

CHAPTER 1

Introduction/Summary

This Draft Environmental Impact Report (EIR) evaluates the environmental effects that may result from the construction of the proposed residential development. This EIR has been prepared in conformance with state and County of Orange environmental policy guidelines for implementation of the California Environmental Quality Act (CEQA).

1.1 Introduction

The proposed project site consists of two non-contiguous parcels of private property located in the southeastern portion of unincorporated Orange County in the Santa Ana mountains. The parcels are located to the west of Ortega Highway, and separated by Long Canyon Road.

The project is approximately 1,500 feet west of El Cariso Village, a small rural residential area, six miles southwest of the City of Lake Elsinore in Riverside County, and approximately 6.25 miles east of the City of Rancho Santa Margarita in Orange County.

Phase 1 (south parcel) is approximately 389.6 acres and the Phase 2 (north parcel) is 194.5 acres. Throughout this EIR, the location of the proposed project will be referred to as the project site, and generally refers to both Phase 1 (south parcel) and Phase 2 (north parcel) unless explicitly stated.

1.2 Background

Development on the project site has been the subject of ongoing environmental review related to proposed developments since 2006. On May 22, 2006, a Notice of Preparation (NOP) and Initial Study were distributed to the State Clearinghouse (SCH), interested agencies, and the public for a 30-day public review period. The SCH issued a project number for the previous EIR (No. 2006051110) and a public scoping meeting was held on June 1, 2006. Between circulation of the NOP in 2006 and August 2008, the project applicant reduced the proposed number of single-family residential units from 213 to a maximum of 169 single-family. As a result, the NOP was re-issued and another public scoping meeting was held on August 18, 2008. Prior to circulation of the Draft EIR in October 2008, the project applicant decided to suspend the project in response to a downturn in the residential housing market.

Then in 2013, the project was redesigned to be smaller, and no longer proposes residential units within Riverside County, amongst other project revisions. A NOP and Initial Study was prepared and distributed for a 30-day public review period on September 26, 2013. However, pursuant to changes to the project description that involved the number of residential units and wastewater

systems, a revised NOP and Initial Study was circulated for a 30-day public review starting on October 16, 2014.

1.3 Project Summary

The project applicant, the Preserve at San Juan, LLC, proposes to develop 72 single-family residential lots under a proposed Rural Residential 1A General Plan Land Use Designation and a proposed AR “Agricultural Residential” zoning. The project would include large areas of open space, and would be developed in two phases (Phase 1 (south parcel), and Phase 2 (north parcel)).

Phase 1 (south parcel) would develop 43 single-family residences and Phase 2 (north parcel) would develop 29 single-family residences. The total project area of both phases includes 584.1 acres, and the project proposes improvements on 169.5 of those acres. The remaining 414.6 acres (71 percent of the project area) would remain undeveloped open space.

1.4 Alternatives

CEQA requires that “*an EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project...*” (CEQA Guidelines, Section 15126.6 (a)). The discussion must focus on alternatives to the project or its location which are capable of lessening significant impacts, even if these alternatives would impede to some degree the attainment of project objectives, or be more costly (Section 15126.6 (b)). The EIR is required to briefly describe the rationale for selecting the alternatives to be discussed and also identify any alternatives that were considered by the lead agency, but rejected as infeasible during the scoping process.

The specific alternative of “No Project” shall be evaluated along with its impact. If the “No Project” alternative is determined to be the environmentally superior alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. Alternatives analyzed in the EIR include the following:

- **Alternative 1 – No Project/No Build Alternative:** under this alternative, no development would occur on the project site, and it would remain in its current condition.
- **Alternative 2 – Decreased Density Single Phase:** under this alternative, a reduction in the number of residential units would occur by not developing Phase 1 (south parcel). Phase 2 (north parcel) would be developed with 29 residential units, as planned by the proposed project, and the Phase 1 (south parcel) would remain as open space. This alternative would decrease the number of residential units developed in the project area by 43 units, or approximately 60 percent.
- **Alternative 3 – Decreased Density Both Phases:** under this alternative, a 50 percent reduction in the number of residential units would be built in each phase. Thus, 22 single-family residences would be developed in Phase 1 (south parcel) and 14 single-family residences would be developed in Phase 2 (north parcel). This alternative would decrease

the number of residential units developed in the project area by 36 units, and provide a larger area of open space on each parcel.

Other alternatives that were considered but rejected include selling the project site for conservation purposes (due to this not meeting any project objectives) and an alternative site for the project (due to the fact that there are no alternative sites within the control of the project applicant, and that in the event land could be purchased of suitable size and developmental characteristics, it would likely have similar impacts after mitigation as the project).

1.5 Environmental Procedures

Purpose of an EIR

In accordance with *CEQA Guidelines* Section 15121(a), the purpose of an EIR is to serve as an informational document that will generally inform public agency decision makers and the public of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. *CEQA Guidelines* Section 15151 contains the following standards for EIR adequacy:

“An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.”

An EIR is an informational document for use by decision makers and the public in their review of the potential impacts of a proposed project, as well as in the evaluation of alternatives and mitigation measures which may minimize, or eliminate those impacts. As such, this document includes a full discussion of the project description, the existing environmental setting, environmental impacts, mitigation measures, and residual impacts that may exist after mitigation has been implemented, and project alternatives that could alleviate potential impacts.

To gain the most value from this report certain key points recommended in the *CEQA Guidelines* should be kept in mind:

- This report should be used as a tool to give the reader an overview of the possible ramifications of the proposed project and the non-clustered scenario. It is designed as an “early warning system” with regard to potential environmental impacts and subsequent effects on the local community’s natural resources.
- A specific environmental impact is not necessarily irreversible or permanent. Incorporating changes recommended in this report during the design and construction

phases of project development can wholly or partially mitigate impacts, particularly in more developed urban areas.

As the public agency with the authority to approve or deny the project, the County will consider the information in the EIR along with other information before taking any action on the project. The conclusions of the EIR regarding environmental impacts do not control the County's discretion to approve, deny or modify the proposed project, but instead are presented as information intended to aid the decision-making process.

The purpose of this EIR is to provide an objective, full-disclosure document to inform agency decision makers and the general public of the direct and indirect environmental impacts of the proposed project, and related actions. This is a "Project" EIR in conformance with Section 15161 of the *CEQA Guidelines*, in that it examines the environmental impacts associated with a specific development project. The primary purpose of this EIR is to:

- Identify and evaluate potential environmental consequences of the proposed project.
- Assess cumulative impacts of the project in conjunction with related past, present, and reasonably foreseeable future projects within the area.
- Indicate the manner in which those environmental consequences can be mitigated or avoided.
- Define and analyze alternatives that have the potential to reduce or eliminate potentially significant impacts associated with the proposed project or non-clustered scenario.
- Identify impacts, if any, that even with the implementation of mitigation measures would be unavoidable and adverse.
- Provide documentation supporting these determinations.

Environmental Process

Initial Studies/Notice of Preparations

The environmental analysis of the proposed project was initiated by the County with the preparation of an Initial Study. A Notice of Preparation (NOP) was prepared and distributed with the Initial Study for a 30-day public review period, which commenced on September 26, 2013. In addition, a revised NOP and Initial Study was circulated for a 30-day public review starting on October 16, 2014 in response to changes in the project description related to the number of residential units and wastewater treatment systems. A copy of the NOP/Initial Study, Revised NOP/Initial Study, and copies of comments received in response to both are included as Appendix A1 and A2 of this EIR.

