Oak Hills Estate Tentative Tract Map, Rezone, and Development Plan Final EIR

SCH #2015111069
County EIR #17EIR-00000-00001

Prepared by
County of Santa Barbara
Planning & Development
Department

Prepared with the assistance of
RECON Environmental, Inc.

RECON Number 8147
October 2017

Final
Environmental Impact Report for the Oak Hills Estate Tentative Tract Map, Rezone, and Development Plan, County of Santa Barbara, California
SCH # 2015111069
ER # 17EIR-00000-00001

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List of Abbreviated Terms

°C	degrees Celsius
°F	degrees Fahrenheit
AB	Assembly Bill
ADT	Average Daily Traffic
AFY	acre-foot per year
ALUCP	Airport Land Use Compatibility Plan
ALUP	Adopted Airport Land Use Plan
APN	Assessor's Parcel Number
AQMIS	Air Quality and Meteorological Information System
BAU	Business as Usual
BMP	Best Management Practice
BP	before present
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CAL FIRE	California Department of Forestry and Fire Protection
CalGreen	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	Clean Air Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CC&Rs	Covenants, Conditions, & Restrictions
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFC	California Fire Codes
CFGC	California Fish and Game Code
cfs	cubic foot per second
CH_4	methane
City	City of Lompoc
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	carbon monoxide
County	County of Santa Barbara
COLT	City of Lompoc Transit
CRC	California Residential Code
CRPR	California Rare Plant Rank
CO_2	carbon dioxide
CRHR	California Register of Historical Resources
CUF	Consumptive Use Factor
CWA	Clean Water Act
dB	decibel
dB(A)	A-weighted decibel

ECAP	Energy and Climate Action Plan
EIR	Environmental Impact Report
EMS	emergency medical services
EO	Executive Order
EPA	Environmental Protection Agency
ERME	Environmental Resources Management Element
ESA	Federal Endangered Species Act
ESCP	Erosion and Sediment Control Plan
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHSZ	Fire Hazard Severity Zone
FRA	Federal Responsibility Area
FRAP	Fire and Resource Assessment Program
FTA	Federal Transit Authority
GHG	greenhouse gas
GPCD	gallons per capita per day
GWP	Global Warming Potential
HFHSZ	High Fire Hazard Severity Zone
HOA	Homeowners Association
HVAC	heating, ventilation, and air conditioning
IPCC	Intergovernmental Panel on Climate Change
IRWMP	Integrated Regional Water Management Plan
ITE	Institute of Transportation Engineers
L_{dn}	day–night average noise level
L_{eq}	Average sound level
LID	Low-impact Development
LOS	Level of Service
LRA	Local Responsibility Area
LRWRP	Lompoc Regional Wastewater Reclamation Plant
LUDC	Land Use and Development Code
LUSD	Lompoc Unified School District
MGD	million gallons per day
MJHMP	Multi-jurisdictional Hazard Mitigation Plan
MMT CO_2E	million metric ton of carbon dioxide equivalent
mph	miles per hour
MSL	mean sea level
MT CO_2E	metric ton carbon dioxide equivalent
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NBAR	North County Board of Architectural Review
NFIP	National Flood Insurance Program
NFPA	National Fire Protection Association
NOx	nitrogen oxide
NO_2	nitrogen dioxide
NOP	Notice of Preparation
NPDES	National Pollution Discharge Elimination System
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
OES	Office of Emergency Services
OHEDRB	Oak Hills Estates Design Review Board

OSMP	Open Space Management Plan
P&D	Santa Barbara County Planning and Development
PG&E	Pacific Gas & Electric
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
PM_{10}	particulate matter less than 10 microns in diameter
PRC	Public Resources Code
psi	pounds per square inch
PSD	Prevention of Significant Deterioration
Reserve	Burton Mesa Ecological Reserve
ROC	reactive organic compounds
RPS	Renewables Portfolio Standard
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SBCAG	Santa Barbara County Association of Governments
SBCAPCD	Santa Barbara County Air Pollution Control District
SBCEMSA	Santa Barbara County Emergency Medical Service Agency
SBCFCD	Santa Barbara County Flood Control District
SBCFD	Santa Barbara County Fire Department
SCAQMD	South Coast Air Quality Management District
SCCAB	South Central Coast Air Basin
SCS	Sustainable Communities Strategy
SCGC	Southern California Gas Company
SHMA	Seismic Hazards Mapping Act
SIP	State Implementation Plan
SLOAPCD	San Luis Obispo Air Pollution Control District
SMAQMD	Sacramento Metropolitan Air Quality Management District
SoCalGas	Southern California Gas Company
SO_2	sulfur dioxide
SRA	State Responsibility Area
SRRE	Source Reduction and Recycling Element
SWMP	Storm Water Management Program
SWPPP	Storm Water Pollution Prevention Plan
SWQCB	State Water Quality Control Board
SWQMP	Storm Water Quality Management Plan
TAC	toxic air contaminants
TRM	Tentative Tract Map
TRP	Tree Replacement Plan
VAFB	Vandenberg Air Force Base
VHFHSZ	Very High Fire Hazard Severity Zone
VVCSD	Vandenberg Village Community Services District
V/C	volume to capacity ratio
USC	United States Code
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
USDA	United States Department of Agriculture
UWMP	Urban Water Management Plan
VHFHSZ	Very High Fire Hazard Severity Zone
WEAP	Worker Environmental Awareness Program
WDR	Waste Discharge Requirements

Chapter S.0
Executive Summary

This section summarizes the characteristics of the proposed Oak Hills Estate project and the alternatives to the project that were evaluated by the Environmental Impact Report (EIR). As detailed below, this Revised ~~Draft~~ EIR identifies revisions to the EIR made in response to comments on the Draft EIR, shown using ~~strikeout~~ and underline format. For clarity, double ~~strikeout~~ and underline were used to distinguish editorial revisions in the Final EIR from the single underline and ~~strikeout~~ in the Revised Draft EIR. This section summarizes the environmental impacts that would result from the implementation of the project and the alternatives to the project. This section also lists the mitigation measures that were identified by the EIR to reduce the project's environmental impacts. This section also details s~~ummarizes~~ in Table S-1 the impacts and mitigations identified in the Final EIR and any related revisions that address comments received during public review ~~and~~ to the Draft EIR and Revised Draft EIR.

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S.1 Revised Project Description and Objectives

The Oak Hills Estate project involves a request for the approval of a rezone, vesting tentative tract map, and a development plan to develop an existing 16.88 acre parcel with 29 single-family residential units and one open space lot. The natural open space lot would encompass approximately 43.1 ~~43.3~~ percent of the project site ~~and include a private trail~~. The property is identified as Assessor's Parcel Number (APN) 097-371-010 and is located in northern Santa Barbara County (County) in the unincorporated Vandenberg Village area approximately 6 miles north of the City of Lompoc.

A Draft EIR for the Oak Hills Estate project was circulated for public review between February 2 and March 20, 2017. Comments submitted by the United States Fish and Wildlife Service and California Department of Fish and Wildlife stated that the project would have the potential to result in significant impacts to the El Segundo blue butterfly (*Euphilotes battoides allyni*), which is listed as an endangered species under the Federal Endangered Species Act.

California Environmental Quality Act (CEQA) Guidelines Section 15088.5, Recirculation of an EIR Prior to Certification, states that a lead agency (County of Santa Barbara Planning & Development) is required to recirculate an EIR when significant new information is added before it has been certified.

In addition to providing new information and analysis pertaining to the El Segundo blue butterfly, the~~is~~ Revised Draft EIR addresses~~s~~ changes to the project made by the applicant to minimize potential impacts to El Segundo blue butterfly and its habitat. Changes to the project description ~~addressed by this Revised Draft EIR~~ are detailed in Section 2.0, Project Description. All of the public review comments submitted on the original Draft EIR and ~~are included in Appendix J of this~~ Revised Draft EIR and responses are included in Chapter 11.0.

The objectives of the Oak Hills Estate project are as follows:

1. To develop the site in a manner that is consistent with the County's General Plan, environmental requirements, and that complements the physical characteristics of the site.

2. To provide desirable housing types and densities consistent with surrounding neighborhoods.

3. To develop the site in a manner that preserves a significant component of the site as permanent open space designed and managed to protect the natural habitat.

4. To ensure that the site is compatible with the Burton Mesa Ecological Reserve and surrounding area through sensitive site design and residential architectural design standards.

5. To develop design criteria that encourage connectivity inside and adjacent to the project, that link the community with walking trails, and provide access to the adjacent Country Club property.

S.2 Summary of Significant Effects and Mitigation Measures that Reduce or Avoid the Significant Effects

The significance of each impact resulting from implementation of the proposed project has been determined according to the County's Environmental Thresholds and Guidelines Manual and/or CEQA thresholds. Table S-1, located at the end of this section, summarizes the significant and less than significant effects identified during the environmental analysis completed for the project. Table S-1 also includes a mitigation framework to reduce the significant environmental effects, with a conclusion as to whether the impact has been mitigated to below a level of significance. ~~Changes made to the original Draft EIR impacts and mitigation measures are also shown in the strikeout and underline format in Table S-1.~~ The mitigation measures listed in Table S-1 are also discussed within each relevant topical area in Chapter 4.0, Environmental Impact Analysis.

S.3 Summary of Cumulative Impacts

The State CEQA Guidelines (Section 15130) require that cumulative impacts be analyzed in an EIR when the resulting impacts are cumulatively considerable and, therefore, potentially significant. Cumulative impacts refer to the combined effect of project impacts with the impacts of other past, present, and reasonably foreseeable future projects. Cumulative impacts are analyzed in each individual resource section in Chapter 4.0. The list of cumulative projects was compiled through review of the County's most recent Cumulative Project List (July 2015), as well as consultation with County staff on past, present, and foreseeable future projects. The proposed project's contribution to cumulative impacts was determined to be less than significant (Class III) for air quality; cultural resources; geology and soils; greenhouse gas emissions; hydrology and water quality; land use; noise; public services and utilities; transportation and circulation; and fire protection. Cumulative biological resources impacts would be reduced to a less than significant level with the implementation of mitigation measures identified for the proposed project (Class II). Aesthetics impacts were identified to be a cumulatively considerable (Class I) impact.

S.4 Areas of Controversy

The Notice of Preparation (NOP) was distributed on November 23, 2015, for a 30-day public comment period. In addition, a public scoping meeting was held on December 3, 2015 at the County Public Works Department conference room, located at 620 West Foster Road, Santa Maria, California. The NOP and comment letters are included in this Final EIR as Appendix A.

Potential areas of controversy include the potential impacts to aesthetics, biological resources, and tribal cultural resources, as raised by tribal representatives during the EIR public scoping meeting.

Potentially significant impacts related to the following environmental issue areas are analyzed in detail in the Final EIR Chapter 4.0, Environmental Impact Analysis, sections:

4.1 Aesthetics
4.2 Air Quality
4.3 Biological Resources
4.4 Cultural Resources
4.5 Geology and Soils
4.6 Greenhouse Gas
4.7 Hydrology and Water Quality
4.8 Land Use
4.9 Noise
4.10 Public Services and Utilities
4.11 Transportation and Circulation
4.12 Fire Protection

S.5 Project Alternatives

To fully evaluate the environmental effects of projects, CEQA mandates that alternatives to the project be analyzed. Section 15126.6 of the CEQA Guidelines requires the discussion of "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" and the evaluation of the comparative merits of the alternatives. The alternatives discussion is intended to "focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project," even if these alternatives would impede to some degree the attainment of the project objectives.

Chapter 7.0, Alternatives, provides a discussion of the alternatives considered but rejected, a detailed analysis of the Development under the Current Zoning (No Project Alternative), the Reduced Unit Alternative (Alternative 2), and the Clustered ~~Project~~Unit Alternative (Alternative 3). Chapter 7.0 identifies the Reduced Unit Alternative as the environmentally superior alternative, as required under CEQA.

S.5.1 Alternative 1: No Project Alternative (Development under the Current Zoning)

This scenario examines the potential impacts to the project site associated with buildout under the current Residential Ranchette (Inland Area); 10-acre gross lot minimum (RR-10) zoning of the project site. Under the No Project Alternative, one single-family dwelling could be constructed on the 16.88-acre parcel with approval of a land use permit consistent with Land Use and Development Code Section 35.23.030. Permitted uses also include a farmworker dwelling unit and a residential second unit. This analysis assumes that the lot would be developed with a single-family home consistent with the project site's current zoning and neighborhood context.

S.5.2 Alternative 2: Reduced Unit Alternative

The purpose of the Reduced Unit Alternative is to minimize the project's development footprint to reduce resource impacts from the project while providing single-family homes consistent with the project objectives. This alternative includes reduced roadways and infrastructure footprint and reduced area for homes~~, and elimination of the on-site trail~~ (Figure 7-1). Under the Reduced Unit Alternative, approximately 5.07 acres would be available for single-family lots. Residential lot sizes would be reduced by 2.35~~2.28~~ acres in comparison to the proposed project's 7.42~~7.35~~ acres. Approximately 20 homes are assumed to be constructed under this alternative based on proposed project's lot sizes. Roadways would comprise approximately 0.67 acre under this alternative, which is 0.45 acre less than the proposed project's 1.12 acres of roadways. In addition, a 100-foot-wide fuel management area, totaling approximately 4.75 acres, would be established at the edge of the development area.

