent feasible;
- All material transported offsite shall be either sufficiently watered or securely covered to prevent excessive amounts of dust prior to departing the job site;
- Reroute construction trucks away from congested streets or sensitive receptor areas;
- Track-out devices shall be used at all construction site access points; and

- All delivery truck tires shall be watered down and/or scraped down prior to departing the job site.

CULTURAL RESOURCES

Standard Condition A04: Prior to the issuance of any Grading Permit, the Applicant shall provide written evidence to the Director, OC Development Services, or designee, that Applicant has retained a County-certified archaeologist, to observe grading activities and salvage and catalogue archaeological resources, as necessary. The archaeologist shall be present at the pre-grade conference, shall establish procedures for archaeological resource surveillance, and shall establish, in cooperation with the Applicant, procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the artifacts as appropriate. If the archaeological resources are found to be significant, the archaeological observer shall determine appropriate actions, in cooperation with the project Applicant, for exploration and/or salvage.

Prior to the release of the grading bond, the Applicant shall obtain approval of the archaeologist's follow-up report from the Manager, Harbors, Beaches and Parks (HBP)/Coastal and Historical Facilities. The report shall include the period of inspection, an analysis of any artifacts found and the present repository of the artifacts. Applicant shall prepare excavated material to the point of identification. Applicant shall offer excavated finds for curatorial purposes to the County of Orange, or its designee, on a first refusal basis. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the Manager, HBP/Coastal and Historical Facilities. Applicant shall pay curatorial fees if an applicable fee program has been adopted by the Board of Supervisors, and such fee program is in effect at the time of presentation of the materials to the County of Orange or its designee, all in a manner meeting the approval of the Manager, HBP/Coastal and Historical Facilities.

GEOLOGY AND SOILS

Standard Condition G01: Prior to the issuance of a Grading Permit, the Applicant shall submit a geotechnical report to the Director, OC Development Services, or designee, for approval. The report shall include the information and be in the form as required by the Grading Manual.

Standard Condition A07: Prior to the issuance of any grading permit, the project applicant shall provide written evidence to the Manager, Subdivision and Grading, that applicant has retained a County certified paleontologist to observe grading activities and salvage and catalogue fossils, as necessary. The paleontologist shall be present at the pre-grade conference, shall establish procedures for paleontological resource surveillance, and shall establish, in cooperation with the applicant, procedures for temporarily halting or redirecting work to permit sampling, identification, and evaluation of the fossils. If the paleontological resources are found to be significant, the paleontologist shall determine appropriate actions, in cooperation with the applicant, which ensure proper exploration and/or salvage.

Prior to the release of the grading bond, the applicant shall submit the paleontologist's follow-up report for approval by the Manager, HBP/Coastal and Historical Facilities. The report shall include the period of inspection, a catalogue and analysis of the fossils found, and the present repository of the fossils. Applicant shall prepare excavated material to the point of identification. The applicant shall offer excavated finds for curatorial purposes to the County of Orange, or its designee, on a first refusal basis. These actions, as well as final mitigation and disposition of the resources, shall be subject to approval by the HBP/Coastal and Historical Facilities. Applicant shall pay curatorial fees if an applicable fee program has been adopted by the Board of Supervisors, and such fee program is in effect at the time of presentation of the materials to the County of Orange or its designee, all in a manner meeting the approval of the Manager, HBP/Coastal and Historical Facilities.

Standard Condition D01b: Prior to the issuance of any Grading Permits, the following drainage studies shall be submitted to and approved by the Director, OC Development Services, or designee:

A. A drainage study of the project including diversions, offsite areas that drain onto and/or through the project, and justification of any diversions; and

B. When applicable, a drainage study evidencing that proposed drainage patterns will not overload existing storm drains; and

C. Detailed drainage studies indicating how the project grading, in conjunction with the drainage conveyance systems including applicable swales, channels, street flows, catch basins, storm drains, and flood water retarding, will allow building pads to be safe from inundation from rainfall runoff which may be expected from all storms up to and including the theoretical 100-year flood.

Standard Condition D02b: Prior to the issuance of any Grading Permits, the Applicant shall in a manner meeting the approval of the Director, OC Development Services, or designee:

1. Design provisions for surface drainage; and

2. Design all necessary storm drain facilities extending to a satisfactory point of disposal for the proper control and disposal of storm runoff; and

3. Dedicate the associated easements to the County of Orange, if determined necessary.

Prior to the issuance of any Certificates of Use and Occupancy, said improvements shall be constructed in a manner meeting the approval of the Manager, Construction.