Section 15123(b)(2) of the *CEQA Guidelines* requires that an EIR summary identify areas of controversy known to the lead agency, including issues raised by other agencies and the public. **Tables 1-1 and 1-2** identify those who submitted written comments on the NOPs/Initial Studies and topics raised by the commenters, and also provides a reference to the section of the EIR in which these issues are evaluated. None of the comments received are considered controversial, and all environmental issues raised are discussed within this EIR.

**TABLE 1-1
NOP TOPICS RAISED**

Commenter/Date	Summary of Comment	EIR Section
Soboba Band of Luiseno Indians October 26, 2013	Information and consultation request; cultural resource sensitivity.	Section 3.4, <i>Cultural</i>
Department of Transportation, District 12 October 25, 2013	Phase 1 Highway 74 accessibility; appropriate traffic analyses and mitigation for traffic impacts.	Section 3.14, <i>Traffic</i>
Pechanga Band of Luiseno Indians October 25, 2013	Information and consultation/involvement request; cultural resource sensitivity; cumulative cultural resource impacts; growth-inducing impacts; air quality effects.	Section 3.2, <i>Air Quality</i> ; Section 3.4, <i>Cultural</i>
Local Agency Formation Commission October 24, 2013	Efficiency and reliability of public services; annexation clarification.	Chapter 2, <i>Project Description</i> ; Section 3.15, <i>Utilities</i>
Linda Hoffman October 17, 2013	Night skies, traffic congestion, Native American artifacts, storm water drainage, water supply, wildlife and hunting grounds.	Section 3.1, <i>Aesthetics</i> ; Section 3.3, <i>Biological Resources</i> ; Section 3.4, <i>Cultural</i> ; Section 3.8, <i>Hydrology</i> ; Section 3.14, <i>Traffic</i>
Barbara Mitchell October 17, 2013	Traffic impacts at Long Canyon Road, Native American artifacts, population increase, soil and climate.	Section 3.3, <i>Biological Resources</i> ; Section 3.4, <i>Cultural</i> ; Section 3.14, <i>Traffic</i> ;
South Coast Air Quality Management District October 11, 2013	Air quality impacts, methodology, thresholds, and data sources.	Section 3.2, <i>Air Quality</i>
Southern California Gas Company October 7, 2013	Extension of new natural gas service, cultural or biological field monitoring.	Section 3.15, <i>Utilities</i> ; Section 3.4, <i>Cultural</i> ; Section 3.3, <i>Biological Resources</i>
SCH September 26, 2013	General NOP Distribution.	None

**TABLE 1-2
REVISED NOP TOPICS RAISED**

Commenter/Date	Summary of Comment	EIR Section
California Department of Fish and Wildlife December 1, 2014	Information and consultation/involvement request; biological resources.	Section 3.4, <i>Biological Resources</i>
Metropolitan Water District December 1, 2014	DEIR should include a statement on the proposed annexation to Metropolitan, WMWD, MWDOC and LAFCO.	Section 2.0, <i>Project Description</i> and Section 3.16, <i>Utilities</i>
Pechanga Band of Luiseno Mission Indians November 26, 2014	Information and consultation/involvement request; cultural resource sensitivity; cumulative cultural resource impacts; growth-inducing impacts; air quality effects.	Section 3.2, <i>Air Quality</i> ; Section 3.5, <i>Cultural</i>

Commenter/Date	Summary of Comment	EIR Section
United States Department of the Interior November 26, 2014	Information and consultation request; biological resources.	Section 3.4, <i>Biological Resources</i>
Department of Transportation, District 12 November 25, 2014	A Traffic Impact Study is necessary to determine the near and long term impacts to State facilities. Coordinate with District 8 for work performed within Caltrans ROW.	Section 3.14, <i>Traffic</i>
Orange County Fire Authority November 17, 2014	Information and consultation/involvement request; fire services, fire hazard zones, and response times.	Section 3.13, <i>Public Services</i>
Department of Transportation, District 8 November 14, 2014	Recommendation of appropriate traffic analyses and mitigation for traffic impacts.	Section 3.14, <i>Traffic</i>
Rincon Band of Luiseno Indians November 6, 2014	Information and consultation/involvement request; significance of cultural resources.	Section 3.5, <i>Cultural</i>
Native American Heritage Commission November 6, 2014	Information and consultation/involvement request; significance of historical resources.	Section 3.5, <i>Cultural</i>
South Coast Air Quality Control District November 4, 2014	Information and consultation request related to air quality and greenhouse gas analyses, modeling and health risk assessment files.	Section 3.3, <i>Air Quality</i>
State Clearinghouse September 26, 2013	General NOP Distribution.	None

In addition to distribution of the NOPs/Initial Studies, two public scoping meetings were held at Hell's Kitchen (32685 Ortega Highway, Lake Elsinore) on October 16, 2013 and November 13, 2014, from 4:45 p.m. to 6:45 p.m. to introduce the proposed project to the community, and to provide an opportunity for the public to submit verbal and written comments and recommendations regarding the issues to be addressed in the EIR. Notification of the meeting included a direct mailing of the notice to public agencies and the surrounding community. A list of comments (both verbal and written) given at the scoping meetings are included in **Table 1-3** below, along with a reference to the chapter or section of the EIR in which these issues are evaluated.

**TABLE 1-3
COMMENTS RAISED AT SCOPING MEETINGS**

Summary of Comment	EIR Section
What is the background of the concept for the proposed project, and how will it fit into the existing in the project area?	Chapter 2.0, <i>Project Description</i> , Section 3.1, <i>Aesthetics</i>
Is there public access to the project site?	Chapter 2.0, <i>Project Description</i> , Section 3.14, <i>Traffic</i>
There should be allowance for an equestrian lifestyle, including public equestrian trails.	Chapter 2.0, <i>Project Description</i>
Is it the developer who owns the land or is it U.S. Forest Service land?	Chapter 2.0, <i>Project Description</i>
Where is the location of the secondary access road?	Chapter 2.0, <i>Project Description</i> , Section 3.14, <i>Traffic</i>
Will there be reinstallation of the historic USGS monument?	Chapter 2.0, <i>Project Description</i>
What is the role of Orange County versus the role of Riverside County? How does this pertain to road improvements in Riverside County?	Chapter 2.0, <i>Project Description</i> ; Section 3.14, <i>Traffic</i>
What are the impacts of light pollution and impacts to star gazing activities?	Section 3.1, <i>Aesthetics</i>
Suggests using orange lighting equipment that does not radiate light back up at the sky after being cast downwards.	Section 3.1, <i>Aesthetics</i>
Would there be potential interruption to wildlife migration routes?	Section 3.3, <i>Biology</i>
There would be disruption to an existing viewing spot for wild deer near private property.	Section 3.3, <i>Biology</i>
Verify potential impacts to rock art and nearby burial grounds.	Section 3.4, <i>Cultural</i>
Suggests that an ethnographic study should be done.	Section 3.4, <i>Cultural</i>
Suggests that a Native American monitor should be able to be present on site at all times.	Section 3.4, <i>Cultural</i>
What is the extent of the proposed road widening, and what is the effect on soil erosion?	Section 3.5, <i>Geology and Soils</i>
Would there be increased flooding and increased creek depth from implementation of the proposed project?	Section 3.8, <i>Hydrology</i>
The Riverside County Fire Department will respond to fire calls, although the project site is within Orange County boundaries.	Section 3.12, <i>Public Services</i>
Would there be increased traffic impacts?	Section 3.14, <i>Traffic</i>
Describe the deceleration lanes?	Section 3.14, <i>Traffic</i>
Will pipelines supplying the project be new or would the existing pipelines be used?	Chapter 2.0, <i>Project Description</i> , Section 3.15, <i>Utilities</i>
Please verify the Los Caberos development and the proposed 500kV transmission line for the Nevada Hydro company.	Chapter 2.0, <i>Project Description</i>

- a Note: "Los Caberos" housing development and Nevada Hydro Company 500 kV transmission line were both mentioned at October 16 scoping meeting. ESA could not locate any information regarding Los Caberos online. The proposed 500 kV transmission line was dismissed by the CPUC in 2012, and there is no application for the project currently present before the CPUC. Therefore, it cannot be considered as a proposed project under CEQA. Additional details can be found at this website:
http://www.cpuc.ca.gov/environment/info/aspen/nevadahydro/talega_escondido_valley_serrano.htm.