S.5.3 Alternative 3: Clustered ~~Project~~ Unit Alternative

The purpose of the Clustered ~~Project~~ Unit Alternative is to reduce the project's overall development footprint and scale, and to minimize or avoid resource impacts that would result from the implementation of the proposed project. The Clustered ~~Project~~ Unit Alternative would provide 29 condominiums or townhomes clustered onto two areas of the project site. This alternative design would retain additional open space area on the project site~~. Under this alternative, the on-site trail would be eliminated~~, and Road A would become a cul-de-sac (Figure 7-2). This alternative would consist of approximately 4.91 acres of condominium/townhome development, 0.49 acre for roadways, and 5.27 acres used to provide a 100-foot-wide fuel management area. The Clustered ~~Project~~Unit Alternative would result in residential and roadway development on approximately 5.4 acres of the project site, compared to 8.54~~7.35~~ acres of residence and roadway development that would occur if the proposed project were implemented.

S.6 Environmentally Superior Alternative

CEQA Guidelines Section 15126.6(e)(2) requires an EIR to identify the environmentally superior alternative. If the No Project Alternative is the environmentally superior alternative, the EIR must identify an environmentally superior alternative from the other alternatives. The project itself may not be identified as the environmentally superior alternative.

The Reduced Unit Alternative is considered the environmentally superior alternative, because it would reduce significant impacts associated with aesthetics, biological resources, cultural resources, geology, hydrology and water quality, noise, and fire protection compared to the proposed project (refer to Table 7-1). The Reduced Unit Alternative is consistent with project objectives to design and provide desirable housing at densities that are compatible with existing neighborhoods and the adjacent Burton Mesa Ecological Reserve. The Reduced Unit Alternative is also consistent with implementing the project objective to encourage connectivity inside and adjacent to the project, linking the community with walking trails, and providing access to the adjacent Village Country Club property. Although aesthetics impacts would

remain significant and unavoidable for the proposed project under all project scenarios except for the No Project Alternative, the Reduced Unit Alternative would reduce these impacts through the reduction in the number of lots developed on the project site. Thus, the Reduced Unit Alternative would meet all of the project's objectives in a manner that is consistent with the County's Comprehensive Plan while preserving more habitat and open space than the proposed project.

Table S-1
Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
Aesthetics			
Impact AES-1: Visual Aesthetic Character	**Surface Waters** No direct alteration of the spikerush wetland is proposed and it has limited visibility from off-site due to the intervening topography. Proposed new property lines for lots 25 and 27, and new Road B would be located 50 feet (minimum)~~approximately 50–65 feet away~~ from the spikerush wetland. Therefore, the project would not result in significant visual impacts to views of this surface water feature. Alterations to the ephemeral drainages would have limited direct off-site public visibility due to intervening site topography. Therefore, the proposed project alterations to on-site surface waters would result in a less than significant impact to the existing visual character of the site (Class III impact). Native trees growing along and within the banks of two ephemeral streams contribute to the open space character of the site. Ground surface alterations from proposed grading and construction within the central drainage would have the potential to result in significant impacts to the native trees, which in turn would result in significant impacts to the site's visual character. In addition, the project proposes to construct a culvert to channel the easternmost drainage under proposed lot 29 and Oak Hill Drive. During construction of the culvert, the critical root zones of the existing native trees (shown as #76 in the proposed tree removal and protection plan in Figure 2-7) could be impacted. Substantial impacts to these trees could require their removal, which would be visible from off-site locations and contribute to a significant visual impact. The tree protection plan in MM BIO-3.2 requires that the root zones of the trees within and adjacent to the ephemeral drainages be protected during construction. MM BIO-3.2 also requires that if the root zone is impacted, the trees be replaced at a ratio of 10:1. Therefore, with the implementation of MM BIO-3.2, the proposed alterations to surface waters on the project site and resulting potential impacts to scenic trees would be a significant and mitigated impact (Class II impact). **Grading, Vegetation Removal, and Construction** The removal of native trees and vegetation from the project site would result in significant changes to the visual character of the site, and areas where vegetation would be removed would be most visible from homes near the project site; the Vandenberg Country Club golf course; and from areas on the Reserve, depending on the location of the viewer. Topography of the site, particularly adjacent to Oak Hill Drive, would partially screen views from the roadway of areas where vegetation is to be removed or modified. Previously proposed vegetation management procedures to reduce wildfire hazards are depicted in the Design Guidelines located in Appendix C-1. The project has been revised so that the proposed Fuel Management Zone 1 (FMZ-1) would result in vegetation management in areas on proposed residential lots that are within 30 feet of proposed new residences. Project revisions to the fuel management zones would not result in an increase in the amount of vegetation management that would be conducted on the project site. However, the proposed Design Guidelines do not depict the location of the revised fuel management zones.	***MM AES-1: Design Guidelines and Open Space Management Plan Revisions*** The proposed Oak Hills Estate Design Guidelines and Open Space Management Plan shall be revised to address the review comments provided in the Oak Hills Estate Project – Peer Review of Open Space Management Plan (RECON 2016a~~April 15, 2016~~, Appendix D-2) and Oak Hills Estate Project – Peer Review of Design Guidelines (RECON 2016b~~, June 1, 2016~~, Appendix C-2). These revisions address tree protection during grading; the preparation of separate on-site and off-site restoration and management plans for habitat restoration; ~~habitat restoration financing;~~ landscape design; a native habitat planting list; invasive species control; the location and design of proposed fuel management zones; homeowner education; and overall site design. The Guidelines and Plan shall also incorporate review comments that may be provided by the NBAR. The purpose of the required revisions is to ensure that the design, scale, character, heights, colors, and materials used in residential lots and drainage swales, trails, project entries, and landscaping of common open space areas are compatible with existing surrounding development. **Plan Requirements and Timing:** The amended Oak Hills Estate Design Guidelines and Open Space Management Plan shall be reviewed and approved by the County prior to final map recordation ~~of the tract map~~ and will be included in the Covenants, Conditions, and Restrictions. **Monitoring**: The Owner/Applicant shall demonstrate to Planning & Development compliance monitoring staff that the project has been built consistent with the County-approved amended Oak Hills Estate Design Guidelines and Open Space Management Plan. ***MM AES-2: NBAR Design Review*** The Owner/Applicant shall demonstrate that future development on the project site is consistent with the Amended Oak Hills Estate Design Guidelines and obtain NBAR approval of the development on the project site. All project elements (e.g., future residence design, scale, character, colors, materials and landscaping of common open areas, ~~the proposed trail~~ and storm water detention basins) shall be compatible with vicinity development. **Timing:** The Owner/Applicant shall submit architectural drawings of the project for review and shall obtain final NBAR approval prior to zone clearance for each proposed residence ~~approval of rezone and Vesting Tentative Tract Map. issuance of a land use permit~~. Grading plans shall be submitted to P&D concurrent with or prior to NBAR plan filing. **Monitoring:** The Owner/Applicant shall demonstrate to P&D compliance monitoring staff that the project has been built consistent with approved NBAR design and landscape plans prior to Final Building Inspection Clearance.	Class III (LTS): surface waters Class I (SU): Grading, Vegetation Removal, and Construction Class II (SM): ~~Trail and~~ Detention Basins; Oak Hills Estates Design Guidelines, Project Site Lighting

Table S-1
Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
	Mitigation Measure (MM) AES-1 requires revisions to the project's proposed Oak Hills Estate Design Guidelines and Open Space Management Plan, as identified in the Oak Hills Estate Project – Peer Review of Open Space Management Plan (Appendix D-2) and Oak Hills Estate Project – Peer Review of Design Guidelines (Appendix C-2) that include requirements that address impacts of proposed construction activities on native vegetation to the extent feasible. The proposed revisions identify measures that specifically address requirements for tree protection during grading; the preparation of separate on-site and off-site restoration and management plans for habitat restoration and financing; landscape design; providing a native habitat-friendly plant palette; invasive species control; the location and design of proposed fuel management zones; and overall site design. The revised Open Space Management Plan and the Oak Hills Estate Design Guidelines, as approved by the County, would require the implementation of specified requirements prior to the commencement of grading, vegetation removal, fuel management, and landscaping activities. The revised Plan and Guidelines would reduce the impacts of proposed construction activities on native vegetation to the extent feasible. However, even with mitigation implemented, the project would result in grading, vegetation removal, fuel management activities (e.g., vegetation trimming and thinning), and construction of residences and paved streets. As such, the project would permanently change the project site's visual character from native vegetation and open space to residential urban development. Therefore, grading, construction, and vegetation removal by the proposed project would result in a permanent change to the project site's visual character and a significant and unavoidable impact with mitigation implemented (Class I). Implementation of off-site habitat restoration activities would have a beneficial effect to the visual character of the currently disturbed off-site mitigation parcel. **~~Trail and~~ Detention Basins** ~~The proposed trail would meander through the project's open space area and follow the contours of the existing terrain. The Oak Hills Estate Design Guidelines currently do not include the proposed trail design. Without design specifications for the trail (e.g., wayfinding sign designs, materials, trash receptacles, planting, and plans for maintenance of the trail) and the detention basins (e.g., road entries next to the basins, basin designs, landscaping and planting plans), the appearance of the trail may be inconsistent with the overall project and neighborhood, and may have the potential to result in significant visual character impacts.~~ Proposed storm water detention basins that would be located near Oak Hills Drive would also have the potential to result in significant visual character impacts. Mitigation measure MM AES-2 would ensure that specific ~~trail design,~~signs, and fencing; and detention basin designs, elevations, and landscaping plans undergo County review and obtain NBAR approval. Implementation of MM AES-2 would ensure installation of the ~~proposed trail and~~ detention basins would not result in a significant permanent change to the project site's visual character (Class II).		

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	Oak Hills Estate Design Guidelines The design of individual homes on the project site would be one-story, which would minimize the potential for incompatibility with existing residences near the project site. However, individual homes could have a significant impact on the visual character of the existing neighborhood if they were inconsistent with the proposed design guidelines, inconsistent with the existing semi-rural character of the surrounding neighborhood, the Reserve, or Vandenberg Country Club. For example, if the homes were of inconsistent design, of out of scale, character, or their designs or colors were not visually compatible with surrounding homes, they could have a significant impact on the visual character of the neighborhood. Potential home design incompatibility impacts would be reduced to a less than significant level with the implementation of mitigation measure AES-2, which requires that future home developers obtain NBAR approval of the home design (Class II). **Project Site Lighting** Implementation of the lighting requirements in the Oak Hills Estate Design Guidelines would ensure that adverse lighting impacts to the visual character of the site and surroundings would not occur. Window glass on individual homes would also result in additional source of glare compared to existing conditions; however, it would not result in substantially more sources of glare (e.g., windows) than exists in the surrounding neighborhoods, and the increase in glare would not be substantial. The small additional source of lighting and glare that would result from future residences on the project site would be consistent with the existing surrounding residential development. Therefore, less than significant impacts would be associated with lighting and glare (Class III).		
Impact AES-2: Important Scenic Areas	There are no designated scenic ridgelines in the vicinity of the project site. One designated state scenic highway—Highway 1—is located approximately 2 miles south of the project site. However, Highway 1 does not provide views of the project site and intervening topography, development, and vegetation and scenic resources associated with Highway 1 would not be affected by development of the project. Oak Hill Drive is not a designated scenic roadway in the Santa Barbara County Comprehensive Plan. The project would locate residential development adjacent to areas with scenic value (e.g., the Burton Mesa Ecological Reserve), which could be inconsistent with the Environmental Resources Management Element (ERME) of the County Comprehensive Plan. The proposed Open Space Management Plan (Appendix B) HOA Managed L However, the project includes a buffer between the residential building envelopes and the Reserve as well as a designated open space, which would retain approximately 43~~53~~ percent of the site's existing natural lands~~open space~~. The proposed Open Space Management Plan (Appendix B) Tree Removal and Protection Plan and HOA Managed Landscape/Habitat Plan (see Figures 2-7~~2-8~~ and 2-8~~2-10~~) address the project's visual quality and impact on surrounding scenic value through appropriate landscaping and protection of natural vegetation where feasible. However, even with the preservation of open space, the project would	MM AES-1 and MM AES-2 would apply to Impact AES-2 to reduce impacts on important scenic areas.	Class II (SM)