Standard Condition D03a: Prior to the issuance of any Grading Permit, and if determined necessary by the Director, OC Development Services, or designee, the Applicant shall record a letter of consent, from the upstream and/or downstream property owners permitting drainage diversions and/or unnatural concentrations. The form of the letter of consent shall be approved by the Director, OC Development Services, or designee, prior to recordation of the letter.

Standard Condition D09a: Prior to the issuance of any Grading Permits, Applicant shall delineate on the grading plan the floodplain which affects the property, in a manner meeting the approval of the Director, OC Development Services, or designee.

Standard Condition WQ01: Prior to the recordation of any Final Subdivision Map (except those maps for financing or conveyance purposes only) or the issuance of any Grading or Building Permit (whichever comes first), the Applicant shall submit for review and approval by the Manager, Inspection Services Division, a Water Quality Management Plan (WQMP) specifically identifying Best Management Practices (BMPs) that will be used onsite to control predictable pollutant runoff. This WQMP shall identify, at a minimum, the routine structural and non-structural measures specified in the current Drainage Area Management Plan (DAMP). The WQMP may include one or more of the following:

- Discuss regional water quality and/or watershed programs (if available for the project);
- Address Site Design BMPs (as applicable) such as minimizing impervious areas, maximizing permeability, minimizing directly connected impervious areas, creating reduced or "zero discharge" areas, and conserving natural areas;
- Include the applicable Routine Source Control BMPs as defined in the DAMP; and

- Demonstrate how surface runoff and subsurface drainage shall be managed and directed to the nearest acceptable drainage facility (as applicable), via sump pumps if necessary.

Standard Condition WQ03: Prior to the issuance of a Certificate of Use and Occupancy, the Applicant shall demonstrate compliance with the WQMP in a manner meeting the satisfaction of the Manager, Inspection Services Division, including:

- Demonstrate that all structural Best Management Practices (BMPs) described in the project's WQMP have been implemented, constructed, and installed in conformance with approved plans and specifications;
- Demonstrate that the Applicant has complied with all non-structural BMPs described in the project's WQMP;
- Submit for review and approval an Operations and Maintenance (O&M) Plan for all structural BMPs for attachment to the WQMP;
- Demonstrate that copies of the project's approved WQMP (with attached O&M Plan) are available for each of the incoming occupants;
- Agree to pay for a Special Investigation from the County of Orange for a date (12) twelve months after the issuance of a Certificate of Use and Occupancy for the project to verify compliance with the approved WQMP and O&M Plan; and
- Demonstrate that the Applicant has agreed to and recorded one of the following: 1) the CC&R's (that must include the approved WQMP and O&M Plan) for the project Home Owner's Association; 2) a water quality implementation agreement that has the approved WQMP and O&M Plan attached; or 3) the final approved Water Quality Management Plan (WQMP) and Operations and Maintenance (O&M) Plan.

Standard Condition WQ04: Prior to the issuance of any Grading or Building Permits, the Applicant shall demonstrate compliance under California's General Permit for Stormwater Discharges Associated with Construction Activity by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) Number or other proof of filing in a manner meeting the satisfaction of the Director, OC Development Services, or designee. Projects subject to this requirement shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). A copy of the current SWPPP shall be kept at the project site and be available for County review on request.

Standard Condition WQ05: Prior to the issuance of any Grading or Building Permit, the Applicant shall submit an Erosion and Sediment Control Plan (ESCP) in a manner meeting approval of the Director, OC Development Services, or designee, to demonstrate compliance with local and state water quality regulations for grading and construction activities. The ESCP shall identify how all construction materials, wastes, grading or demolition debris, and stockpiles of soil, aggregates, soil amendments, etc. shall be properly covered, stored, and secured to prevent transport into local drainages or coastal waters by wind, rain, tracking, tidal erosion or dispersion. The ESCP shall also describe how the Applicant will ensure that all BMP's will be maintained during construction of any future public rights-of-way. A copy of the current ESCP shall be kept at the project site and be available for County review on request.