Draft EIR

Based on the Initial Studies and the scoping meetings, the following environmental issues were identified for evaluation in the EIR:

- Aesthetics (Section 3.1)
- Agriculture and forest resources (Section 3.2)
- Air quality (Section 3.3)
- Biological resources (Section 3.4)
- Cultural/scientific resources (Section 3.5)
- Geology and soils (Section 3.6)
- Greenhouse gas emissions (Section 3.7)
- Hazards and hazardous materials (Section 3.8)
- Hydrology and water quality (Section 3.9)
- Land use and planning (Section 3.10)
- Noise (Section 3.11)
- Population and housing (Section 3.12)
- Public services (Section 3.13)
- Recreation (Section 3.14)
- Transportation and traffic (Section 3.15)
- Utilities and service systems (Section 3.16)

As discussed in the Initial Studies there are no mining or significant mineral deposits within the project site; impacts to mineral resources would not occur (see Appendices A1 and A2 of this EIR). Therefore, this issue is not discussed further in this EIR.

This Draft EIR has been distributed to affected agencies, surrounding cities, counties, and interested parties for a 45-day review period in accordance with Section 15087 of the *CEQA Guidelines*. During the review period, from May 24, 2017 through July 7, 2017, the Draft EIR is available for general public review at the following locations:

- OC Public Works, Development Services/Planning, 300 N. Flower Street, Santa Ana 92703
- Mission Viejo Branch Library: 100 Civic Center, Mission Viejo 92691
- El Toro Branch Library: 24672 Raymond Ave, Lake Forest 92630
- Rancho Santa Margarita Branch Library: 30902 La Promesa Drive, Rancho Santa Margarita 92688
- Silverado Branch Library: 28192 Silverado Canyon Road, Silverado 92676
- Lakeside Library: 32593 Riverside Drive, Lake Elsinore 92530

Additionally, the Draft EIR can be downloaded or reviewed via the Internet at:

http://www.ocpublicworks.com/ds/planning/projects/the_preserve_at_san_juan

Interested parties may provide written comments on the Draft EIR. Written comments on the Draft EIR should be addressed to:

Kevin Shannon, Contract Planner
OC Public Works
OC Development Services/Planning
300 N. Flower Street
Santa Ana, CA 92703
Kevin.Shannon@ocpw.ocgov.com

Final EIR

Upon completion of the 45-day public review period, written responses to comments on environmental issues discussed in the Draft EIR will be prepared and incorporated into the Final EIR. These comments, and their responses, will be included in the Final EIR for consideration by the Orange County Planning Commission and Board of Supervisors, as well as other public decision makers.

1.6 Draft EIR Organization

As illustrated in **Table 1-4**, this EIR is organized into nine chapters each dealing with a separate aspect of the required content of an EIR as described in the *CEQA Guidelines*; it is intended for use and reference. To help the reader locate information of particular interest, a brief summary of the contents of each chapter of the EIR is provided. Acronyms and abbreviations are included directly after the Table of Contents and provide a description of abbreviations and acronyms used throughout the document. The following chapters are contained within the EIR:

**TABLE 1-4
REQUIRED DRAFT EIR CONTENTS**

Requirement (CEQA Guidelines Section)	Location in EIR
Table of contents (Section 15122)	Table of Contents
Summary (Section 15123)	Chapter 1.0
Project description (Section 15124) and environmental setting (Section 15125)	Chapter 2.0 and Chapter 3.0 (Sections 3.1 – 3.16)
Significant environmental impacts (Section 15126.2(a))	Chapter 3.0 (Sections 3.1 – 3.16); Chapter 4.0
Unavoidable significant environmental impacts (Section 15126.2(b))	Chapter 3.0 (Sections 3.1 – 3.16); Chapter 4.0
Mitigation measures (Section 15126.4)	Chapter 1.0; Chapter 3.0 (Sections 3.1 – 3.16)
Cumulative impacts (Section 15130)	Chapter 3.0 (Sections 3.1 – 3.16)
Alternatives to the proposed project (Section 15126.6)	Chapter 5.0
Growth-inducing impacts (Section 15126.2(d))	Chapter 8.0
Effects found not to be significant (Section 15128)	Chapter 3.0 (Sections 3.1 – 3.16); Chapter 6.0
Organizations and persons consulted (Section 15129)	Chapter 9.0
List of preparers (Section 15129)	Chapter 9.0

Chapter 1.0 – Introduction/Summary: This chapter provides an overview of the purpose and use of the EIR, the scope of this EIR, the environmental review process for the EIR and the project, and the general format of the document. This chapter also contains a summary of the proposed project, environmental impacts, proposed mitigation, and level of significance after mitigation. Also, contained within this section is a summary description of project alternatives.

Chapter 2.0 – Project Description: This chapter defines the project location, describes the proposed project, the Project Design Features, benefits of the project, and outlines the project objectives.

Chapter 3.0 – Environmental Setting, Impacts and Mitigation Measures: This chapter describes and evaluates the environmental issue areas, including the existing environmental setting and background, applicable environmental thresholds, environmental impacts, policy considerations related to the particular environmental issue area under analysis, mitigation measures capable of minimizing environmental harm, and a discussion of cumulative impacts.

Prior to considering mitigation to lessen environmental impacts associated with the proposed project, CEQA encourages the avoidance of impacts. Optimally, environmental impacts can be either eliminated or substantially reduced by the project design. In addition to design considerations that avoid or reduce impacts, numerous existing regulatory requirements serve to mitigate the environmental impacts of a project. The significance evaluation for each environmental issue area in the EIR (Chapter 3.0), first considers the significance of an impact upon incorporation of Project Design Features and compliance with regulatory requirements. If upon implementation of these measures and requirements, an impact is less than significant, additional mitigation is not required pursuant to CEQA. If additional mitigation is required, such measures are recommended. The following outlines the mitigation structure included in Chapter 3.0 of this EIR:

- **Project Design Features (PDFs)** are specific applicant-initiated design features that are incorporated as part of the project to avoid and/or minimize potential environmental impacts. The PDFs will be included in the EIR’s Mitigation Monitoring and Reporting Program (MMRP) to ensure implementation and appropriate monitoring of each PDF. These features are listed in Chapter 2.0, *Project Description*, and discussed within each sub-sections of Chapter 3.0 to describe how these features would to avoid, reduce, or offset potential impacts.
- **Mitigation Measures** are required by CEQA for projects that would otherwise cause significant impacts (*CEQA Guidelines* Section 15126.4). This EIR includes mitigation measures for potential impacts that would not be reduced or eliminated by a combination of Project Design Features and compliance with regulatory requirements.