Table S-1
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Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
	result in urban development on a vacant site. While this would result in potentially significant visual impacts, revisions to the design guidelines required by mitigation measure AES-1 would ensure that grading- and construction-related visual character impacts associated with the development are reduced to less than significant. Implementation of MM AES-2 requires NBAR review is completed prior to the development, which would ensure that future development on the project site is visually compatible with surrounding development and open space. Therefore, the project would have a significant but mitigated impact on important scenic areas (Class II).		
Impact AES-3: Scenic Quality to the Burton Mesa Ecological Reserve and Other Off-site Locations	The project site is currently undeveloped and shares the scenic qualities of the adjacent natural open space of the Burton Mesa Ecological Reserve, which borders the site to the north and west. Important vistas from the Reserve, particularly of maritime chaparral and oak woodland communities, are experienced from publicly accessible trails in the Reserve. Development of the project infrastructure, roads, and homes would result in the removal of or impacts to between 74 and 127~~131~~ native coast live oaks trees (*Quercus agrifolia*) of varying maturity, and 9.10~~11.11~~ acres of native habitat. This would result in a reduction of between 21 percent and 35~~37~~ percent of the existing tree cover at the project site. As such, the project would cause a significant change to the existing on-site visual resources and alter the overall visual character of the site when viewed from the Reserve. On and ~~O~~off-site mitigation required by MM BIO-~~1.5~~2.1 and MM BIO-2.2 (see Section ~~1~~4.3, Biological Resources) would include the restoration of habitat and planting of replacement trees at a 10:1 ratio~~ at an off-site area~~. This EIR also includes proposed mitigation measures (MM BIO-3.1, MM BIO-3.2, and MM BIO-3.3) that call for the preparation of a tree protection plan for the remaining on-site trees and for off-site planting of trees at a ratio of 10:1 for each tree that is removed or impacted. However, the off-site mitigation area is located approximately one mile from the project site and would not compensate for the visual impacts to public views from the Reserve as scenic quality is a site-specific resource. On-site mitigation would partially compensate for the loss of trees by ensuring that the potential for additional tree loss is minimized during construction and occupancy of the homes. On-site planting of oak trees could partially offset visual impacts from tree canopy reduction in the long term, but this effect would not occur for decades and the change to the visual character would persist. Construction of the proposed project would result in grading and clearing of 57~~58~~ percent of the site ~~and~~ with the construction of 29 homes, two roads, drainage swales, infrastructure, and ~~fire clearing~~extensive vegetation management in the fuel management area that extends outward 30 feet from proposed residences ~~for~~(FMZ-1).~~an on-site trail the creation of fire management zones within a large portion of the remaining open space area.~~ These changes would affect the visual quality of the existing semi-disturbed, yet undeveloped, project site. The project site is adjacent to public access areas on the Reserve and thus is visible from public viewpoints at the Reserve. Views of the project site from the Reserve would be permanently altered, and following project construction, would include views of low-	Mitigation measures MM BIO-~~1.5~~2.1, 2.2, MM BIO-3.1, MM BIO-3.2, and MM BIO-3.3 in Section 4.3, Biological Resources, identify available and feasibly implementable actions to mitigate and compensate for the visual character impact of construction of the proposed project and conversion of existing open space to urban residential uses. However, no feasible mitigation would fully address these impacts to the existing visual character and public views of the site from the Reserve; therefore, impacts are significant and unavoidable.	Class I (SU)

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	density, landscaped, urban residential development. However, the project would be in character with surrounding residential development that may be visible from the same view points on the Reserve that offer views of the project site. Additionally, approximately 7.257~~.15~~7.31~~~~ acres of the project site would remain in a~~as~~ natural open space, covering 43 percent of the site. Approximately 0.72 acre would be in managed open space, covering 4.3 percent of the site. The open space would help to retain some of the existing natural views that are currently available from the Reserve, though views would also include the adjacent residential development proposed by the project. Mitigation measures MM BIO-~~1.5~~2.1, 2.2, MM BIO-3.1, MM BIO-3.2, and MM BIO-3.3 require protection of native plants and trees, establishment of landscaping on-site that would be visually compatible with existing native vegetation during construction, and compensating for the loss of native habitat through on- ~~site through provision~~and of off-site mitigation. Nonetheless, visual impacts to the Reserve would occur due to project development as the project site is currently open and, though semi-disturbed, characterized by natural vegetation. The project would convert the majority of the site from semi-disturbed open space and native habitat to rural residential and developed urban fringe. No feasible mitigation would fully address these impacts to the existing visual character and public views of the site from the Reserve; therefore, impacts are significant and unavoidable (Class I impact).		
Cumulative Aesthetic Impacts	The proposed project would result in impacts to/the removal of between 74 and 127~~131~~ coast live oak trees on the project site (between 21 percent and 35~~37~~ percent of the existing 360 on-site oaks) and the removal of 9.10~~11.11~~ acres of native habitat (including 6.92~~7.38~~ acres of maritime chaparral and 2.18~~3.73~~ acres of coyote brush scrub). The removal of oaks and maritime chaparral in an urban fringe area would partially be mitigated by the project applicant's proposal to restore off-site coast live oaks at a 10:1 ratio and to restore maritime chaparral on a portion of APN 097-371-067, and mitigation measure MM BIO-2.3~~2.5~~ would require a landscape plan for the project site that would partially replace removed vegetation. Mitigation measures MM BIO-3.1, MM BIO-3.2, and MM BIO-3.3 require native tree protection, and the implementation of a tree protection plan and a tree replacement plan, which ~~call for the preparation of an off-site native habitat restoration plan including the planting of additional oak trees at the off-site mitigation property, and an on-site tree protection plan~~ would further mitigate project impacts to visually important resources. Additionally, MM AES-1 requires revisions to the Oak Hills Estates Design Guidelines and Open Space Management Plan to reduce impacts to visual resources.	Changes to the existing visual conditions at the site, including the loss of native vegetation, ongoing fuel management of native vegetation for wildfire risk reduction, and future construction of residences and roads and drainage infrastructure, would result in the project contributing to a cumulatively considerable impact to the area's visual character by conversion of habitat to urban residential use. Impacts would be significant and unavoidable.	Class I (SU)

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Air Quality			
Impact AQ-1: Plan Consistency	The project proposes a residential unit development density of 1.7 dwelling units per acre, which is less than the General Plan land use designation of 12.3 dwelling units per acre. Therefore, the project would be consistent with the growth projections of the Clean Air Plan and would not interfere with implementation of the Clean Air Plan. Impacts would be less than significant (Class III impact).	Impacts would be less than significant. No mitigation is required.	Class III (LTS)
Impact AQ-2: Criteria Pollutant Emissions	***Construction*** According to the County Environmental Thresholds and Guidelines Manual, the short-term construction-related air quality impacts of a project are considered less than significant; however, they should be disclosed in all environmental documents for projects involving ground disturbance. ***Operations*** Operation-related air emissions were calculated as described in Section 4.2.2.2. Table 4.2-5 displays the maximum daily emission levels for each criteria pollutant. The CalEEMod output files for construction emissions are contained in Appendix E-1. As shown in Table 4.2-5, operations emissions do not exceed significance thresholds. Impacts would be less than significant (Class III impact). ***Operation and Off-Site Restoration*** The project would have a significant air quality impact related to operation if total project emissions of NO_X and ROG exceeded 55 pounds per day or if emissions of PM_{10} exceeded 80 pounds per day. Additionally, the County also considers emission of NO_X or ROG equaling or exceeding 25 pounds from motor vehicles associated with a project to represent an adverse impact on air quality. Air emissions associated with project operations and off-site restoration were calculated as described in Section 4.2.2.2. Table 4.2-5 and Table 4.2-6 display the maximum daily emission levels for each criteria pollutant during operation and off-site restoration activities. The CalEEMod output files for restoration emissions are contained in Appendix E-1. As shown in Tables 4.2-5 and 4.2-6, operations and restoration emissions would not exceed significance thresholds. The total anticipated daily operational and restoration activity emissions are well below the County thresholds for area and mobile emissions. Impacts would be less than significant (Class III impact).	Impacts would be less than significant. No mitigation is required.	Class III (LTS)

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Impact AQ-3: Cumulative Criteria Pollutant Emissions	Because the project would not conflict with the 2013 Clean Air Plan, it would not contribute to a cumulatively considerable net increase in criteria pollutant emissions. Impacts would be less than significant (Class III impact).	Impacts would be less than significant. No mitigation is required.	Class III (LTS)
Impact AQ-4: Sensitive Receptors	Residential land uses in the vicinity of the project are considered to be sensitive receptors. The project does not propose any substantial on-site source of pollutants that would affect these sensitive receptors. Project construction would include the use of construction equipment that would emit diesel particulate matter (diesel PM). The project would be required to implement the standard measures recommended by the SBCAPCD to reduce diesel PM emissions and potential exposure of sensitive receptors. Impacts would be less than significant. Projects that do not include substantial on-site sources of pollutants may still result in off-site impacts associated with project-generated traffic; specifically, projects may contribute to localized exceedances of ambient air quality standards for CO, commonly referred to as CO "hot spots". Based on the project Traffic and Circulation Study, the project would generate up to 29 peak hour trips, which is far less than the County threshold for significance. Thus, the project would not substantially contribute to a CO hot spot. The project would not generate substantial pollutant concentrations onsite or contribute to the generation of substantial pollutant concentrations off-site. Thus, the project would not expose sensitive receptors to substantial pollutant concentrations. Impacts would be less than significant (Class III impact).	Impacts would be less than significant. No mitigation is required.	Class III (LTS)
Impact AQ-5: Odors	During construction, diesel exhaust from construction equipment may be a perceptible odor. As required by Santa Barbara County Municipal Code Section 9.16.015, construction equipment would only be operated between 7:00 a.m. and 8:00 p.m. Due to the limited duration of construction operations requiring the use of heavy construction equipment and separation distance between construction activities and nearby sensitive receptors, proposed construction operations are not anticipated to result in objectionable odors that would affect a substantial number of people. The project proposes residential land use. Residential land uses do not typically generate substantial odors. Therefore, the project is not anticipated to result in objectionable odors that affect a substantial number of people. The project is not anticipated to generate objectionable odors affecting a substantial number of people during construction or operation. Impacts would be less than significant (Class III impact).	Impacts would be less than significant. No mitigation is required.	Class III (LTS)

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Biological Resources			
Impact BIO-1: Sensitive Plant and Wildlife Species	***Special Status Plants*** The proposed project development and fuel management zones have the potential to result in significant permanent direct impacts to nine special status plant species. Implementation of mitigation measures (MM) BIO-1.1 through MM BIO-1.5 include requirements for special-status plant surveys, flagging, habitat restoration, and worker awareness program to mitigate potential impacts. MM BIO-2.1 and MM BIO-2.2 would mitigate permanent impacts to special status plants and maritime chaparral habitat by requiring the appropriate mitigation and restoration replacement ratios at an off-site location per County standards. Landscaping and construction equipment could contribute to the spread of invasive plant species, however, MM BIO-2.4 would address impacts resulting from invasive weeds on-site and at the off-site mitigation parcel. Therefore, impacts to special status plant species would be less than significant with mitigation incorporated (Class II impact). To address USFWS's comments on the potential take for the Vandenberg monkeyflower ~~take~~, focused plant surveys were conducted in the spring of 2014 and 2017. As noted in Rincon's Biological Resource Assessment (2017a), focused surveys determined that this species was not observed on the project site when this species was confirmed in flower at reference sites in the region. Despite the potentially suitable habitat on-site, focused plant surveys during a particularly wet year in 2017 confirmed that the project has a low potential for impact. However, to address the USFW's comments regarding potential take of Vandenberg monkeyflower, the impact assessment has been revised to disclose potential impacts to this federally endangered species. The applicant must obtain USFWS approval of an Incidental Take permit and~~, including a~~ Habitat Conservation Plan pursuant to Section 10(a)(1)(B) of the FESA. ~~Through USFWS consultation, the Habitat Conservation Plan and any conditions on the Incidental Take Permit are anticipated to mitigate impacts to the highest extent feasible.~~ To ensure the appropriate regulatory processes are followed, MM BIO-1.15 requires that the applicant obtain these necessary permits/approvals from USFWS prior to the County's issuance of any grading permit. With the implementation of MM BIO-1.15, Impact BIO-1 would be mitigated to less than significant levels for the Vandenberg monkeyflower (Class II impact). ***Special Status Wildlife Species*** Fifteen special status wildlife species have the potential to occur within the project site. These include American badger (*Taxidea taxus*), silvery legless lizard (*Anniella pulchra pulchra*), Blainville's horned lizard (*Phrynosoma blainvillii*), western red bat (*Lasiurus blossevillii*), western spadefoot toad (*Spea hammondii*), coast patch-nosed snake (*Salvadora hexalepis virgultea*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), vernal pool fairy shrimp (*Branchinecta lynchi*), El Segundo blue butterfly (*Euphilotes battoides allyni*), red-legged frog (*Rana aurora draytonii*), white-tailed kite (*Elanus leucurus*), Cooper's hawk (*Accipiter cooperii*), burrowing	***MM BIO-1.1: Special Status Plant Species Avoidance and Minimization*** All special status plant species and areas to be avoided during proposed project construction, selective pruning/thinning, and restoration activities at the project site, and off-site mitigation property shall be demarcated in the field with highly visible flagging or survey tape wherever possible to protect rare plants from harm ~~during construction~~. a. Sensitive plant occurrences that are not within the immediate disturbance footprint but that are located within 50 feet of the disturbance limits shall have a highly visible flagging or survey tape installed at least 15 feet beyond their extent to protect them from harm during the construction phase of the project. **Plan Requirements and Timing:** A County qualified botanist or designee approved by the County Planning & Development Department shall provide oversight during flagging and/or placement of survey tape and he/she or a designee (e.g., construction foreman) will return to the site once a week during each phase of construction activities to ensure that flagging/survey tape remains intact. This process shall also occur during the preliminary design and development of each individual housing lot. **Monitoring:** The Project Proponent/Contractor/Owner/Applicant shall demonstrate to County Planning & Development Department compliance monitoring staff that all protection measures and flagging are in place prior to issuance of grading and building permits and throughout grading and construction for each project phase and lot development. Santa Barbara County Planning and Development (P&D) staff shall perform site inspections throughout the grading and construction phase. ***MM BIO-1.2: Special Status Plant Species Protection and Restoration*** Mitigation for loss of special status plants shall be implemented as part of the On-site and Off-site Mitigation Plan (see MM BIO-2.1 and MM BIO-2.2) to create maritime chaparral habitat. Compensatory mitigation ratios shall provide for no-net-loss of each special status plant species impacts, with a minimum 2:1 ratios for individual species lost (area restored/created/enhanced area lost) for CRPR List 1B species and 1:1 ratio for CRPR List 4 species. If any additional special status plant species are identified on the project site, the replacement requirements shall be reflected appropriately through increases in the Off-site Mitigation Plan. The habitat compensation ratios required in both the On-site Habitat and Open Space Protection Plan (see MM BIO-2.1). and the Off-site Mitigation Plan (see MM BIO-2.2), are as follows: a. To compensate for the removal of approximately 19~~16~~ La Purisima manzanita plants, restoration at a 2:1 ratio shall be undertaken. b. To compensate for the removal of 27~~11~~ sand mesa manzanita plants, restoration at a 2:1 ratio shall be undertaken. c. To compensate for the removal of 6.92~~6.22~~ acres of mesa horkelia, restoration	Class II (SM)