HYDROLOGY AND WATER QUALITY

Standard Condition D01b: Prior to the issuance of any Grading Permits, the following drainage studies shall be submitted to and approved by the Director, OC Development Services, or designee:

A. A drainage study of the project including diversions, offsite areas that drain onto and/or through the project, and justification of any diversions; and

B. When applicable, a drainage study evidencing that proposed drainage patterns will not overload existing storm drains; and

C. Detailed drainage studies indicating how the project grading, in conjunction with the drainage conveyance systems including applicable swales, channels, street flows, catch basins, storm drains, and flood water retarding, will allow building pads to be safe from inundation from rainfall runoff which may be expected from all storms up to and including the theoretical 100-year flood.

Standard Condition D02b: Prior to the issuance of any Grading Permits, the Applicant shall in a manner meeting the approval of the Director, OC Development Services, or designee:

1. Design provisions for surface drainage; and

2. Design all necessary storm drain facilities extending to a satisfactory point of disposal for the proper control and disposal of storm runoff; and

3. Dedicate the associated easements to the County of Orange, if determined necessary.

Prior to the issuance of any Certificates of Use and Occupancy, said improvements shall be constructed in a manner meeting the approval of the Manager, Construction.

Standard Condition D03a: Prior to the issuance of any Grading Permit, and if determined necessary by the Director, OC Development Services, or designee, the Applicant shall record a letter of consent, from the upstream and/or downstream property owners permitting drainage diversions and/or unnatural concentrations. The form of the letter of consent shall be approved by the Director, OC Development Services, or designee, prior to recordation of the letter.

Standard Condition D05a: Prior to the issuance of a building permit per Zoning Code Section 7-9-113, the applicant shall submit an Elevation Certificate to the Manager, Current Planning Services, identifying the base flood elevation and certifying that the planned elevation of the lowest floor, including basements, is at least one (1) foot above the Base Flood Elevation (BFE). (NOTE: To eliminate FEMA requirements for flood insurance, the lowest elevation of any part of the structure, not only the lowest floor, must be above the BFE.)

Standard Condition D05b: Prior to the issuance of certificates of use and occupancy for any building, the applicant shall complete Section “E” of the Elevation Certificate, identifying the Base Flood Elevation (BFE) and certifying the as built lowest floor, including basements, as constructed, is at least one (1) foot above the BFE, in a manner meeting the approval of the Manager, Building Inspection Services. (NOTE: To eliminate FEMA requirements for flood insurance, the lowest elevation of any part of the structure, not only the lowest floor, must be above the BFE.)

Standard Condition D09a: Prior to the issuance of any Grading Permits, Applicant shall delineate on the grading plan the floodplain which affects the property, in a manner meeting the approval of the Director, OC Development Services, or designee.

Standard Condition WQ01: Prior to the recordation of any Final Subdivision Map (except those maps for financing or conveyance purposes only) or the issuance of any Grading or Building Permit (whichever comes first), the Applicant shall submit for review and approval by the Manager, Inspection Services Division, a Water Quality Management Plan (WQMP) specifically identifying Best Management Practices (BMPs) that will be used onsite to control predictable pollutant runoff. This WQMP shall identify, at a minimum, the routine structural and non-structural measures specified in the current Drainage Area Management Plan (DAMP). The WQMP may include one or more of the following:

- Discuss regional water quality and/or watershed programs (if available for the project);
- Address Site Design BMPs (as applicable) such as minimizing impervious areas, maximizing permeability, minimizing directly connected impervious areas, creating reduced or "zero discharge" areas, and conserving natural areas;
- Include the applicable Routine Source Control BMPs as defined in the DAMP; and
- Demonstrate how surface runoff and subsurface drainage shall be managed and directed to the nearest acceptable drainage facility (as applicable), via sump pumps if necessary.

Standard Condition WQ03: Prior to the issuance of a Certificate of Use and Occupancy, the Applicant shall demonstrate compliance with the WQMP in a manner meeting the satisfaction of the Manager, Inspection Services Division, including:

- Demonstrate that all structural Best Management Practices (BMPs) described in the project's WQMP have been implemented, constructed, and installed in conformance with approved plans and specifications;
- Demonstrate that the Applicant has complied with all non-structural BMPs described in the project's WQMP;
- Submit for review and approval an Operations and Maintenance (O&M) Plan for all structural BMPs for attachment to the WQMP;
- Demonstrate that copies of the project's approved WQMP (with attached O&M Plan) are available for each of the incoming occupants;
- Agree to pay for a Special Investigation from the County of Orange for a date (12) twelve months after the issuance of a Certificate of Use and Occupancy for the project to verify compliance with the approved WQMP and O&M Plan; and
- Demonstrate that the Applicant has agreed to and recorded one of the following: 1) the CC&R's (that must include the approved WQMP and O&M Plan) for the project Home Owner's Association; 2) a water quality implementation agreement that has the approved WQMP and O&M Plan attached; or 3) the final approved Water Quality Management Plan (WQMP) and Operations and Maintenance (O&M) Plan.