Chapter 4.0 – Significant Impacts: The significant impacts of the proposed project are analyzed in Chapter 3.0 are summarized in this chapter.

Chapter 5.0 – Alternatives Analysis: This chapter analyzes feasible alternatives to the proposed project, including the Alternative 1: No Project/No Build, Alternative 2: Decreased Density Single Phase, and Alternative 3: Decreased Density Both Phases, as described above.

Chapter 6.0 – Impacts Found Not to be Significant: This chapter summarizes the impacts found to less than significant for the proposed project.

Chapter 7.0 – Significant Irreversible Changes: This chapter identifies any irreversible changes to the natural environment resulting associated with the proposed project.

Chapter 8.0 – Growth Inducing Impacts: This chapter provides a summary of the proposed project’s potential growth-inducing impacts.

Chapter 9.0 – References/Report Preparation: This chapter identifies all references used and cited in the preparation of this report and lists those who prepared the analysis.

Appendices: Data supporting the analysis or content of the EIR are provided in the appendices to the document. These include the two NOPs/Initial Studies and responses received, biological reports, geotechnical reports, hydrology reports, traffic report, and other technical reports prepared for the project.

1.7 Summary of Impacts

Impacts and mitigation measures associated with the proposed project are summarized in **Table 1-5**. As shown, project impacts associated with aesthetics and construction noise would remain significant and unavoidable even after incorporation of mitigation measures. These impacts would require the adoption of a Statement of Overriding Considerations during project approval. The details of the Project Design Features listed in Table 1-5 below, are provided in Table 2-6, Project Design Features, in Section 2.0, *Project Description*.

**TABLE 1-5
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Applicable Project Design Features	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
3.1 Aesthetics				
Impact 3.1-1: Would implementation of the proposed project could have a substantial adverse effect on a scenic vista?	PDF-1, PDF-2, PDF-3, PDF-4, PDF-5.	Significant and unavoidable	MM 3.1-1: The project's design plans shall state that exterior paint colors for the residential and associated structures are limited to a palette of earthy tones that shall be provided for homeowners to choose from to ensure that project structures blend into the natural surroundings. Exterior paint options shall be included in the CR&Rs; and managed, approved, and enforced by the Homeowner's Association.	Significant and unavoidable
Impact 3.1-2: Would implementation of the proposed project could substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?		No impact	None required.	No impact
Impact 3.1-3: Would implementation of the proposed project could substantially degrade the existing visual character or quality of the site and its surroundings	PDF-1, PDF-2 PDF-3, PDF-4, PDF-5, PDF-6, PDF-9, PDF-19.	Significant and unavoidable	MM 3.1-1: Listed above under Impact 3.1-1.	Significant and unavoidable
Impact 3.1-4: Would implementation of the proposed project could create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	PDF-20	Less than significant	MM 3.1-2: Prior to the issuance of building permits, the applicant shall demonstrate that all exterior lighting has been designed and located so that all direct rays are confined to the development areas of the project site in a manner meeting the approval of the County's Building and Safety Department.	Less than significant
Cumulative	PDF-1, PDF-2 PDF-3, PDF-4, PDF-5, PDF-6, PDF-9, PDF-19, PDF-20.	Less than significant	None required.	Less than significant
3.2 Agriculture and Forestry Resources				
Impact 3.2-1: Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?		No impact	None required.	No impact
Impact 3.2-2: Would the project result in the loss of forest land or conversion of forest land to non-forest use?	PDF-1, PDF-2, PDF-20.	No impact	None required.	No impact

Impact	Applicable Project Design Features	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Cumulative			None required.	No Impact
3.3 Air Quality				
Impact 3.3-1: Would the project conflict with or obstruct implementation of the applicable air quality plan?		Less than significant	None required.	Less than significant
Impact 3.3-2: Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation.		Less than significant	None required.	Less than significant
Impact 3.3-3: Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).		Less than significant	None required.	Less than significant
Impact 3.3-4: Would the project expose sensitive receptors to substantial pollutant concentrations?		Less than significant	None required.	Less than significant
Cumulative		Less than significant	None required.	Less than significant
3.4 Biological Resources				
Impact 3.4-1: Would implementation of the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	PDF-1, PDF-2, PDF-13, PDF-14, PDF-17, PDF-20.	Potentially significant	<p>MM 3.4-1: Environmental Awareness Programs: The project's construction plans and grading specifications shall state that the construction contractor shall implement the following measures:</p> <ul style="list-style-type: none"> The applicant shall prepare a <i>Worker Environmental Awareness Program</i> that shall be administered to all on-site personnel including surveyors, construction engineers, employees, contractors, contractor's employees, supervisors, inspectors, subcontractors, and delivery personnel. The program shall be implemented during site preconstruction and construction, and shall: <ol style="list-style-type: none"> Be developed by or in consultation with the County approved biologist and consist of an on-site or training center presentation in which supporting written material and electronic media, including photographs of protected species, is made available to all workers; 	Less than significant

Impact	Applicable Project Design Features	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			<p>2. Discuss the locations and types of sensitive biological resources on the project site and adjacent areas, and explain the reasons for protecting these resources;</p> <p>3. Describe the temporary and permanent habitat protection measures to be implemented at the project site;</p> <p>4. Identify whom to contact if there are further comments and questions about the material discussed in the program; and</p> <p>5. Include a training acknowledge form to be signed by each worker indicating they received training and shall abide by the guidelines.</p> <ul style="list-style-type: none"> • The applicant shall implement a <i>Resident Environmental Awareness Program</i> intended to increase awareness to residents of the sensitive plants, wildlife and associated habitats that occur in the preserved open space areas. The intention of the program shall be to encourage active conservation efforts among the residents to help conserve the habitats in the preserved open space. The program shall address inadvertent impacts from the introduction of invasive plant species (including "escapees"). At a minimum, the program shall include the following components: <ol style="list-style-type: none"> 1. Informational kiosks shall be constructed at entrance points to hiking trails and at various locations along the fence line that separates the project site and the open space area to inform residents and trail users on the sensitive flora and fauna that rely on the habitats found within the preserved open space and the importance of staying on trails within open space areas. 2. The applicant shall provide residents or the Homeowners Association with a brochure which includes a list of plant species to avoid in residential landscaping to prevent the introduction of invasive plant species to the surrounding natural communities. 	