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	owl (*Athene cunicularia hypugaea*), loggerhead shrike (*Lanius ludovicianus*), and American peregrine falcon (*Falco peregrinus anatum*). ~~Impacts to eight special status species (e.g., western spadefoot toad, western red bat, American badger, silvery legless lizard, Blainville's horned lizard, coast patch-nosed snake, vernal pool fairy shrimp, and the American peregrine falcon) with potential to occur in the project site could also result from project construction.~~ However, mitigation measures requiring presence surveys and/or pre-construction wildlife surveys specific to each special-status species would avoid or reduce potential direct impacts to these species to less than significant levels (MM BIO-1.6 through MM BIO-1.14). To address USFWS comments regarding potential take of vernal pool fairy shrimp it was determined through USFWS consultation that protective fencing and signs would be placed between the spikerush emergent wetland and the proposed development (specifically located at a lower elevation on the development side of the topographical divide that separates the wetland from the adjoining areas of the project site) and that minimal vegetation management for wildfire hazard risk reduction would occur in the vicinity of the wetland. The Santa Barbara County Fire Department has concurred that conducting minimal vegetation management around the wetland would be acceptable (pers. com. Captain Fidler). **MM BIO-1.12** would ensure that prior to issuance of any grading permit the project applicant shall obtain concurrence by the USFWS that the project would avoid impacts to fairy shrimp or obtain an Incidental Take Permit and Habitat Conservation Plan. **MM BIO-2.1** and **MM FP 2.1** require that approved fencing and signs be installed prior to the County's issuance of any grading permit and the implementation of an approved Fuel Management Plan. With the avoidance measures implemented through MM BIO-2.1 and MM FP-2.1 impacts to the potentially occurring vernal pool fairy shrimp would be avoided and less than significant. To address USFWS comments regarding potential take of ~~vernal pool fairy shrimp,~~ the California red-legged frog, and El Segundo blue butterfly the applicant must obtain USFWS approval of an Incidental Take permit and~~, including a~~ Habitat Conservation Plan pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act. ~~Through USFWS consultation, the Habitat Conservation Plan and any conditions on the Incidental Take Permit are anticipated to mitigate impacts.~~ To ensure the appropriate regulatory processes are followed, ~~MM BIO-1.12,~~ MM BIO-1.13 and MM BIO-1.14 require that the applicant obtain these necessary permits/approvals from USFWS prior to the County's issuance of any grading permit. ~~Additionally, implementation of water quality measures (e.g., MM GEO-2, MM WQ-1, and MM WQ-3) and MM BIO-1.12, which reduces potential impacts on vernal pool wetlands habitats, would reduce potential significant impacts to fairy shrimp if present.~~ According to the Biological Resources Assessment located in Appendix D-1 of the ~~Revised Draft~~ EIR, the white-tailed kite, Cooper's hawk, burrowing owl, and loggerhead shrike were not observed during project surveys nor were they identified within the CNDDB 9-quadrangle search vicinity. The habitat on-site may be	at a 2:1 ratio shall be undertaken. d. To compensate for the removal of 50 curly-leaved dune mint, restoration at a 2:1 ratio shall be undertaken. e. To compensate for the removal of 74 Lompoc ceanothus, restoration at a 1:1 ratio shall be undertaken. ~~To compensate for the removal of 3 paniculate tarplant, restoration at a 1:1 ratio shall be undertaken.~~ f. To compensate for the removal of any identified paniculate tarplant, restoration at a 1:1 ratio shall be undertaken. g. To compensate for the removal of 35 Lompoc wallflowers, restoration at a 1:1 ratio shall be undertaken. h. To compensate for the removal of 25 California spineflower, restoration at a 1:1 ratio shall be undertaken. i. To compensate for the removal of 10 Blochman's ragwort, restoration at a 1:1 ratio shall be undertaken. These compensating ratios shall apply to any incidental special status species losses that occur during construction of the project (see MM BIO-2.1) **Plan Requirements and Timing:** The management and replacement requirements of special status plant species that are being preserved within the project site shall be addressed in the On-site Habitat and Open Space Protection Plan (which may also be the Owner/Applicant's Open Space Management Plan revised for consistency with this mitigation measure and **MM BIO-2.1** and **MM BIO-2.2**). The specified replacement ratios and numbers must be submitted to the County for approval prior to first zoning ~~land use~~ clearance issuance for the first residential structure~~ of the development plan~~ and shall also include all criteria specified in **MM BIO-2.1**. Existing occurrences of special status plants shall be protected and enhanced to the maximum extent feasible prior to relying on the required off-site mitigation. The identified mitigation measures, replacement ratios, and restoration plan shall be noted on all site, grading, and construction plans. **Monitoring:** The restoration components of both the On-site Habitat and Open Space Protection (**MM BIO-2.1**) (or the revised Owner/Applicant's Open Space Management Plan) and the Off-site Restoration Plan (**MM BIO-2.2**) shall include species-specific monitoring requirements and regular restoration status reports to Planning & Development to be prepared in accordance with the details outlined in each plan. The County Planning & Development staff shall ensure that the total restoration requirements of the project in this mitigation measure are addressed prior to issuance of grading permits. Monitoring shall continue for 5 years at a minimum and continue until the restoration requirements are achieved. County Planning & Development compliance staff shall ensure compliance on-site during and post-construction and during project operations.	

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Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
	appropriate foraging and nesting habitat for these species. Therefore, there is a low to moderate potential for these species to occur on-site. In order to address CDFW's comment regarding these species, MM BIO-5.1 (Preconstruction Surveys for Nesting Birds) has been revised to include a focused survey for raptor species, including any avoidance measures if these species are observed. No mitigation is proposed for American peregrine falcons because the species is extremely mobile and anticipated to avoid construction. Further, MM BIO-1.5 requiring a worker environmental awareness program would ensure construction personnel are instructed on appropriate avoidance measures. Impacts to special status wildlife species would be less than significant with mitigation incorporated (Class II impact).	***MM BIO-1.3: ~~Pre-Construction and Off-site Restoration Area(s)~~ Special Status Plant Species Surveys*** Reconnaissance level botanical ~~and wildlife pre-construction~~ surveys shall be conducted within 4 weeks prior to initial site work such as clearing, grubbing, staging, or grading to ensure that all sensitive resources within the disturbance areas are identified and appropriately protected and flagged/fenced where applicable on the (1) project site and (2) at all off-site restoration areas. The ~~2014~~ 2017 botanical survey is valid for 2 years or as deemed appropriate by the County. If project activities that require ground disturbance have not been commenced by March 1, ~~2018~~2019, additional floristic surveys would be required as follows: a. If groundbreaking activities commence after March 1, 2019~~2018~~, prior to any vegetation removal, grubbing, or other construction activities, a qualified botanist shall conduct a seasonally timed and comprehensive special status plant survey. b. The intent of these surveys is to document the location(s) and number(s) of any special status plant species that occur within the project site so that an effective mitigation program can be accomplished if required. The special status plant survey shall coincide with the appropriate blooming periods for each species with potential to occur on-site. The special status plant survey shall be conducted in accordance with the current regional, state, and federal protocols. c. Current listing status of Vandenberg monkeyflower, a species currently proposed for listing as federally endangered with some potential to occur within the project site shall be reviewed prior to conducting a preconstruction rare plant survey. d. Review of current listing status shall include review of any critical habitat designation decisions. In the event that the species is listed and critical habitat is present on the project site, measures shall be prescribed to minimize impacts to critical habitat for Vandenberg monkeyflower. Vandenberg monkeyflower requires sandy openings (canopy gaps) within Burton Mesa chaparral. e. Any and all additional special status plant species not previously reported from the ~~2014~~ 2017 botanical survey and new patches of species already documented to occur within the project site shall be mapped onto an aerial photograph of the site at a scale no less than 1 inch = 200 feet during the preconstruction survey. f. A special status plant survey technical report shall be submitted to the County (and to any other pertinent resource agencies if required) that documents the survey results prior to the onset of construction activities. If needed, the Open Space management Plan (OSMP) shall be updated to include mitigation for any additional species located during preconstruction surveys. Any and all mapped locations of sensitive plant species shall be included in the grading plans for the project.	

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Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
		Plan Requirements and Timing: The Owner/Applicant shall hire a County-qualified biologist to conduct the botanical~~preconstruction~~ surveys. A copy of the survey report and any recommended measures to protect sensitive species shall be identified prior to grading and/or building permit issuance. Any protection measures shall be maintained in good condition throughout grading and construction. This measure will be printed on all restoration/habitat protection/ grading and construction plans. **Monitoring:** If no additional special status plants are observed within the project site or off-site restoration areas, the results shall be documented in a technical report and submitted to the County. Compliance monitoring staff shall confirm that the surveys have taken place and any protection measures are installed prior to the project site's pre-construction meeting. Compliance and monitoring staff shall ensure thorough periodic site inspections that any protection measures are maintained in good condition throughout grading and construction. ***MM BIO-1.4: Pre-Fuel Management ~~and Trail~~ Special Status Plant Clearance Surveys*** Two weeks prior to any ~~trail construction or~~ fuel management activities located in FMZ-2 ~~occurring outside the development footprint~~ and between the months of March and May (i.e., in spring), a qualified botanist approved by the County shall conduct a comprehensive special status plant clearance survey within the proposed ~~trail alignment and fuel management areas~~FMZ-2. a. The development footprintFMZ-2 includes the area ~~on~~within the project site that ~~has been impacted by any development activity (i.e., hardscape, access roads, parking lots, non-building facilities, and building structures).~~would be selectively pruned and thinned. b. The intent of this survey is to document the location(s) and number(s) of any and all annual special status plant species so that ~~the trail alignment and~~ fuel management activities can successfully avoid special status plants. c. If special status plants are discovered, fuel management activities shall avoid special status plants and sensitive **vegetation in accordance with recommendations set forth in** MM BIO-1.1. d. Should avoidance prove infeasible, relocation and/or off-site restoration to an appropriate receiver site approved by the County shall be undertaken at the appropriate ratios and following the protocols in **MM BIO-2.2**. **Plan Requirements and Timing:** The Owner/Applicant shall hire a County-qualified biologist to conduct the ~~preconstruction~~ fuel management surveys. A copy of the survey report and any recommended measures to take to protect sensitive species shall be identified prior to ~~grading and/or building permit issuance~~the start of fuel management activities. Any protection measures shall be maintained in good condition throughout ~~grading and construction~~selective pruning/thinning activities. A special status plant clearance survey shall be conducted on an annual basis. After buildout of the project, annual surveys would continue until three consecutive years have elapsed	