Standard Condition WQ04: Prior to the issuance of any Grading or Building Permits, the Applicant shall demonstrate compliance under California's General Permit for Stormwater Discharges Associated with Construction Activity by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) Number or other proof of filing in a manner meeting the satisfaction of the Director, OC Development Services, or designee. Projects subject to this requirement shall prepare and implement

a Stormwater Pollution Prevention Plan (SWPPP). A copy of the current SWPPP shall be kept at the project site and be available for County review on request.

Standard Condition WQ05: Prior to the issuance of any Grading or Building Permit, the Applicant shall submit an Erosion and Sediment Control Plan (ESCP) in a manner meeting approval of the Director, OC Development Services, or designee, to demonstrate compliance with local and state water quality regulations for grading and construction activities. The ESCP shall identify how all construction materials, wastes, grading or demolition debris, and stockpiles of soil, aggregates, soil amendments, etc. shall be properly covered, stored, and secured to prevent transport into local drainages or coastal waters by wind, rain, tracking, tidal erosion or dispersion. The ESCP shall also describe how the Applicant will ensure that all BMP's will be maintained during construction of any future public rights-of-way. A copy of the current ESCP shall be kept at the project site and be available for County review on request.

NOISE

Standard Condition N02: Except when the interior noise level exceeds the exterior noise level, the Applicant shall sound attenuate all nonresidential structures against the combined impact of all present and projected noise from exterior noise sources to meet the interior noise criteria as specified in the Noise Element and Land Use/Noise Compatibility Manual. Prior to the issuance of any Building Permits, the Applicant shall submit to the Director, OC Development Services, or designee, an acoustical analysis report prepared under the supervision of a County-certified acoustical consultant which describes in detail the exterior noise environment and the acoustical design features required to achieve the interior noise standard and which indicates that the sound attenuation measures specified have been incorporated into the design of the project.

Standard Condition N08: Prior to the issuance of any Building or Grading Permits, the Applicant shall obtain the approval of the Director, OC Development Services, or designee, of an acoustical analysis report and appropriate plans which demonstrate that the noise levels generated by this project during its operation shall be controlled in compliance with Orange County Codified Ordinance, Division 6 (Noise Control). The report shall be prepared under the supervision of a County Certified Acoustical Consultant and shall describe the noise generation potential of the project during its operation and the noise mitigation measures, if needed, which shall be included in the plans and specifications of the project to assure compliance with Orange County Codified Ordinance, Division 6 (Noise Control).

Standard Condition N10: A. Prior to the issuance of any Grading Permits, the project proponent shall produce evidence acceptable to the Director, OC Development Services, or designee, that:

- All construction vehicles or equipment, fixed or mobile, operated within 1,000 feet of a dwelling shall be equipped with properly operating and maintained mufflers.
- All operations shall comply with Orange County Codified Ordinance Division 6 (Noise Control).
- Stockpiling and/or vehicle staging areas shall be located as far as practicable from dwellings.

B. Notations in the above format, appropriately numbered and included with other notations on the front sheet of the project's permitted grading plans, will be considered as adequate evidence of compliance with this condition.

TRANSPORTATION

Standard Condition T07: Prior to the issuance of any Grading Permits, the Applicant shall provide adequate sight distance per Standard Plan 1117 at all street intersections, in a manner meeting the approval of the Director, OC Development Services, or designee. The Applicant shall make all necessary revisions to the

plan to meet the sight distance requirement such as removing slopes or other encroachment from the limited use area in a manner meeting the approval of the Director, OC Development Services, or designee.