Impact	Applicable Project Design Features	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			<p>MM 3.4-2: Best Management Practices for Biological Resources – Construction. The project’s construction plans and grading specifications shall state that prior to and during construction, the following shall apply:</p> <ul style="list-style-type: none"> • The project impact footprint shall be staked and fenced (e.g., with orange snow fencing, silt fencing or a material that is clearly visible) by a surveyor and the boundary shall be confirmed by a qualified biological monitor. The construction site manager shall ensure that the fencing is maintained for the duration of construction and that any required repairs are completed in a timely manner. • Maintenance activities shall not commence until 7:00 a.m. and shall be completed before dusk each day. • If any common wildlife is encountered during maintenance activities, the common wildlife shall be allowed to leave the work area unharmed and shall be flushed or herded in a safe direction away from the work area(s). • Qualified biological monitor(s) shall be on-site during all vegetation removal activities to flush any common wildlife within the project impact footprint away from work areas. • Any open trenches shall be covered at the end of each work day in a manner to prevent the entrapment of wildlife, or adequately ramped to provide an animal escape route. • If nighttime maintenance is required, lighting shall be shielded and focused downward and away from undisturbed areas and shall be limited to the minimum amount necessary to complete the maintenance activities. • Staging or storage areas shall be located a minimum of 300 feet from any drainage. • Any equipment or vehicles driven and/or operated within or adjacent to ponded or flowing water within any drainage shall be checked and maintained daily, to prevent leaks of materials that could be harmful to aquatic species. • All vehicles and equipment shall be maintained in proper working condition to minimize fugitive emissions and accidental spills from motor oil, 	

Impact	Applicable Project Design Features	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			<p>hydraulic fluid, grease, or other fluids or hazardous materials. All fuel or hazardous waste leaks, spills, or releases shall be stopped or repaired immediately with drip pans in place and cleaned up at the time of occurrence. However, no vehicle or equipment maintenance shall occur within 300 feet of any drainage. All spill material removed shall be contained and disposed of at an appropriate off-site landfill. Maintenance vehicles shall carry appropriate equipment and materials to isolate and remediate leaks or spills, such as a spill containment kit.</p> <ul style="list-style-type: none"> • Stationary equipment such as motors, pumps, or generators, located within or adjacent to ponded or flowing water within drainages shall be positioned over drip pans. • No equipment maintenance shall be done within or adjacent to ponded or flowing water within drainages where petroleum products or other pollutants from the equipment may enter into the water. • No waste, cement, concrete, asphalt, paint, oil, or any other substances used during maintenance activities which could be hazardous to aquatic life, or other organic or earthen material, shall be allowed to contaminate the soil and/or enter into or be placed where it may be washed by rainfall or runoff into ponded or flowing water within any drainages. Any of these materials placed where they may affect ponded or flowing water shall be removed immediately upon observation. When operations are completed, any excess non-native materials shall be removed from the work area. Only the use of native materials is expected to recontour existing baseline conditions (i.e., no non-native fill will be introduced to the open space areas). • All litter and pollutions laws shall be followed. If trash receptacles are provided within or near the work areas they shall be wildlife-proof. • All exposed/disturbed areas shall be stabilized to the greatest extent possible using appropriate, industry standard erosion control measures. 	

Impact	Applicable Project Design Features	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			<ul style="list-style-type: none"> • No maintenance activities shall occur during active precipitation. If any precipitation is forecasted, the work area shall be secured at least one day prior so no materials enter or wash into any drainages. <p>MM 3.4-3: Sensitive Wildlife. The project's construction plans and grading specifications shall state that to avoid direct impacts to sensitive wildlife, a pre-construction survey shall be conducted within three days of proposed impacts by a qualified biologist. If it is determined by the biologist during the pre-construction survey that sensitive wildlife is present and thus may be impacted, no construction shall be allowed to occur in the immediate area until the individual(s) are relocated to an adjacent area that contains suitable habitat. A biological monitor shall be present during any ground disturbance activities within or immediately adjacent to habitat of sensitive wildlife species.</p> <p>The California Department of Fish and Wildlife shall be consulted prior to relocating any sensitive wildlife species. CDFW may require a sensitive wildlife relocation plan be prepared and approved prior to relocating any sensitive wildlife. If required by the California Department of Fish and Wildlife, the plan shall include methods for trapping, handling and relocating all sensitive wildlife and shall identify areas that are suitable for relocation. Suitable relocation habitats shall include areas containing proper soils, host plants, and moisture conditions favorable for long-term survival of the sensitive wildlife, and relocation areas shall be sufficient in size for introducing new individuals so that overpopulation does not occur.</p> <p>MM 3.4-4: Sensitive Insects. The project's construction plans and grading specifications shall state that as required by the updated U.S. Fish and Wildlife Service protocol, a preconstruction habitat assessment shall be conducted by a certified Quino checkerspot butterfly biologist in coordination with the U.S. Fish and Wildlife Service. A site assessment shall be conducted by a qualified Quino checkerspot butterfly biologist to determine if the project site contains areas where surveying for</p>	

Impact	Applicable Project Design Features	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			<p>Quino checkerspot butterfly is recommended. Recommended Quino checkerspot butterfly survey areas include all areas that do not fall under "Excluded Areas" outlined in U.S. Fish and Wildlife Service protocol, regardless of the presence or absence of QCB host plants or nectar sources.</p> <p>If it is determined by the habitat assessment and/or coordination with the U.S. Fish and Wildlife Service that focused surveys are needed and Quino checkerspot butterfly are found within the study area, any potentially significant impacts to Quino checkerspot butterfly habitat shall be mitigated at a minimum 1:1 mitigation-to-impact ratio, subject to approval by the U.S. Fish and Wildlife Service through Section 7 consultation. Appropriate mitigation includes one or more of the following measures:</p> <ul style="list-style-type: none"> • On- and/or off-site preservation of Quino checkerspot butterfly habitat; • On- and/or off-site creation, restoration, and/or enhancement of Quino checkerspot butterfly habitat, including the preparation of a habitat mitigation and monitoring plan; and/or • Payment into a conservation bank or other comparable mitigation banking mechanism (e.g., in-lieu fee program, Pre-Approved Mitigation Area, etc.). 	
<p>Impact 3.4-2: Would implementation of the proposed project could have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?</p>	<p>PDF-1, PDF-2, PDF-17, PDF-20.</p>	<p>Potentially significant</p>	<p>MM 3.4-5: Sensitive Plant Communities. Measures to off-set impacts to coast live oak woodland and coast live oak forest shall include one (or a combination) of the following mitigation measures (which are detailed in the Tree Management and Preservation Plan for the project:</p> <ul style="list-style-type: none"> • Preservation of the 26.5 acres of preserved coast live oak woodland and 4.4 acres of coast live oak forest in perpetuity under a conservation easement, deed restriction, or other appropriate mechanism. • Individual coast live oak trees within fuel modification zones, off-site impact areas, and temporary impact areas shall be protected and preserved in-place, and coast live oak trees located within the fuel modification zones that require pruning shall comply with Orange 	<p>Less than significant</p>

Impact	Applicable Project Design Features	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			<p>County Fire Authority requirements. Trees shall be pruned by a qualified arborist with experience specializing in the management and care of this tree species in consultation with the County Biological Resources Monitor and in accordance with the guidelines published by the National Arborist Association. In no case shall more than 20 percent of the tree canopy of any oak tree be removed.</p> <ul style="list-style-type: none"> • The applicant shall plant trees, seedlings, and onsite-collected acorns within the landscaped portion of the proposed development as well as within the onsite oak woodlands to be preserved as open space. Trees shall be replaced at a minimum of 3:1 replacement ratio, with the possibility of up to 12:1 should all acorns/seedlings survive. All trees and seedlings shall be from a local source indigenous to the immediate area. • Prior to the issuance of any grading permits, the applicant shall obtain the approval of a tree preservation plan for the project by the Manager of OC Planning. The Manager of OC Parks is to be consulted if the plan involves any off-site tree mitigation at an OC Parks facility. • A five-year monitoring program shall be prepared that includes performance standards and criteria for evaluating success. <p>Impacts to southern willow scrub shall be mitigated at a minimum ratio of 2:1, as directed by the California Department of Fish and Wildlife, and include one, or a combination of, the following:</p> <ul style="list-style-type: none"> • Onsite creation, enhancement, or restoration; • Offsite creation, enhancement, or restoration; • Offsite acquisition and preservation; • Purchase of credits at an agency-approved mitigation bank; and/or • Payment into an in-lieu fee agreement. <p>A monitoring plan shall accompany the creation, restoration, and/or enhancement of sensitive plan communities. The plan shall focus on the provision of equivalent habitats within disturbed habitat areas of the study area and/or offsite (e.g., this may include, but is not limited to, removal of non-native and/or invasive species; salvage/dispersal of native</p>	