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Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
		with no sensitive plants detected during the annual surveys. This measure will be printed on all restoration/habitat protection/ grading and construction plans. **Monitoring:** If no additional special status plants are observed within the project site, the results shall be documented in a technical report and submitted to the County. Compliance monitoring staff shall confirm that the surveys have taken place and any protection measures are installed prior to the pre-construction meeting. Compliance and monitoring staff shall ensure thorough periodic site inspections that any protection measures are maintained in good condition throughout grading and construction. Fuel management clearance surveys shall be conducted annually post project construction. ***MM BIO-1.5: Worker Environmental Awareness Program*** Prior to initiation of construction activities (including staging and mobilization), all personnel associated with project construction shall attend a WEAP training, conducted by a qualified biologist, to aid workers in recognizing special status biological resources that may occur within the project site. The specifics of this program shall include identification of the sensitive species and habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and measures required to avoid and minimize impacts to biological resources within the work area. A fact sheet conveying this information shall also be prepared for distribution to all contractors, their employers, and other personnel involved with construction of the project. All employees shall sign a form provided by the trainer documenting that they have attended the WEAP and understand the information presented to them. **Plan Requirements and Timing:** The Owner/Applicant shall hire a County-qualified biologist or designee to conduct the WEAP. The project fact sheet, employee signature report, and WEAP program shall be developed, approved, and implemented by the County Planning & Development staff prior to issuance of a grading permit, final restoration plan approval, or zoning clearance for each project phase and development of each individual housing lot. This measure will be printed on all restoration/habitat protection/grading and construction plans. **Monitoring:** County Planning & Development compliance monitoring staff shall confirm that the WEAP have taken place and any additional trainings have been completed as part of the pre-construction meeting(s). County compliance and monitoring staff including the WEAP designee shall ensure thorough periodic site inspections that any protection measures are maintained in good condition throughout grading and construction. WEAP staff shall be available as needed on-site during and post construction for monitoring and compliance. ***MM BIO-1.6: American Badger Avoidance*** A survey for badger burrows shall be conducted within the project and off-site restoration site disturbance footprint by a County-approved biologist. If the project is phased, a survey shall be required prior to each phase of construction and/or individual lot development. Dens found within the survey area shall be mapped and monitored using a tracking medium, remote camera system, and/or spotlighting at	

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Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
		night for a minimum of 3 days to assess the presence of badgers. Inactive dens shall be collapsed by hand with a shovel to prevent badgers from re-using them during construction. **Plan Requirements and Timing:** A County qualified biologist selected by the County Planning & Development Department with experience with badger surveys shall conduct or shall provide oversight during surveys and relocation and he/she or a designee (e.g., construction foreman) will return to ensure den abandonment. This process shall occur prior to issuance of a grading permit, final restoration plan approval, or zoning clearance for each project phase and development of each individual housing lot. Surveys will be conducted a minimum of two weeks before ground-disturbing activities. Active dens located within the survey area shall be avoided during the breeding season (March 1 through June 30). A minimum buffer of 50 feet around the active den within the project site shall be demarcated by construction fencing. The fencing shall be installed 1 foot above ground to permit movement of badgers in and out of the buffer zone. Once the biologist has determined that active dens are no longer in use, the den shall be collapsed by shovel. Prior to grading activities occurring outside the breeding seasons, badgers may be discouraged from using currently active dens by partially blocking the entrance of the den with sticks, debris, and soil for 3 to 5 days. Access to the den would be incrementally blocked to a greater degree over this period. This would cause the badger to abandon the den site and move elsewhere. After badgers have stopped using active dens within the project site, the dens would be collapsed by hand with a shovel. This measure will be printed on all restoration/habitat protection/ grading and construction plans. **Monitoring:** The biologist shall demonstrate to County Planning & Development Department compliance monitoring staff that all badger dens have been collapsed and that the protection measures have been completed prior to and throughout grading and construction for each project phase and lot development. ***MM BIO-1.7: Silvery Legless Lizard Avoidance*** The following measure is designed to reduce the potential for impact, with the final goal of no net loss of the species. a. ~~A minimum of two weeks p~~Prior to initiation of ground disturbing activities and vegetation removal, a County-approved biologist shall coordinate with CDFW a species relocation plan. ~~conduct capture and relocation efforts for silvery legless lizards within the disturbance area~~. b. Any subsequent project phases (i.e., individual lot grading) shall require a clearance survey prior to ground-disturbance activities. c. Designated open space areas on-site or at County-approved off-site locations shall be identified for release of captured individuals. d. Survey for legless lizards shall include raking of leaf litter and sand under shrubs and trees in suitable habitat within the disturbance footprint to a minimum depth of 8 inches.	

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Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
		e. Captured animals shall be placed into containers with sand or moist paper towels and released in the designated areas within 3 hours. f. In addition to preconstruction surveys, the biologist shall be on-site during initial grading activities to relocate any legless lizards that are unearthed during excavation in any phase of the project. i. If in good health, they shall be immediately relocated to the designated relocation area. ii. If injured, the animals shall be turned over to a CDFW approved specialist until they are in a condition suitable for release into the designated release area or deposited at an approved vertebrate museum. **Plan Requirements and Timing:** A County qualified biologist selected by the County Planning & Development Department with experience with silvery legless lizard surveys shall conduct or shall provide oversight during surveys and relocation. This process shall occur prior to issuance of a grading permit, final restoration plan approval, or zoning clearance for each project phase and development of each individual housing lot. This measure will be printed on all restoration/habitat protection/ grading and construction plans. **Monitoring:** The biologist shall demonstrate to the County Planning & Development Department compliance monitoring staff that all protection/relocation measures are in place prior to and throughout grading and construction for each project phase and lot development. ***MM BIO-1.8: Blainville's Horned Lizard Avoidance*** The following measure is designed to reduce the potential for impact, with the final goal of no net loss of the species. a. Prior to initiation of ground disturbing activities and vegetation removal, a County-approved biologist shall coordinate with CDFW a species relocation plan. b. Coverboard surveys shall be completed within 3 months of the start of construction. The coverboards shall be at least 4 feet by 4 feet and constructed of untreated plywood placed flat on the ground. The coverboards shall be checked by a qualified biologist once per week for each week after placement up until the start of vegetation removal. c. Horned lizards winter underground starting in October; therefore surveys should not need to be conducted during the winter months. d. In addition, a minimum of 2 weeks prior to initiation of ground-disturbing activities and vegetation removal, a County-approved biologist shall conduct preconstruction clearance survey. e. A clearance survey shall be required prior to each phase of construction and/or individual lot development. Any individuals captured by these efforts shall be relocated to designated open space areas on-site or at County-approved off-site locations.	

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Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
		f. Captured animals shall be placed into containers with sand or moist paper towels and released in the designated areas within 3 hours. g. In addition to preconstruction surveys, the biologist shall be on-site during initial grading activities to relocate any Blainville's horned lizards that are unearthed during excavation. i. If in good health, they shall be immediately relocated to the designated relocation area. ii. If injured, the animals shall be turned over to a CDFW approved specialist until they are in a condition suitable for release into the designated release area or deposited at an approved vertebrate museum **Plan Requirements and Timing:** A County qualified biologist selected by the County Planning & Development Department with experience with Blainville's horned lizard surveys/avoidance shall conduct or shall provide oversight during surveys and relocation. This process shall occur prior to issuance of a grading permit, final restoration plan approval, or zoning clearance for each project phase and development of each individual housing lot. This measure will be printed on all restoration/habitat protection/ grading and construction plans. **Monitoring:** The biologist shall demonstrate to the County Planning & Development Department compliance monitoring staff that all protection/ relocation measures are in place prior to and throughout grading and construction for each project phase and lot development. ***MM BIO-1.9: Western Red Bat Avoidance*** The following measures are designed to reduce the potential for impact, with the final goal of no net loss of the species. a. To the extent feasible, removal of suitable roosting trees should be avoided during the time when western red bats may occupy their winter range (September–May). b. For construction activities occurring at a time when western red bats may occupy their winter range (September–May), surveys for roosting western red bats shall be conducted by a qualified biologist no more than 14 days prior to vegetation removal. The surveys shall include the entire area of disturbance and focus on the trees located within the impact area. If active roosts are located, all construction work shall be conducted outside a buffer zone from the roost to be determined by the qualified biologist. The buffer area(s) shall be closed to all construction personnel and equipment until May 1. c. To the extent feasible and if applicable, night time work shall be kept to a minimum and lighting used shall be as dim as legally possible and should be directed to where it is needed to avoid light spillage. Any upward lighting should be minimized.	

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Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
		Plan Requirements and Timing: A County qualified biologist selected by the County Planning & Development Department with experience with western red bat avoidance/surveys shall conduct or shall provide oversight during surveys and relocation. This process shall occur prior to issuance of a grading permit, final restoration plan approval, or zoning clearance for each project phase and development of each individual housing lot. This measure will be printed on all restoration/habitat protection/ grading and construction plans. **Monitoring:** The biologist shall demonstrate to County Planning & Development Department compliance monitoring staff that all protection/relocation measures are in place prior to issuance of grading and building permits and throughout grading and construction for each project phase and lot development. ***MM BIO-1.10: Western Spadefoot Toad Avoidance*** The following measures are designed to reduce the potential for impact, with the final goal of no net loss of the species. a. Prior to initiation of ground-disturbing activities and vegetation removal, a County-approved biologist shall coordinate with CDFW a species relocation plan. b. A pre-construction survey for western spadefoot toads shall be conducted not less than 2 weeks prior to the initiation of construction. If the project is phased, a clearance survey shall be required for each phase of construction and/or individual lot development. c. If western spadefoot toads are found and these individuals are likely to be killed or injured by construction activities, a qualified biologist shall be allowed sufficient time to capture and relocate the animals from the project site before construction activities begin. d. A County-approved biologist(s) shall relocate the individuals the shortest distance possible to a location that contains suitable habitat not likely to be affected by activities associated with the proposed project. The biologist(s) should maintain sufficiently detailed records of any individuals observed, captured, relocated, etc., including size, coloration, and distinguishing features and photographs (preferable digital) to assist him/her in determining whether translocated animals are returning to the project site. e. A County-approved biologist shall be present on-site during initial ground disturbance. Any western spadefoot toads that are unearthed during initial ground disturbance shall be relocated the shortest distance possible to a location that contains suitable habitat not likely to be affected by activities associated with the proposed project. f. The biologist(s) shall maintain sufficiently detailed records of any individuals observed, captured, relocated, etc., including size, coloration, and distinguishing features and photographs (preferable digital) to assist him/her in determining whether translocated animals are returning to the project site.	

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		g. To ensure the diseases are not conveyed between work sites by the qualified biologist, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force shall be followed at all times. **Plan Requirements and Timing:** A County qualified biologist selected by the County Planning & Development Department with experience with western spadefoot toad surveys/avoidance shall conduct or shall provide oversight during surveys and relocation. This process shall occur prior to issuance of a grading permit, final restoration plan approval, or zoning clearance for each project phase and development of each individual housing lot. This measure will be printed on all restoration/habitat protection/grading and construction plans. **Monitoring:** The biologist shall demonstrate to County Planning & Development Department compliance monitoring staff that all protection/relocation measures are in place prior to issuance of grading and building permits and throughout grading and construction for each project phase and lot development. ***MM BIO-1.11: Coast Patch-nosed Snake Avoidance*** The following measure is designed to reduce the potential for impact, with the final goal of no net loss of the species. a. A pre-construction survey for coast patch-nosed snake shall be conducted not less than 2 weeks prior to the initiation of construction. It the project is phased, a clearance survey shall be required prior to each phase of construction and/or individual lot development. A County-approved biologist shall be present on-site during initial ground disturbance. Any coast patch-nosed snakes that are unearthed during initial ground disturbance shall be relocated the shortest distance possible to a location that contains suitable habitat not likely to be affected by activities associated with the proposed project. **Plan Requirements and Timing:** A County qualified biologist selected by the County Planning & Development Department with experience with coast patch-nosed snake surveys/avoidance shall conduct or shall provide oversight during surveys and relocation. This process shall occur prior to issuance of a grading permit, final restoration plan approval, or zoning clearance for each project phase and development of each individual housing lot. This measure will be printed on all restoration/habitat protection/ grading and construction plans. **Monitoring:** The biologist shall demonstrate to County Planning & Development Department compliance monitoring staff that all protection/relocation measures are in place prior to issuance of grading and building permits and throughout grading and construction for each project phase and lot development. ***MM BIO-1.12: Vernal Pool Fairy Shrimp USFWS Approval*** Prior to issuance of any grading permit the project applicant shall obtain all necessary approvals from the USFWS. Approvals will include either concurrence by the USFWS that the project would avoid impacts to fairy shrimp through the installation of fencing and signs, or the preparation by the Owner/Applicant and USFWS approval of	

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		~~including~~ an Incidental Take Permit and Habitat Conservation Plan for the vernal pool fairy shrimp on the project site consistent with the FESA of 1973~~, prior to issuance of any grading permit~~. All required mitigation measures, including, but not limited to the location of mitigation site(s), c~~C~~onstruction timing, avoidance measures ~~and~~ monitoring, and mitigation success criteria shall be consistent with USFWS requirements and would consist of measures such as those listed below or other measures identified by the USFWS or the CDFW. **Avoidance and Minimization Efforts:** The project proponent and contractor shall adhere to the following protection measures, which apply the spikerush emergent wetland at the project site that may be present and/or filled with water during project construction phases of development. The spikerush emergent wetland locations shall be included on the grading, site, and landscape plans and shall include the following measures: ~~Restrict construction within 250 feet of the edge of the pool/pool complex; install protective fencing gate least 250 feet from the edge of pools or spikerush emergent wetland prior to construction.~~ a. No grass cutting shall be permitted within the vernal pools and buffer areas. b. Install a fence around each identified pool and/or the spikerush emergent wetland to limit access to~~against~~ humans, vehicles, and pets. The fence shall have signs posted to explain this requirement and discourage vandalism. No recreation shall be permitted within the fenced pool/water area. c. CC&Rs shall contain information regarding the sensitivity of vernal pool and wetland habitats explaining all restrictions on the habitat and surrounding area. d. No disking for fire control or any other use shall be permitted. e. No mosquito control shall be permitted except use of mosquito fish. f. A County qualified biologist shall conduct or shall provide oversight during installation of protective fencing and signs on-site prior to issuance of grading/building permits and pre-construction meeting and shall install permanent fencing prior to Final Building Inspection Clearance(s). All requirements shall be specified on all grading and building plans, graphically depicted if feasible. ~~f.~~g. The project biologist or designee shall demonstrate to County Planning & Development compliance monitoring staff that all protection measures are in place prior to initiation of grading activities and throughout grading and construction phases. **Plan Requirements and Timing:** The Owner/Applicant shall provide to P&D ~~copies of Incidental Take Permit and Habitat Conservation Plan approvals obtained from the~~ USFWS clearance prior to issuance of any grading permit for the project site. **Monitoring:** Permittee shall provide to P&D copies of ~~confirmation of implementation of mitigation measures in the vernal pool fairy shrimp Incidental Take Permit and Habitat Conservation Plan from USFWS. P&D staff shall confirm receipt of any necessary approvals~~USFWS clearance prior to issuance of any grading permit for the project site.	