TRIBAL CULTURAL RESOURCES

Standard Condition A04: Prior to the issuance of any Grading Permit, the Applicant shall provide written evidence to the Director, OC Development Services, or designee, that Applicant has retained a County-certified archaeologist, to observe grading activities and salvage and catalogue archaeological resources, as necessary. The archaeologist shall be present at the pre-grade conference, shall establish procedures for archaeological resource surveillance, and shall establish, in cooperation with the Applicant, procedures for temporarily halting or redirecting work to permit the sampling, identification, and evaluation of the artifacts as appropriate. If the archaeological resources are found to be significant, the archaeological observer shall determine appropriate actions, in cooperation with the project Applicant, for exploration and/or salvage.

Prior to the release of the grading bond, the Applicant shall obtain approval of the archaeologist's follow-up report from the Manager, Harbors, Beaches and Parks (HBP)/Coastal and Historical Facilities. The report shall include the period of inspection, an analysis of any artifacts found and the present repository of the artifacts. Applicant shall prepare excavated material to the point of identification. Applicant shall offer excavated finds for curatorial purposes to the County of Orange, or its designee, on a first refusal basis. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the Manager, HBP/Coastal and Historical Facilities. Applicant shall pay curatorial fees if an applicable fee program has been adopted by the Board of Supervisors, and such fee program is in effect at the time of presentation of the materials to the County of Orange or its designee, all in a manner meeting the approval of the Manager, HBP/Coastal and Historical Facilities.

5.2 Inventory of Mitigation Measures

Mitigation Measure BIO-1: Bat Protection. Prior to the start of construction, including demolition and grading activities, all suitable areas within the project site and an appropriate survey buffer shall be surveyed for the presence of bat roosts by a qualified bat biologist. Surveys are recommended as follows:

1) Initial surveys are recommended to be conducted at least six months prior to the initiation of vegetation removal and ground disturbing activities, ideally during the maternity season (typically March 1 to August 31), to allow time to prepare mitigation and/or exclusion plans if needed, and

2) Pre-construction surveys shall be conducted by a qualified bat biologist no more than two weeks prior to the initiation of vegetation removal and ground disturbing activities.

Surveys may entail direct inspection of the trees/suitable habitat or nighttime surveys.

Mitigation Measure BIO-1(a): If active bat roosts are present, a qualified bat biologist shall determine the species of bats present and the type of roost (i.e., day roost, night roost, maternity roost). If the biologist determines that the roosting bats are not a special-status species and the roost is not being used as a maternity roost, then the bats may be evicted from the roost by a qualified bat biologist experienced in developing and implementing bat mitigation and exclusion plans.

Mitigation Measure BIO-1(a)(i): If special-status bat species or a maternity roost of any bat species is present, but no direct removal of active roosts will occur, a qualified bat biologist shall determine appropriate avoidance measures, which may include implementation of a construction-free buffer around the active roost.

Mitigation Measure BIO-1(a)(ii): If special-status bat species or a maternity roost of any bat species is present and direct removal of habitat (roost location) will occur, then a qualified bat biologist experienced in developing bat mitigation and exclusion plans shall develop a mitigation plan to compensate for the lost roost site. Removal of the roost shall only occur when the mitigation plan has been approved by the County and only when bats are not present in the roost. The mitigation plan shall detail the methods of excluding bats from the roost and the plans for a replacement roost in the vicinity of the project site. The mitigation plan shall be submitted to the County for approval prior to implementation. The plan shall include: (1) a description of the species targeted for mitigation; (2) a description of the existing roost or roost sites; (3) methods to be used to exclude the bats if necessary; (4) methods to be used to secure the existing roost site to prevent its reuse prior to removal; (5) the location for a replacement roost structure; (6) design details for the construction of the replacement roost; (7) monitoring protocols for assessing replacement roost use; (8) a schedule for excluding bats, demolishing of the existing roost, and construction of the replacement roost; and (9) contingency measures to be implemented if the replacement roosts do not function as designed.

Mitigation Measure BIO-1(b): Pre-construction surveys shall be conducted by a qualified bat biologist no more than two weeks prior to the initiation of vegetation removal and ground disturbing activities. If no active roosts are present, then trees/suitable habitat shall be removed within two weeks following the pre-construction survey. If active roosts are present, then follow BIO-2(a).

Mitigation Measure BIO-1(c): All potential roost trees shall be removed in a manner approved by a qualified bat biologist, which may include presence of a biological monitor.