Impact	Applicable Project Design Features	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			duff and seed bank; transplantation, seeding, and/or planting/staking). In addition, the plan shall provide details as to the implementation of the plan, maintenance, and future monitoring to ensure success.	
Impact 3.4-3: Would implementation of the proposed project could have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	PDF-13, PDF-14, PDF-17.	Potentially significant	MM 3.4-6: Jurisdictional Waters. The project's construction plans and grading specifications shall state that the applicant shall provide on- and/or off-site replacement and/or enhancement of existing U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife jurisdictional waters and wetlands. Riparian/riverine habitat shall be mitigated at a minimum ratio of 1:1 for unvegetated/upland areas and 2:1 for areas supporting riparian vegetation. Impacts to jurisdictional resources may be compensated through payment into an in-lieu fee program or approved mitigation bank through coordination with the U.S. Army Corps of Engineers. If creation, restoration, and/or enhancement is to occur on-site and/or off-site, a mitigation and monitoring plan shall be prepared and subject to the approval of these regulating agencies. The plan shall describe the location of mitigation and provide details as to the implementation of the plan, success criteria, maintenance, and monitoring for a three-year period following construction.	Less than significant
Impact 3.4-4: Would implementation of the proposed project could 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?	PDF-1, PDF-2.	Potentially significant	MM 3.4-1: Listed above under Impact 3.4-1. MM 3.4-2: Listed above under Impact 3.4-1. MM 3.4-7: Nesting Bird Surveys. The project's construction plans and grading specifications shall state that all vegetation clearing for construction and fuel modification shall occur outside of the breeding bird season (fall and winter), between September 1 and February 14 to reduce the potential to impact an active nest. If clearing and/or grading activities cannot be avoided during the breeding season, all suitable habitats shall be thoroughly surveyed for the presence of nesting birds by a qualified biologist prior to and initial ground disturbing activities. Suitable nesting habitat on the project site includes grassland, scrub, chaparral, and woodland communities. If any active nests are detected, the area shall be flagged, along with a 300-foot buffer	Less than significant

Impact	Applicable Project Design Features	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			for passerine species or 500 feet for raptors (or appropriate buffer as determined by the monitoring biologist), and shall be avoided until the nesting cycle is complete or it is determined by the biological monitor that the chicks have fledged the nest and the nest is no longer active.	
Impact 3.4-5: Would implementation of the proposed project could conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	PDF-1, PDF-5, PDF-22.	Potentially significant	MM 3.4-5: Listed above under Impact 3.4-2.	Less than significant
Impact 3.4-6: Would implementation of the proposed project could conflict with provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	PDF-1, PDF-2, PDF-4, PDF-13, PDF-14, PDF-17, PDF-20.	Potentially significant	<p>MM 3.4-8: Compliance with Section 6.1.2 of the MSHCP – Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools. In accordance with Section 6.1.2 of the MSHCP, a Determination of Biologically Equivalent or Superior Preservation shall be prepared and submitted to the Environmental Programs Division The Determination of Biologically Equivalent or Superior Preservation shall include an analysis of alternatives that demonstrates efforts that first avoid direct and indirect effects to MSHCP Riparian/Riverine habitat; if avoidance is not feasible, the Determination of Biologically Equivalent or Superior Preservation shall include alternatives that would minimize potential effects. If an avoidance alternative is selected, the project shall ensure the long-term conservation of the avoided Riparian/Riverine habitat through the use of deed restrictions, conservation easements, or other appropriate mechanisms.</p> <p>If an avoidance alternative is not feasible, the Determination of Biologically Equivalent or Superior Preservation shall include measures to ensure the replacement of any lost functions and values of Riparian/Riverine habitat. Riparian/Riverine habitat shall be mitigated at a minimum ratio of 1:1 for unvegetated/upland areas and 2:1 for areas supporting riparian vegetation. Measures shall include one, or a combination of, the following:</p> <ul style="list-style-type: none"> • Onsite creation, enhancement, or restoration; • Off-site creation, enhancement, or restoration; • Off-site acquisition and preservation; • Purchase of credits at an agency-approved 	Less than significant

Impact	Applicable Project Design Features	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			mitigation bank; and/or • Payment into an in-lieu fee agreement.	
Cumulative	PDF-1, PDF-2, PDF-5, PDF-13, PDF-14, PDF-17, PDF-20, PDF-22.	Less than significant	None required.	Less than significant
3.5 Cultural/Scientific Resources				
Impacts 3.5-1 and 3.5-2: Would the project result in a substantial adverse change in the significance of a historical or archaeological resource, as defined in CEQA Guidelines Section 15064.5?	PDF-1, PDF-2.	Potentially significant	<p>MM 3.5-1: Prior to the issuance of a grading permit, the applicant/developer shall provide written evidence to the County Building and Safety Division that a qualified archaeologist has been retained to address the potential discovery of unanticipated archaeological discoveries. In addition, written evidence must be provided that Native American monitors shall be allowed to monitor earthmoving activity related to the project.</p> <p>In the event that archaeological materials, including stone tools, shells, bones, glass shards, ceramics, or other materials older than 50 years in age, are encountered during ground-disturbing activities, work in the immediate vicinity of the resource shall cease until a qualified archaeologist has assessed the discovery and appropriate treatment pursuant to CEQA Guidelines Section 15064.5 is determined.</p> <p>If archaeological resources are found to be significant, the archaeologist shall determine, in consultation with the County and local Native American groups expressing interest, appropriate avoidance measures or other appropriate mitigation. Per CEQA Guidelines Section 15126.4(b)(3), preservation in place shall be the preferred means to avoid impacts to archaeological resources qualifying as historical resources. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures, such as data recovery or other appropriate measures, in consultation with the implementing agency and local Native American representatives expressing interest in prehistoric or tribal resources. If an archaeological site does not qualify as an historical resource but meets the criteria for a unique archaeological resource as defined in Section 21083.2, then the site shall be</p>	Less than significant

Impact	Applicable Project Design Features	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			<p>treated in accordance with the provisions of Section 21083.2.</p> <p>MM 3.5-2: Prior to the issuance of a grading permit, a Cultural Resources Monitoring Plan shall be prepared by a qualified archaeologist in consultation with the County and local Native American groups expressing interest. The plan shall identify the location and timing of cultural resources monitoring. Monitoring would occur in areas most likely to contain resources, such as valleys and canyons. The plan shall allow the qualified archaeologist, based on observations of subsurface soil stratigraphy or other factors during initial grading, and in consultation with the Native American monitor and the lead agency, to reduce or discontinue monitoring as warranted if the archaeologist determines that the possibility of encountering archaeological deposits is low. The plan shall provide the appropriate measures to be followed in the event of unanticipated discovery of a cultural resource consistent with <i>CEQA Guidelines</i> Section 15126.4(b)(3), as well as identify the appropriate data recovery methods and procedures to reduce or eliminate the effect of the project if avoidance of significant historical or unique archaeological resources is determined to be infeasible. The plan shall also include reporting of monitoring results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals. The plan shall be submitted to the County Department of Building and Safety for review and approval prior to the issuance of a grading permit and any resulting archaeological requirements shall be incorporated into all development plans and included on project permits.</p>	
<p>Impact 3.5-3: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?</p>	<p>PDF-1, PDF-2.</p>	<p>Potentially significant</p>	<p>MM 3.5-3: Prior to the issuance of a grading permit, the applicant/developer shall provide written evidence to the County Department of Building and Safety that a qualified paleontologist has been retained to respond on an as-needed basis to address unanticipated paleontological discoveries, and the paleontological requirements shall be incorporated into all development plans submitted and included as conditions of approval. In the event</p>	<p>Less than significant</p>