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		MM BIO-1.13: El Segundo Blue Butterfly USFWS Approval Prior to issuance of any grading permit the project applicant shall obtain all necessary approvals from the USFWS. Approvals include ~~concurrence from the USFWS that the project would avoid impacts to the El Segundo blue butterfly; or obtain~~ ~~including~~ an Incidental Take Permit and Habitat Conservation Plan for the El Segundo blue butterfly on the project site and a USFWS approved off-site mitigation parcel consistent with the federal Endangered Species Act of 1973~~, prior to issuance of any grading permit~~. All required mitigation measures, including but not limited to the location of mitigation site(s), c~~C~~onstruction timing, avoidance measures monitoring, and mitigation success criteria shall be consistent with USFWS requirements and would consist of measures such as those listed below or other measures identified by the USFWS. Avoidance and Minimization Efforts: Prior to issuance of any grading permit the project applicant shall acquire -a County-approved biologist to conduct a pre-construction survey one week prior to grading for all life stages of the El Segundo blue butterfly within the project disturbance limits. All life stages shall be avoided by the project, and shall not occur during the adult flight season of the El Segundo blue butterfly (generally around June 15 to September 15) in order to avoid disrupting the reproductive behaviors. Locations of the El Segundo blue butterfly's host plant (*Eriogonum parvifolium*) will be avoided to the maximum extent practicable within the development area during construction activities. Locations of the El Segundo blue butterfly host plant will be avoided to the maximum extent practicable within FMZ-2 during pruning and thinning activities as prescribed by the following: 1. One week prior to any fuel management activities located within the open space lot that will be selectively pruned and thinned (FMZ-2), a qualified biologist approved by the County shall demarcate coastal buckwheat avoidance areas. 2. Avoidance areas shall be demarcated in the field with protective fencing installed at an appropriate distance that would not disturb the plant or the underlying leaf litter. 3. The intent of the avoidance areas is to document the location(s) and number(s) of any and all host plants for the federally endangered El Segundo blue butterfly so that fuel management activities can successfully avoid impacts to the life cycle of this species. 4. Should avoidance prove infeasible, relocation and/or off-site restoration to an appropriate receiver site approved by the County shall be undertaken at the appropriate ratios only after take authorization has been secured from the USFWS through Section 10 of the FESA. 5. Mitigation measures and ratios for p~~P~~ermanent impacts to the El Segundo blue butterfly's host plant shall be contingent upon USFWS guidance and the final Habitat Conservation Plan measures. ~~that are authorized by the USFWS shall be salvaged (including underlying litter and soils) and relocated to an~~	

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		~~approved location. Mitigation for host plants shall be provided at a minimum ratio of 2:1.~~ **Plan Requirements and Timing:** The Owner/Applicant shall provide to P&D copies of the USFWS approved El Segundo blue butterfly Incidental Take Permit and Habitat Conservation Plan ~~Incidental Take Permit and Habitat Conservation Plan approval obtained from the USFWS~~ prior to issuance of any grading permit for the project site~~ and restoration of the off~~ ~~site mitigation parcel~~. **Monitoring:** Permittee shall provide to P&D copies of the USFWS approved El Segundo blue butterfly Incidental Take Permit and Habitat Conservation Plan. ~~of confirmingationof implementation of~~ USFWS ~~mitigation measures~~ and/or conditions of USFWS approval. ~~in the El Segundo blue butterfly Incidental Take Permit and Habitat Conservation Plan from USFWS.~~ P&D staff shall confirm receipt of any necessary approvals prior to issuance of any grading permit for the project site ~~and restoration of the off site mitigation parcel~~. ***MM BIO-1.14: California Red-Legged Frog USFWS Approval*** Prior to issuance of any grading permit the project applicant shall obtain all necessary approvals from the USFWS. Approvals include ~~concurrence by the USFWS that the project would avoid impacts to fairy shrimp; or~~ obtaining~~, including~~ an Incidental Take Permit and Habitat Conservation Plan for the California red-legged frog ~~on the project site and restoration of the off-site mitigation parcel~~ consistent with the federal Endangered Species Act of 1973~~, prior to issuance of any grading permit~~. All required mitigation measures, including but not limited to the location of mitigation sites(s), c~~C~~onstruction timing, avoidance~~, and~~ monitoring, and mitigation success criteria shall be consistent with USFWS requirements and would consist of measures such as those listed below or other measures identified by the USFWS. **Avoidance and Minimization Efforts:** The project applicant shall acquire a USFWS-approved biologist to conduct a pre-construction survey within 24-hours prior to grading within the project disturbance limits. Initial grading will be avoided between November 1st and March 31st during the time when California red-legged frogs are most likely moving through upland areas. The spikerush emergent wetland will be avoided to the maximum extent practicable within FMZ-2 during pruning and thinning activities. Specific conservation measures would be provided upon receipt of the Section 10 permit. **Plan Requirements and Timing:** The Owner/Applicant shall provide to P&D copies of the USFWS approved California red-legged frog Incidental Take Permit and Habitat Conservation Plan ~~Incidental Take Permit and Habitat Conservation Plan approval,obtained from the USFWS~~ prior to issuance of any grading permit for the project site, ~~and restoration of the off-site mitigation parcel~~ **Monitoring:** Permittee shall provide to P&D copies of the USFWS approved California red legged frog Incidental Take Permit and Habitat Conservation Plan, ~~of confirmingation of implementation of mitigation measures~~ P&D staff shall confirm	

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Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
		receipt of any necessary approvals prior to issuance of any grading permit for the project site, ~~and restoration of the off-site mitigation parcel~~ ***MM BIO-1.15: Vandenberg Monkeyflower USFWS Approval*** Prior to issuance of any grading permit the project applicant shall obtain all necessary approvals from the USFWS. Approvals include obtaining~~, including~~ an Incidental Take Permit and Habitat Conservation Plan for the Vandenberg monkeyflower on the project site and restoration of the off-site mitigation parcel consistent with the federal Endangered Species Act of 1973~~, prior to issuance of any grading permit~~. ~~All required mitigation measures, including but not limited to the location of mitigation site(s), c~~Construction timing, avoidance~~, and~~ monitoring, and mitigation success criteria shall be consistent with USFWS requirements and would consist of measures such as those listed below or other measures identified by the USFWS. **Avoidance and Minimization Efforts:** The project applicant shall acquire a USFWS-approved botanist to conduct a pre-construction survey prior to grading, pruning/thinning activities within the project disturbance limits and in FMZ-2 during the appropriate blooming period for the Vandenberg monkeyflower. If the Vandenberg monkeyflower is discovered, grading and/or pruning/thinning activities avoid all plants in accordance with the recommendations in MM BIO-1.1, and the specific conservation measures located in the USFWS's Section 10 permit. **Plan Requirements and Timing:** The Owner/Applicant shall provide to P&D copies of the USFWS approved Vandenberg monkeyflower Incidental Take Permit and Habitat Conservation Plan ~~Incidental Take Permit and Habitat Conservation Plan approval obtained from USFWS~~ prior to issuance of any grading permit for the project site, ~~and restoration of the off-site mitigation parcel.~~ **Monitoring:** Permittee shall provide to P&D copies of the USFWS approved Vandenberg monkeyflower Incidental Take Permit and Habitat Conservation Plan. ~~of confirmation of implementation of USFWS mitigation measures, in the Vandenberg monkeyflower Incidental Take Permit and Habitat Conservation Plan from USFWS.~~ P&D staff shall confirm receipt of any necessary approvals prior to issuance of any grading permit for the project site ~~and restoration of the off-site mitigation parcel.~~	
Impact BIO-2: Sensitive Natural Community	A total of 6.92~~7.38~~ acres of moderate quality maritime chaparral, a CDFW-designated sensitive community, would be permanently impacted by the proposed project. The CDFW asserts (Meyer, pers. comm. 10/10/17) that while project-related geotechnical investigations were being conducted on the project site, ground disturbance and plant removal occurred north of the site on the adjacent Burton Mesa Ecological Reserve. The ground disturbance and plant removal were not an authorized activity on the reserve, therefore, the CDFW has requested that the project proponent repair the disturbed areas. In response to this request, mitigation measure **MM BIO-2.1** has been amended to require that the project's On-Site Habitat and Open Space Protection Plan include provisions for the restoration of	***MM BIO-2.1: On-Site Habitat and Open Space Protection Plan*** The Owner/Applicant shall submit for Planning & Development Department approval a revised On-Site Habitat and Open Space Protection Plan for maritime chaparral, oak trees, spikerush emergent wetland, and special status species to be retained on-site within the dedicated open space parcel and FMZ-2~~, designated buffer areas, and adjacent to the on-site trail~~. The On-Site Habitat and Open Space Protection Plan shall be prepared by a P&D-approved arborist and/or biologist and designed wherever possible to protect maritime chaparral that will not be impacted during construction and protect this habitat from construction activity and occupancy of the project; including long-term occupancy of homes, ~~and~~ long-term management of the open space~~, trail, and~~ (including ~~fuel management~~FMZ-2). The existing Open Space	

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	areas to the north of the project site within the Burton Mesa Ecological Reserve that were disturbed by previous geotechnical investigations to the satisfaction of the CDFW. Mitigation measures MM BIO-2.1 through MM BIO-2.4 would avoid or reduce impacts to sensitive vegetation communities by requiring avoidance during construction; ensuring suitable restorable mitigation land is secured on-site and off-site, ~~implementation of off-site mitigation;~~ and preparing/implementing a landscaping plan and invasive weed management plan. Therefore, removal of central maritime chaparral resulting from grading, landscaping~~, trail construction~~, and fuel management zones would be a significant but mitigable impact on sensitive natural communities (Class II impact).	Management Plan (OSMP) as an option to preparing a stand-alone document, may be revised to incorporate all requirements and submitted in place of the On-Site Habitat and Open Space Protection Plan. The On-Site Habitat and Open Space Protection Plan shall include the following components: Measures to replace, restore, and/or enhance impacted sensitive vegetation communities within the project site, with mitigation restoration planting acreage as stated in **MM BIO-1.2** and shall include the following restoration criteria: a. A section detailing any special status plant translocation for the project that details the logistics and timing of the translocation activities. The On-Site Habitat and Open Space Protection Plan ~~revised OSMP~~ must identify specific transplant locations. b. Seed and/or cuttings and/or container stock shall be collected from the plant species prior to their removal from the site by a qualified botanist or restoration expert. Container stock may be utilized only for perennial species. Plants may also be salvaged and stored for replanting, where possible. The method (e.g., seed, cuttings, or container stock) shall be determined for each individual species by a qualified botanist. Habitat enhancement shall be initiated prior to habitat impacts, or as construction schedules and seasonal requirements allow, with a minimum requirement that plant propagation be initiated prior to ground disturbance. i. The project shall include specific measures to maintain native ant species, and discourage the Argentine ant (*Linepithema humile*) from populating the open space. This includes inspection by the project biologist (preferably off-site prior to shipment to the site) of native container stock scheduled to be installed. The biologist shall inspect all specimens and reject any that show non-native ants or evidence of non-native ants. Additionally, all restoration areas shall avoid the use of chemicals which would impact or kill native ant species (i.e., herbicides/pesticides). c. Rare plant collection samplings, data, and records shall be collected by a qualified botanist prior to the seed cutting/collections and the data shall be reported to CDFW. The actual specimens shall be deposited at local herbarium(s) for proper data and record keeping. The data and information collected shall be available for all desired herbarium(s) (e.g., California Polytechnic University at San Luis Obispo, University of California at Santa Barbara, Santa Barbara Botanic Garden). d. If required, the applicant shall obtain the necessary permit or authorization from the appropriate regional and/or state agency (e.g., CDFW) prior to seed/cutting collections. e. Seed and/or cuttings shall be redistributed or planted in areas within the portions of the project open space that have the appropriate habitat characteristics (e.g., slope, aspect, amount of sunlight) necessary to support the transplanted species.	