Mitigation Measure BIO-1(d): All construction activity in the vicinity of an active roost shall be limited to daylight hours.

Mitigation Measure BIO-2: A pre-construction presence/absence survey for Coastal Range newt and coastal whiptail shall be performed by a qualified biologist within 30 days prior to the initiation of construction, including demolition and grading activities, within the project site where suitable habitat is present. The survey methodology should be consistent with accepted protocols or guidelines for determining presence of sensitive reptile and/or amphibian species in southern California. If either species is detected within the project site during the survey, avoidance and minimization measures shall be implemented such as temporary fencing, inspection of trenches and holes for entrapped wildlife each morning prior to the onset of project construction, and inspection of pipes, culverts, and similar construction material for entrapped wildlife. If no special status species are observed during the presence/absence survey, no further action is required.

Mitigation Measure BIO-3: A nesting bird survey shall be conducted within three days prior to start of construction, including demolition, grading, and vegetation removal, if construction and/or vegetation removal occurs during the nesting bird season (February 15 – September 1). If vegetation removal occurs outside of nesting season or if no nesting birds are found, no further mitigation is required. If active nests are identified, the biologist will establish appropriate buffers around the area (typically 500 feet for raptors and sensitive species, 200 feet for non-raptors/non-sensitive species). All work within these buffers will be halted until the nesting effort is finished (i.e., the juveniles are surviving independent from the nest). The onsite biologist will review and verify compliance with these nesting boundaries and will verify the nesting effort has finished. Work can resume within the buffer area when no other active nests are found. Alternatively, a qualified biologist may determine that certain work can be permitted within the buffer areas and would develop a monitoring plan to prevent any impacts while the nest continues to be active (eggs, chicks, etc.). If vegetation clearing is not initiated within 72 hours of a negative survey during nesting season, the nesting survey must be repeated to confirm the absence of nesting birds.

CULTURAL RESOURCES

Mitigation Measure CR-1: If human remains are encountered during excavation activities, all work shall halt in the vicinity of the remains and the County Coroner shall be notified (*California Public Resources Code,* Section 5097.98). The Coroner will determine whether the remains are of forensic interest. If the Coroner, with the aid of a qualified Archaeologist, determines that the remains are prehistoric, she/he will contact the Native American Heritage Commission (NAHC). The NAHC will be responsible for designating the most likely descendant (MLD), who will be responsible for the ultimate disposition of the remains, as required by Section 7050.5 of the *California Health and Safety Code*. The MLD shall make his/her recommendation within 48 hours of being granted access to the site. If feasible, the MLD's recommendation should be followed and may include scientific removal and non-destructive analysis of the human remains and any items associated with Native American burials (*California Health and Safety Code,* Section 7050.5). If the landowner rejects the MLD's recommendations, the landowner shall rebury the remains with appropriate dignity on the property in a location that will not be subject to further subsurface disturbance (*California Public Resources Code,* Section 5097.98).

HAZARDS AND HAZARDOUS MATERIALS

Mitigation Measure HAZ-1: Prior to demolition of buildings expected to contain asbestos containing building materials or lead paint, the Applicant shall prepare an asbestos and lead paint survey. In the event asbestos containing building materials or lead paint are identified, it shall be removed and disposed of in accordance with local, state and federal regulations.

HYDROLOGY AND WATER QUALITY

Mitigation Measure HWQ-1: Prior to grading permits for the proposed project, the Applicant shall submit a Letter of Map Revision to FEMA for approval identifying that the project site has been raised to where it is located outside of the 100-year flood plain.

NOISE

Mitigation Measure N-1: Obtain a construction work permit from the County of Orange prior to starting construction.

Mitigation Measure N-2: Two weeks before construction activities begin, the project shall notify all residential uses located within 500 feet of the construction site regarding the construction schedule for the proposed project and a sign shall also be posted in a readily visible location at the project site. All notices and signs shall indicate the dates and duration of construction activities, as well as provide a telephone number where residents can inquire about the construction process and register complaints to a designated construction noise disturbance coordinator.

Mitigation Measure N-3: The project shall provide temporary noise barrier shielding along all property lines of the project site to reduce construction noise levels to below 80 db. . The temporary barrier should be at least twelve (12) feet high with a minimum STC rating of 25 and shall be installed at the first phase of construction and prior to performing any demolition, excavation or grading activities. The temporary noise barrier wall should present a solid face area and include sound absorptive material or blankets which can be installed in multiple layers for improved noise insulation. The specifications in detail of the temporary noise barrier will be included in the Construction Management Plan submitted to the Orange County Development Services Department.