Impact	Applicable Project Design Features	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			that paleontological resources are encountered during grading and construction operations, all construction activities shall be halted or redirected to provide for the qualified paleontologist to assess the find for significance and, if necessary, develop a paleontological resources impact mitigation plan (PRIMP) for the review and approval by the County prior to resuming construction activities.	
Impact 3.5-4: Would the project disturb human remains, including those interred outside of formal cemeteries?	PDF-1, PDF-2.	Less than significant	None required.	Less than significant
Cumulative	PDF-1, PDF-2.	Less than significant	Implement Mitigation Measures MM 3.5-1 through MM 3.5-3.	Less than significant
3.6 Geology and Soils				
Impact 3.6-1: Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?		Potentially significant	MM 3.6-1: Prior to the issuance of a grading permit, the applicant shall have a qualified civil engineer prepare final grading plans and a Final Geotechnical Assessment in conformance with the California Building Code, County Grading and Excavation Code, that shall be approved by the County's Building and Safety Department.	Less than significant
Impact 3.6-2: Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking and landslides?	PDF-10	Potentially significant	MM 3.6-1: Listed above under Impact 3.6-1.	Less than significant
Impact 3.6-3: Would the project result in substantial soil erosion or the loss of topsoil?	PDF-4, PDF-13, PDF-14, PDF-15, PDF-16, PDF-17	Potentially significant	MM 3.9-1: Listed above under Impact 3.9-1.	Less than significant
Impact 3.6-4: Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site lateral spreading or collapse?		Potentially significant	MM 3.6-1: Listed above under Impact 3.6-1.	Less than significant
Impact 3.6-5: Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal system where sewers are not available for the disposal of waste water?		Potentially significant	MM 3.6-2: The project operator shall design and operate the onsite wastewater treatment systems in accordance with the SWRCB adopted Resolution No. 2012-0032—the Water Quality Control Policy for Siting, Design, Operation, and Maintenance of On-site Wastewater Treatment Systems (specifically Tier 2 of this Policy requiring Orange County	Less than significant

Impact	Applicable Project Design Features	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			<p>Department of Public Works to oversee the design and approval of the systems); the Orange County On-site Sewage Absorption System Guidelines; and the County Regulations for Wastewater Treatment and Disposal Systems, which include minimum horizontal setback requirements from geologic and water features. All septic tanks, biofilters and reuse water pump station/emergency storage tanks shall be setback a minimum of five feet from structures, property lines and the top of descending slopes. The project operator shall obtain approval from the County for issuance of building permits for and operation of onsite wastewater treatment systems.</p> <p>MM 3.6-3: The Home Owners Association (HOA) shall provide detailed information via flyers and meetings to project residents regarding the proper use and maintenance necessary to keep onsite wastewater treatment systems functioning properly. In addition, information regarding County-registered HOA approved liquid waste haulers shall be provided to project site residents.</p>	
Cumulative	PDF-4, PDF-10, PDF-13, PDF-14, PDF-15, PDF-16, PDF-17	Less than significant	None required.	Less than significant
3.7 Greenhouse Gas Emissions				
Impact 3.7.1: Would the project generate significant amounts of greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	PDF-4	Less than significant	None required.	Less than significant
Impact 3.7.2: Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	PDF-1, PDF-4.	Less than significant	None required.	Less than significant
Cumulative	PDF-1, PDF-4.	Less than significant	None required.	Less than significant
3.8 Hazards and Hazardous Materials				
Impact 3.8-1: Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		Less than significant	None required.	Less than significant

Impact	Applicable Project Design Features	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
<p>Impact 3.8-2: Would the project 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?</p>		Potentially significant	<p>MM 3.8-1: Prior to issuance of grading permits for Phase 2 (north parcel), a Site Management Plan (SMP) shall be prepared by a qualified hazardous materials consultant and shall detail procedures and protocols for management of onsite hazardous materials, including:</p> <ul style="list-style-type: none"> • A certified hazardous waste hauler shall remove all potentially hazardous materials, wastes, trash pit debris, and abandoned dilapidated vehicles, which shall be disposed of at an appropriate solid waste facility based on the content of the materials. All recyclable materials shall be separated and disposed of at a recycling facility. Hazardous materials shall be transported per California Hazardous Waste Regulations to a landfill permitted by the state to accept hazardous materials. • After removal of the potentially hazardous materials soils samples shall be taken at the airport hangar/maintenance area, storage shed, bunker, vehicle storage areas, trash pits, and at other debris areas to identify any contaminated soils with concentrations above worker safety thresholds established by the Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs). Any samples identified to exceed the RWQCB ESL limits shall be characterized, removed, and disposed of off-site at a licensed hazardous materials disposal facility according to California Hazardous Waste Regulations. A report of the findings shall be provided to the County for review and approval prior to issuance of grading permits for the Phase 2 (north parcel). • Any subsurface materials exposed during construction activities that appear suspect of contamination, either from visual staining or suspect odors, shall require immediate cessation of excavation activities. Soils suspected of contamination shall be segregated from other soils to be tested for potential contamination. If contamination is found to be present Environmental Screening Levels (ESLs), any further proposed groundbreaking activities within 	Less than significant

Impact	Applicable Project Design Features	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			<p>areas of identified or suspected contamination shall be conducted according to California Hazardous Waste Regulations.</p> <ul style="list-style-type: none"> A Health and Safety Plan (HSP) shall be prepared for each contractor that addresses potential safety and health hazards and includes the requirements and procedures for employee protection. The HSP shall also outline proper soil handling procedures and health and safety requirements to minimize worker and public exposure to hazardous materials during construction. All SMP measures shall be printed on the construction documents, contracts, and project plans prior to issuance of grading permits. 	
Impact 3.8-3: Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	PDF-10 and PDF-11.	Less than significant	None required.	Less than significant
Impact 3.8-4: Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	PDF-10, PDF-11.	Potentially significant	MM 3.13-1: Listed below under Impact 3.13-1.	Less than significant
Cumulative	PDF-10, PDF-11.		None required.	Less than significant
3.9 Hydrology and Water Quality				
Impact 3.9-1: Would implementation of the proposed project violate water quality standards or waste discharge requirements?	PDF-1, PDF-2, PDF-3, PDF-4, PDF-6, PDF-13, PDF-14, PDF-15, PDF-16, PDF-17,	Potentially significant	<p>MM 3.6-2: Listed above under Impact 3.6-5.</p> <p>MM 3.6-3: Listed above under Impact 3.6-5.</p> <p>MM 3.9-1: Prior to the issuance of any grading or building permits, the project operator 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 Manager, Permit Services. Projects subject to</p>	Less than significant