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		f. Survivorship of planted material shall be 80 percent at the end of a 5-year monitoring period. Designated open space and mitigation sites shall be maintained in perpetuity. g. Identify success criteria to be met, reporting requirements, funding mechanisms, and long-term protections on open space that are mitigation receiver sites for rare plants and special status plant communities. h. All areas of maritime chaparral and oaks that can be preserved or avoided, including maritime chaparral, coyote brush scrub, and the spikerush emergent wetland shall be demarcated on the On-Site Habitat and Open Space Protection Plan. i. All areas of maritime chaparral and oaks within the designated open space and habitat buffer that can be avoided during fire management, including maritime chaparral, coyote brush scrub, and the spikerush emergent wetland, shall have limited disturbance within ~~the trail construction area~~FMZ-2. j. To the maximum extent feasible based on recommendations of an approved arborist, o~~O~~ak trees that are to be removed shall be boxed and replanted within the County approved off-site restoration area consistent with the Tree Protection Plan ~~Off-Site Habitat Restoration Plan~~ in MM BIO-~~2.2~~3.2. Depict original & new location for these specimens on the Off-Site Habitat Restoration Plan. k. Depict approved lots and building envelopes. l. Depict equipment storage and construction staging and parking areas. m. Depict the type and location of protective fencing or other barriers to be in place to protect the maritime chaparral, coyote brush scrub, and the spikerush emergent wetland areas (this includes protective fencing and signage [stating to keep out of the area] between the spikerush emergent wetland and the proposed development [specifically located at a lower elevation on the development side of the topographical divide that separates the wetland from the adjoining areas of the project site]). Also depict the type and location of protective fencing on the project site to prevent trespass onto the adjacent Burton Mesa Ecological Reserve. n. Comply with and specify the following as notes on On-Site Habitat and Open Space Protection Plan and Building & Grading Plans: i. To avoid damage during construction, all maritime chaparral, coyote brush scrub, and the spikerush emergent wetland shall be temporarily fenced with chain-link or other material satisfactory to P&D, at least the outer drip lines of trees and within 5 feet of all plants and staked to prevent any collapse. ii. Protective fencing/staking/barriers shall be maintained throughout all grading & construction activities. A qualified botanist shall provide oversight during the installation of fencing, flagging or survey tape and	

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		he/she or a designee (e.g., construction foreman) will return to the site once a week during the duration of construction activities to ensure that the fence remains intact. On-Site Habitat Management and Open Space Protection Plan. iii. ~~Any~~ For excavation or trenching required w/in the dripline or sensitive root zone of any specimen within the habitat. 1. Cleanly cut~~ting~~ any roots of one inch in diameter or greater. ~~w/in the habitat.~~ 2. Avoid ~~T~~tree removal and trimming. ~~w/in the habitat.~~ iv. If the use of hand tools is deemed infeasible, P&D may authorize work with rubber-tired construction equipment weighing five tons or less. If significant large rocks are present, or if spoil placement will impact surrounding trees, then a small tracked excavator (i.e., 215 or smaller track hoe) may be used as determined by P&D staff and under the direction of a P&D approved biologist. o. In the event of unexpected damage or removal of habitat: i. If it becomes necessary (as authorized by P&D) to disturb or remove any plants w/in the habitat area, a P&D-approved biologist shall direct the work. Where feasible, specimens shall be boxed and replanted. ii. If a P&D-approved biologist certifies that it is not feasible to replant, plants shall be replaced at a minimum using the replacement ratios identified in MM BIO-1.2 under the direction of the P&D-approved biologist. iii. If replacement plants cannot all be accommodated on-site, a plan must be approved by P&D to include replacement in the Off-Site Restoration Plan in MM BIO-2.2. p. Grading shall be designed to ensure that habitat areas have proper drainage during and after construction, per biologist recommendations. q. The On-Site Habitat and open Space Protection Plan shall describe public outreach to be implemented to educate the residents of the project site about not using invasive species in landscaping, overuse of pesticides and fertilizers, the problem with unleashed pets and pet waste, methods to minimize potentially harmful human/wildlife interaction, and minimizing the use of rodenticides. A public outreach program will be provided for this project for the surrounding neighborhoods to promote, protect, and restore the natural habitats on the project site by fostering education and ongoing community involvement. r. The On-Site Habitat and Open Space Protection Plan shall describe proposed restoration efforts to be implemented on the Burton Mesa Ecological Reserve to repair ground disturbance and plant removal that occurred when project-related geotechnical investigations were conducted. The Plan must also	

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		provide documentation that CDFW has reviewed and concurs with proposed restoration and maintenance efforts to be conducted on the reserve. **Plan Requirements and Timing:** The Owner/Applicant shall submit a final~~revised~~ On-Site Habitat and Open Space Protection Plan that has been approved by P&D prior to issuance of grading~~approval of a zoning clearance for grading and building~~ permits. The Owner/Applicant shall note or graphically depict all plan components listed above, as well as all temporary and/or permanent protection measures and comply with and depict this measure on all Grading and Building Plans. **Monitoring:** P&D staff shall inspect the site to ensure that maritime chaparral, oak trees, spikerush emergent wetland, and special status species identified for protection were not damaged or removed or, if damage or removal occurred, that correction is completed as required by the revised On-Site Habitat and Open Space Protection Plan. P&D staff shall oversee implementation of the On-Site Habitat and Open Space Protection Plan. The Owner/Applicant shall post a performance security to ensure installation and maintenance for a minimum of five years prior to issuance of a grading permit. The Owner/Applicant shall also demonstrate to County Planning & Development compliance monitoring staff that all required components of the approved plan are in place as required prior to ~~initiation of ground disturbance activities~~ zoning clearance issuance for the first residential structure. ~~and maintained throughout the maintenance period.~~ County Planning & Development compliance monitoring staff signature is required to release the installation security upon satisfactory installation of all items in the approved plans and maintenance security upon successful implementation of the On-Site Habitat and Open Space Protection Plan (or Owner/Applicant's Open Space Management Plan revised per this mitigation measure). ***MM BIO-2.2: Off-site Habitat Restoration Plan*** The Owner/Applicant shall identify at least 13.23~~14.76~~ acres of land on the 123-acre VVCSD-owned open space parcel (APN 097-371-067) for off-site mitigation. Required habitat restoration and oak tree planting must be located on previously disturbed land or areas that support non-native vegetation. The area identified for off-site mitigation: a. Shall not include areas of established native habitat, adversely affect existing sensitive plants or trees. b. Habitat restoration may supplement previous habitat enhancement efforts conducted on the VVCSD-owned open space parcel, such as but not limited to planting native vegetation in areas that have been cleared of weeds and non-native plants. The restoration location shall have topography and soils that are suitable for restoration of central maritime chaparral habitat at a 2:1 ratio and be able to support an oak tree replacement ratio of 10:1. The restoration areas:	

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		c. Shall include a suitable buffer from areas designated as urban in the Comprehensive Plan and from existing developed areas (i.e., residential development and roadways) to minimize the potential for adverse edge effects to the restored habitat.. d. Must be located outside of existing or potential fuel management zones that are required in high fire hazard areas adjacent to land zoned for urban development. In addition, an Off-site Habitat Restoration Plan that addresses loss of on-site habitat shall be submitted to and approved by the County. The Off-site Habitat Restoration Plan shall be prepared by a County-qualified botanist or biologist with expertise in habitat restoration **Plan Requirements**: The Owner/Applicant shall submit for Planning & Development approval an off-site restoration plan prepared by a Planning & Development-approved biologist designed to restore central maritime chaparral habitat and coast live oak trees. The off-site restoration plan shall be approved by the County and VVCSD and at minimum include the following: a. Goals and objectives for the restoration of maritime chaparral and coast live oak trees. b. Surveys to identify the location(s) of proposed restoration sites, existing native habitat and special status species located on or near the restoration site(s), and methods to protect identified native habitat and special status species. c. A restoration schedule with milestones. d. Sources of plant materials, including salvage from the Oak Hills Estate project site if feasible. i. The project shall include specific measures to maintain native ant species, and discourage the Argentine ant (*Linepithema humile*) from populating the restoration areas. This includes inspection by the project biologist (preferably off-site prior to shipment to the site) of native container stock scheduled to be installed. The biologist shall inspect all specimens and reject any that show non-native ants or evidence of non-native ants. Additionally, all restoration areas shall avoid the use of chemicals which would impact or kill native ant species (i.e., herbicides/pesticides). e. Plant sources, planting methods, timing, plant density, plant protection, weed control, temporary irrigation, and maintenance details. All native plant materials used for restoration shall be from local sources. f. A fencing and signage plan to limit encroachment into restored areas. Fencing or other barriers shall be designed to prevent unauthorized motor vehicle entry, reduce human and pet intrusion, while maintaining access for wildlife to move through the area. g. Performance criteria that specify the minimum requirements for size, ground coverage and health of replacement plants including a period of time without	

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		supplemental watering. The maintenance requirements shall be no less than 5 years unless satisfactory habitat as determined by the County or other appropriate agency is established before that time. h. Measures that would be implemented if it is determined that performance criteria are not being met in conformance with the approved restoration schedule. i. The off-site restoration plan must be consistent with and incorporate the mitigation requirements specified by the USFWS-approved Incidental Take Permit and Habitat Conservation Plan. j. The Off-Site Habitat Restoration Plan shall describe public outreach to be implemented to educate the residents of adjacent neighborhoods about not using invasive species in landscaping, overuse of pesticides and fertilizers, the problem with unleashed pets and pet waste, methods to minimize potentially harmful human/wildlife interaction, and prohibiting the use of rodenticides. A public outreach program will be provided for this project for the surrounding neighborhoods to promote, protect, and restore the natural habitats in their neighborhood by fostering education and ongoing community involvement. The Owner/Applicant shall include as notes or depictions all plan components listed above, graphically depicting all those related to earth movement, construction, and temporarily and/or permanently installed protection measures prior to issuance of grading/building permits. Comply with and depict this measure on all Grading and Building Plans. **Timing:** A Final Habitat Offsite Restoration Plan shall be prepared by a Planning and Development-qualified biologist and reviewed and approved by P&D and the County Fire Department prior to first zoning clearance~~map recordation~~. The Plan shall clearly state who will fund and be responsible for long-term maintenance, who will monitor for success, and specific remedial measures. Installation shall be completed prior to zoning clearance issuance for the first residential structure. **Monitoring:** Prior to issuance of a grading permit the Owner/Applicant shall post a performance security to ensure installation and maintenance of the off-site restoration area for a minimum of five years. The County shall periodically inspect the restored habitat area in the field over time to ensure habitat vegetation establishment and compliance with approved plans. P&D shall determine successful completion of habitat restoration and when cessation of maintenance can occur, per the criteria in the plan. P&D compliance monitoring staff signature is required to release the installation security upon satisfactory installation of all items in approved plans and maintenance security upon successful implementation of this plan. ***MM BIO-2.3: Landscaping Plan*** A landscape architect shall develop a revised landscape plan for the entire project site in consultation with a qualified biologist. The plan shall indicate the locations and species of plants to be installed throughout the development, including areas adjacent to the open space (e.g., fuel management areas). Drought-tolerant, locally native plant species shall be used. Noxious, invasive, and/or non-native plant species that are recognized on the Federal Noxious Weed List, California Noxious Weeds List, and/or	

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		California Invasive Plant Council Lists shall not be permitted. Species selected for planting shall be similar to those species found in adjacent native habitats. **Plan Requirements and Timing:** Final landscape and irrigation plans shall be submitted by the Permittee to the County for review and approval prior to the first zoning clearance ~~tentative tract map approval and issuance of construction permits.~~ **Monitoring:** Prior to issuance of a grading permit the Owner/Applicant shall post a performance security to ensure installation and maintenance for a minimum of five years. Planning and Development compliance monitoring staff shall conduct a Project Compliance Inspection prior to Final Building Inspection Clearance and shall periodically conduct field checks to monitor maintenance thereafter. If the Owner/Applicant fails to either install or maintain according to the approved plan, the County may consider it a permit violation. ***MM BIO-2.4: Invasive Weed Prevention and Management Program*** An Invasive Weed Prevention and Management Program shall be developed by a qualified biologist to prevent invasion of native habitat by non-native plant species during construction. A list of target species shall be included, along with measures for early detection and eradication. **Plan Requirements and Timing**: The Owner/Applicant shall submit the Invasive Weed Prevention and Management Program for approval by the Planning and Development Department prior to the issuance of zoning clearance. These mitigation requirements will be printed on construction plans. **Monitoring**. The Owner/Applicant shall demonstrate to P&D compliance staff that all required components of the approved program are in place as required prior to initiation of grading activities.	
Impact BIO-3: Loss of Oak Trees	Grading within project building envelopes would result in a direct loss of 74 coast live oak trees. An additional 53~~57~~ oak trees would also be impacted as a result of potential encroachment into the critical root zone during grading and construction as well as trimming for fire protection purposes. Therefore, the project has the potential to result in a loss of up to 127~~131~~ oak trees total, or between 21 and 35 ~~37~~ percent of the oak trees present at the project site, exceeding the 10 percent County threshold. However, on-site tree protection and replacement requirements as well as off-site mitigation would reduce impacts to less than significant levels. Impacts would be significant but mitigable (Class II impact).	***MM BIO-3.1: Native Tree Protection*** Native trees on-site and on the off-site mitigation parcel should be avoided to the maximum extent feasible. Prior to the onset of construction activities, highly visible flagging or survey tape shall be installed around existing stands and individual trees at a buffer/extent radius of 6 feet beyond the canopy dripline, wherever feasible, or otherwise marked in the field to protect them from harm during implementation of the proposed project. **Plan Requirements and Timing:** Applicant/Owner will implement native tree protection measures prior to and during construction as outlined in the measure above. **Monitoring:** Planning & Development compliance staff conduct a project compliance inspection immediately prior to commencement of construction activities and periodically during construction. ***MM BIO-3.2: Tree Protection Plan*** The Owner/Applicant shall submit a Tree Protection Plan (TPP) that addresses both on-site trees and trees on the off-site restoration parcel prepared by a Planning & Development-approved arborist and/or biologist and designed to protect coast live	Class II (SM)