Mitigation Measure N-4: The project shall require all contractors implement construction best management practices to reduce construction noise levels. Best management practices would include the following:

- All construction equipment shall be equipped with muffles and other suitable noise attenuation devices (e.g., engine shields).
- Grading and construction contractors shall use quieter equipment as opposed to noisier equipment (such as rubber-tired equipment rather than track equipment), to the maximum extent feasible.
- If feasible, electric hook-ups shall be provided to avoid the use of generators. If electric service is determined to be infeasible for the site, only whisper-quiet generators shall be used (i.e., inverter generators capable of providing variable load.
- Use electric air compressors and similar power tools rather than diesel equipment, where feasible.
- Locate staging area, generators and stationary construction equipment as far from the adjacent residential homes as feasible.
- Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than five minutes.

Mitigation Measure N-5: The project shall implement a noise monitoring program during construction. The monitoring program shall report the continuous daily construction noise levels along the project's west property line and south of Avenida La Caza near the adjacent residential homes. Noise monitoring should be performed at ground level and behind the noise barrier wall. The monitoring program shall notify construction management personnel when noise levels approach the upper limits of the eight-hour Leq exceedance threshold (80 dBA). Construction activity should cease prior to noise levels exceeding the eight-hour threshold. Weekly construction noise monitoring reports will be submitted to the Orange County Development Services Department. Noise level measurements shall be made pursuant to Section 4-6-3 of the Orange County Municipal Code Noise Control Ordinance.

Mitigation Measure N-6: All construction traffic and personnel shall use Avenida La Caza to access the site. No construction traffic or staging shall be allowed on Via Alondra.

Mitigation Measure N-7: No impact pile driving activities shall be permitted on the project site during construction. If impact pile driving is required, a follow-up noise and vibration impact assessment shall be conducted prior to the start of any pile driving activity.

TRANSPORTATION

Mitigation Measure T-1: Construction equipment mobilization and demobilization activities shall occur during non-peak traffic periods. Daily construction activities will be permitted in accordance with the County Noise Ordinance to the approval of the Director of OC Development Services, or designee.

Mitigation Measure T-2: The Contractor shall be responsible for preparing adequate detour and access plans, including use of a flagman if necessary, to ensure the safe movement of vehicles and pedestrians during the construction period.

TRIBAL CULTURAL RESOURCES

Mitigation Measure TCR-1: If evidence of subsurface tribal cultural resources is found during construction, excavation, and/or other construction activities in that area, construction activities shall cease and the construction contractor shall contact the Director, OC Development Services/Planning, or designee. With

direction from the Manager, an archaeologist certified by the County of Orange shall be retained to evaluate the discovery prior to resuming grading in the immediate vicinity of the find. If warranted (as determined by the Director, OC Development Services/Planning, or designee, in consultation with the archaeologist), the archaeologist shall contact the Native American Heritage Commission to determine the appropriate Native American monitor for the find. The archaeologist and Native American Monitor shall collect the resource and prepare a technical report describing the results of the investigation. The test-level report shall evaluate the site including discussion of significance (depth, nature, condition, and extent of the resources), final mitigation recommendations, and cost estimates.

6.0 REPORT PREPARATION PERSONNEL

COUNTY OF ORANGE (LEAD AGENCY)

OC Public Works, Development Services/Planning
601 North Ross Street
Santa Ana, California 92701

Richard Vuong, Acting Deputy Director, OC Public Works, OC Development Services/Planning
Kevin Shannon, Consultant Environmental Planner, OC Development Services/Planning
Kevin Canning, Contract Planner, OC Development Services/Planning

VCS ENVIRONMENTAL (ENVIRONMENTAL ANALYSIS)

30900 Rancho Viejo Road, Suite 100
San Juan Capistrano, California 92675

Julie Beeman, President
Dan Bott, Project Manager
Daniel Latham, Environmental Analyst
Patrick Maxon, RPA, Archaeologist
Molly Burdick-Whipp, Biologist
Erin Hayes, Biologist
Chris Eljenholm, Biologist/Environmental Analyst
Max Ketabi, GIS
Linda Bo, Document Preparation/Graphics

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