Impact	Applicable Project Design Features	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			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 upon request.	
Impact 3.9-2: Would implementation of the proposed project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or lowering of the local groundwater table level (e.g., the production rate of the pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	PDF-1, PDF-2, PDF-4, PDF-6, PDF-13, PDF-14, PDF-15.	Less than significant	None required.	Less than significant
Impact 3.9-3: Would implementation of the proposed project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion, siltation or flooding on- or off-site?	PDF-1, PDF-2, PDF-3, PDF-13, PDF-14, PDF-15.	Potentially significant	MM 3.9-1: Listed above under Impact 3.9-1.	Less than significant
Impact 3.9-4: Would implementation of the proposed project 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?	PDF-1, PDF-2, PDF-3, PDF-4, PDF-6, PDF-13, PDF-14, PDF-15, PDF-17.	Potentially significant	MM 3.9-1: Listed above under Impact 3.9-1.	Less than significant
Impact 3.9-5: Would implementation of the proposed project otherwise substantially degrade water quality?		Potentially significant	MM 3.6-2 Listed above under Impact 3.6-5. MM 3.6-3: Listed above under Impact 3.6-5.	Less than significant
Cumulative	PDF-1, PDF-2, PDF-3, PDF-4, PDF-6, PDF-13, PDF-14, PDF-15, PDF-16, PDF-17	Less than significant	None required.	Less than significant
3.10 Land Use and Planning				
Impact 3.10.1: Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal	PDF-1, PDF-2, PDF-3.	Less than significant	None required.	Less than significant

Impact	Applicable Project Design Features	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				
Cumulative		Less than significant	None required.	Less than significant
3.11 Noise				
<p>Impact 3.11-1: Would the project expose persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?</p>	PDF-21	<p>Significant and unavoidable (construction)</p> <p>Less than significant (operation)</p>	<p>MM 3.11-1: The project's construction plans and grading specifications shall state that temporary sound barriers shall be installed between the location of construction activities and the closest residences during construction activities that could exceed noise limits. The temporary sound barriers shall remain in place until the conclusion of demolition, grading, and construction activities that could exceed noise limits. The design of the sound barrier will be:</p> <ul style="list-style-type: none"> • At least 14-feet in height above grade; • located such that it will break the line-of-sight between the sound source and the receiver; • Consist of an impervious material with a minimum surface density of 4 pounds per square foot; • Not have any gaps or holes between the panels or at the bottom; and • A minimum weight of two pounds per square foot with no gaps or perforations. <p>MM 3.11-2: The project's construction plans and grading specifications shall state that the project construction contractor shall post signs at the construction sites that are legible at a distance of 50-feet and two weeks prior to the commencement of construction of the project, the project proponent shall send a notice to the off-site residential uses located within a 0.5-mile radius from the project boundaries. All notices and signs shall provide 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.</p> <p>MM 3.11-3: The project's construction plans and grading specifications shall state that the construction contractor shall establish a "noise disturbance coordinator" who shall be responsible</p>	<p>Significant and unavoidable (construction)</p> <p>Less than significant (operation)</p>

Impact	Applicable Project Design Features	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable measures such that the complaint is resolved. All notices that are sent to residential units within 0.5-mile radius from the project boundaries and all signs posted at the construction site shall list the telephone number for the disturbance coordinator.	
Impact 3.11-2: Would the project expose persons to, or generation of, excessive groundborne vibration or groundborne noise levels?		Less than significant	None required.	Less than significant
Impact 3.11-3: Would the project cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?		Less than significant	None required.	Less than significant
Impact 3.11-4: Would the project cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	PDF-21	Significant and unavoidable	MM 3.11-1 through MM 3.11-3, listed under Impact 3.11-1.	Significant and unavoidable
Cumulative		Less than significant	None required.	Less than significant
3.12 Population and Housing				
Impact 3.12-1: Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?		Less than significant	None required.	Less than significant
Cumulative	PDF-1	Less than significant	None required.	Less than significant
3.13 Public Services				
Impact 3.13-1: Would implementation of the proposed project result in adverse physical impacts associated with the provision of new or physically altered fire, police, school, or other public service facilities?	PDF-4, PDF-10, PDF-11, PDF-19	Less than significant	MM 3.13-1: Prior to the issuance of any grading permits, the applicant shall obtain the Orange County Fire Authority design approval of all fire protection access roads, fire hydrants, and fire prevention design measures that shall include the following: <ul style="list-style-type: none"> • Turning radius and access in and 	Less than significant

Impact	Applicable Project Design Features	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			<p>around the project site and structures shall be designed to accommodate large fire vehicles and their weight.</p> <ul style="list-style-type: none"> • All roadways that have medians that do not exceed 1000-feet in width shall have a turnaround. Roadways with medians greater than 1000-feet in width shall provide emergency turnaround access for heavy fire equipment. • If a dead-end street exceeds 150 feet or when otherwise required, a clearly marked fire apparatus access turnaround shall be provided and approved by the Orange County Fire Authority. • All traffic signals on public access ways shall include the installation of optical preemption devices. • Project plans shall include plan and section views and indicate the grade and width of the access road flow-line to flow-line. • Applicable CC&Rs shall contain provisions prohibiting obstructions such as speed bumps/humps, control gates or other modifications unless approval from the Orange County Fire Authority is granted. • A note shall be placed on the fire protection access easement plan indicating that all street/road signs shall be designed and maintained to be illuminated in a manner meeting the Orange County Fire Authority requirements. • Fire hydrant spacing shall be 600 feet between fire hydrants, or as approved by the Orange County Fire Authority. • All electrically operated gates shall install emergency opening devices as approved by the Orange County Fire Authority. <p>MM 3.13-2: The HOA managing the proposed</p>	

Impact	Applicable Project Design Features	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			project shall ensure disclosure of potential wildfire hazards the location of fire and emergency services to all residents. This information shall be provided in information provided to new homeowners and within regular communications to residents from the HOA.	
Cumulative	PDF-4, PDF-10, PDF-11, PDF-19.	Less than significant	None required.	Less than significant
3.14 Recreation				
Impact 3.14-1: Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	PDF-1	Less than significant	None required.	Less than significant
Impact 3.14-2: Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	PDF-1	No impact	None required.	No impact
Cumulative	PDF-1	Less than significant	None required.	Less than significant
3.15 Transportation/Traffic				
Impact 3.15-1: Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	PDF-21	Less than significant	None required.	Less than significant
Impact 3.15-2: Would the project conflict with an applicable congestion management program, including, but not limited to level of service standard and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?		Less than significant	None required.	Less than significant
Impact 3.15-3: Would the project substantially increase hazards due to a design feature	PDF-7, PDF-8, PDF-9.	Less than significant	None required.	Less than significant

Impact	Applicable Project Design Features	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
(e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
Impact 3.15-4: Would the project result in inadequate emergency access?		Less than significant	None required.	Less than significant
Cumulative		Less than significant	None required.	Less than significant
3.16 Utilities and Service Systems				
Impact 3.16-1: Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?		Potentially significant	MM 3.6-2: Listed above under Impact 3.6-5. MM 3.6-3: Listed above under Impact 3.6-5.	Less than significant
Impact 3.16-2: Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts?		Less than significant	None required.	Less than significant
Impact 3.16-3: Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?		Potentially significant	MM 3.9-1 Listed above under Impact 3.9-1.	Less than significant
Impact 3.16-4: Would the project result in insufficient water supplies available to serve the project from existing entitlements and resources, or new or expanded entitlements are needed?	PDF-18	Less than significant	None required.	Less than significant
Impact 3.16-5: Would the project be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?		Less than significant	None required.	Less than significant
Impact 3.16-6: Would the project comply with federal, state and local statutes and regulations related to solid waste?		No impact	None required.	No impact
Cumulative		Less than significant	None required.	Less than significant