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		oaks. The plan shall include a description of the trees to be trimmed and/or removed, the trees to be preserved, and the trees that will be boxed and replanted. As a result of the tree inventory and health assessment, the TPP will be revised and submitted to the County by the applicant prior to any work around coast live oaks on the property. The Owner/Applicant shall comply with and depict the following on the TPP exhibit and Grading and Building Plans. a. Depict location of trees to be removed. b. Depict original and new location of trees to be replaced. c. Depict-approved building envelopes. Include utility corridors, irrigation lines, roadways, driveways. d. Depict equipment storage (including construction materials, equipment, fill soil or rocks) and construction staging and parking areas outside of the protection area. e. Depict the type and location of protective fencing (see below) or other barriers to be in place to protect trees in protection areas during construction. f. Depict the location of all tree wells or retaining walls. These shall be located outside the area within six feet of the dripline of all protected trees unless authorized by P&D. g. Depict the location of all paths, driveways, and sidewalks within 25 feet of dripline areas. Only pervious paving materials (gravel, brick without mortar, turf block) are permitted within 6 feet of dripline areas. The plan shall include, but would not be limited to, an inventory of trees within the construction, enhancement, and restoration sites, setbacks from trees and protective fencing/flagging, restrictions regarding grading and paving near trees for the infrastructure phases and the individual home sites, as well as direction regarding pruning and digging within root zone of trees defined as a radius 6 feet beyond the furthest extent of the tree canopy. The plan shall specify the following as notes on the TPP and grading plans: a. All trees to be protected at least 6 feet outside the dripline with chain-link (or other material satisfactory to Planning & Development) fencing at least 3 feet high, staked to prevent any collapse, and with signs identifying the protection area placed in 15-foot intervals on the fencing. b. Fencing/staking/signage shall be maintained throughout all grading and construction activities. c. All trees located within 25 feet of buildings shall be protected from stucco and/or paint during construction. d. No irrigation is permitted within 6 feet of the dripline of any protected tree unless specifically authorized. e. The following shall be completed only by hand and under the direction of a P&D approved arborist/biologist:	

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		i. Any trenching required within the dripline or sensitive root zone of any specimen. ii. Cleanly cutting any roots of one inch in diameter or greater, encountered during grading or construction. iii. Tree removal and trimming. f. Special equipment: If the use of hand tools is deemed infeasible by P&D, P&D may authorize work with rubber-tired construction equipment weighing five tons or less. If significant large rocks are present, or if spoil placement will impact surrounding trees, then a small tracked excavator (i.e., 215 or smaller track hoe) may be used as determined by Planning & Development staff and under the direction of a Planning & Development-approved biologist. g. The following are not permitted: i. Any trenching within the dripline or sensitive root zone of any specimen. ii. Cutting any roots of one inch in diameter or greater. iii. Tree removal and trimming. h. Grading shall be designed to avoid ponding and ensure proper drainage within driplines of oak trees. **Plan Requirements**: The Owner/Applicant shall: (1) submit the TPP; (2) include all applicable components in Tree Replacement Plan (TRP) and/or Landscape and Irrigation Plans if these are required; (3) include as notes or depictions all plan components listed above, graphically depicting all those related to earth movement, construction, and temporarily and/or permanently installed protection measures. **Timing**: The Owner/Applicant shall comply with this measure prior to land use clearance of the Development Plan. The Owner/Applicant shall install tree protection measures on-site prior to issuance of grading permits and conduct pre-construction and restoration meetings. **Monitoring**: The Owner/Applicant shall demonstrate to Planning & Development compliance monitoring staff that trees identified for protection were not damaged or removed or if damage or removal occurred, that correction is completed as required by the TPP prior to Final Building Inspection Clearance. ***MM BIO-3.3: Tree Replacement Plan (TRP)*** The Owner/Applicant shall submit for Planning & Development approval an off-site TRP prepared by a Planning & Development-approved arborist/biologist as a component of a County approved off-site habitat mitigation plan (see MM BIO-2.2) that addresses loss of on-site oak trees. The tree replacement plan shall be designed to replace native trees removed by the proposed project at a ratio of 10:1 (trees planted: trees impacted) consistent with the County's standard mitigation measures (County of Santa Barbara 2011a) at an approved off-site location (proposed off-site mitigation parcel) prior to land use clearance of the Development Plan. Replacement oak tree plantings would range from a minimum of 740 trees up to a maximum of 1,310 trees.	

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		It is expected that mitigation for removal of native coast live oak trees could occur concurrently as a component of the off-site restoration of maritime chaparral. The plan shall include the following components: a. Description of the project/impact site (i.e., location, responsible parties, areas to be impacted by habitat type); b. Goal(s) of the compensatory mitigation project; c. Description of the proposed compensatory mitigation site (location and size, ownership status, existing functions and values); d. Implementation plan for the compensatory mitigation site (rationale for expecting implementation success, responsible parties, schedule, site preparation, planting plan); e. Maintenance activities during the monitoring period, including weed removal as appropriate (activities, responsible parties, schedule); f. Monitoring plan for the compensatory mitigation site, including no less than quarterly monitoring for the first year (performance standards; target functions and values; target acreages to be established, restored, enhanced, and/or preserved; annual monitoring reports); g. Success criteria based on the goals and measureable objectives; said criteria to be, at a minimum, at least 80 percent survival of container plants; h. An adaptive management program and remedial measures to address any shortcomings in meeting success criteria; i. Notification of completion of compensatory mitigation; and, j. Contingency measures (initiating procedures, alternative locations for contingency compensatory mitigation, funding mechanism). **Plan Requirements**: Include the components of the TRP plan in off-site habitat mitigation plan. **Timing**: Plans shall be submitted prior to land use clearance of the Development Plan and issuance of zoning clearance. The Owner/Applicant shall post a performance security to ensure installation upon off-site habitat restoration initiation and maintenance for 5 years. **Monitoring**: The Owner/Applicant shall demonstrate to Planning & Development compliance monitoring staff that all required components of the approved plan(s) are in place as required upon initiation of habitat restoration and each maintenance visit for 5 years. Planning & Development compliance monitoring staff signature is required to release the installation security upon satisfactory installation of all items in approved plans and maintenance security upon successful implementation of this plan. ***MM BIO-3.4: On-site Arborist/Biologist*** A certified arborist/biologist will be on-site throughout all initial grading and construction activities that may impact native trees. Duties of the on-site arborist/biologist include the responsibility to ensure all aspects of the approved TPP and TRP are carried out.	

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		Requirements and Timing. Mitigation measures MM BIO-3.1 through MM BIO-3.4 are conditions of project approval that shall be verified by the Planning and Development Department prior to the issuance of zoning clearance for grading. These mitigation requirements will be printed on the construction plans. **Monitoring**. The Owner/Applicant shall submit to Planning & Development compliance monitoring staff the name and contact information for the approved arborist/biologist prior to commencement of construction/preconstruction meeting. Planning & Development shall site inspect as appropriate.	
Impact BIO-4: Federal Jurisdictional Wetlands and Waters	The proposed project would impact approximately ~~0.01 acre of RWQCB jurisdictional waters and~~ 0.03 acre of CDFW and RWQCB jurisdictional waters, comprising 112 linear feet due to the ~~underground~~ placement of the eastern ephemeral drainage into an underground channel on the project site. ~~Additionally if the drainage crossing by the proposed trail occurs below the top of bank relevant to CDFW jurisdiction and/or below the ordinary high water mark relative to RWQCB jurisdiction, an additional 0.002 acre and 0.001 acre of impacts to CDFW jurisdictional waters and RWQCB jurisdictional waters would occur.~~ While there is a spikerush emergent wetland on the project site, it would be avoided by construction and no direct impacts would occur. The project would require a RWQCB Waste Discharge Requirements permit and CDFW Streambed Alteration Agreement, which would include conditions for compliance with the state's no net loss of waters rule and other applicable requirements. All drainages on the project site are isolated and would not likely fall under U.S. Army Corps of Engineers jurisdiction. Therefore, no federally protected wetlands or waters would occur and less than significant impacts would result (Class II impact).	Impacts are less than significant. No mitigation measures are required.	Class III (LTS)
Impact BIO-5: Nesting Birds	Proposed development within the project site and selective thinning of dead vegetation within the defensible space areas as a part of fuel management activities occurring within native habitats outside the permanent impact area may result in direct or indirect impacts to nesting bird species, should they be present. Impacts to nesting birds and raptors would be reduced to a less than significant level with the implementation of mitigation measures MM BIO-5.1 (Class II impact).	***MM BIO-5.1: Preconstruction Surveys for Nesting Birds and Raptors*** For construction activities and fuel management activities occurring during the nesting season (generally February 1 to September 15), surveys for nesting birds and raptors, including the whit-tailed kite, covered by the California Fish and Game Code and the Migratory Bird Treaty Act shall be conducted by a qualified biologist no more than 14 days prior to vegetation removal/trimming. The surveys shall include the entire disturbance area plus a 300-foot buffer around the site (500 feet for raptors). If active nests are located, all construction work shall be conducted outside a buffer zone from the nest to be determined by the qualified biologist. The buffer shall be a minimum of 50 feet for non-raptor bird species and at least 300 feet for raptor species. Larger buffers may be required, and/or smaller buffers may be established depending upon the species, status of the nest, and construction activities occurring in the vicinity of the nest. The buffer area(s) shall be closed to all construction personnel and equipment until the adults and young are no longer reliant on the nest site. A qualified biologist shall confirm that breeding/nesting is completed and young have fledged prior to removal of the buffer. **Plan Requirements and Timing:** This survey shall be undertaken 10 days prior to construction of future residences and the start of fuel management activities to determine whether raptors or other special status species are nesting on-site. A report shall be prepared by the biologist and reviewed and approved by Planning &	Class II (SM)

Table S-1 Summary of Significant Environmental Analysis Results			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
		Development prior to the initiation of ground disturbance activities. If raptors or other special status species are found to be nesting, applicant shall avoid work in the area by providing a buffer from active nests until birds have fledged–as determined by the qualified biologist. At their conclusion, the biologist shall inform P&D in writing of the results of the surveys. All required mitigation shall be implemented prior to the start of proposed grading activities. **Monitoring:** Planning & Development shall review the report for compliance and inspect the site during construction activities to ensure compliance. Grading Inspectors shall inspect as needed.	
Impact BIO-6: Wildlife Movement	The proposed project is located within an Essential Connectivity Area as mapped in California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California. However, the proposed project is not expected to significantly hinder wildlife movement in the region or between natural landscape blocks, in this case the Burton Mesa Ecological Reserve, considering it is surrounded by contiguous native habitat suitable for movement as well as contiguous areas surrounding the limits of disturbance that would be preserved as open space. In addition, development would be located outside the central drainage within the project site and proposed fencing would include a low rail, slated fence installed between individual lots and open space. No impacts to wildlife movement are anticipated from development of the 29 lots and proposed trail within the project site (Class III impact).	Impacts would be less than significant. No mitigation is required.	Class III (LTS)
Cumulative Biological Impacts	The project site is one of few remaining parcels located within the Vandenberg Village urban area on land designated in the Comprehensive Plan for residential development. The project site is located at the urban fringe adjacent to the Burton Mesa Ecological Reserve, which supports the biologically important and sensitive maritime chaparral habitat that is one of the last significant stands of maritime chaparral in the state (CDFW 2015). Cumulative projects in the vicinity of the project as detailed in Table 3-1 would remove coast live oaks and reduce local maritime habitat in the region that supports sensitive plants and animals and native trees, including coast live oaks. The nearby Village Country Club Development Plan and Clubhouse Estates Tract Map, like the proposed project, may involve the removal of oak trees and other sensitive habitat and result in impacts to sensitive plant and wildlife species with potential to be at the site, as well as nesting birds. Therefore, implementation of the project in conjunction with other cumulative projects may result in significant cumulative impacts to biological resources. The project proposes to remove a total of 6.92~~7.38~~ acres of maritime chaparral that includes up to 6.92~~6.22~~ acres occupied by Mesa horkelia, which is a species unique to this biological community. The project, with all available on-site avoidance measures and off-site mitigation incorporated, would result in less than significant (Class II) impacts to the on-site sensitive maritime chaparral and coyote sage scrub biological communities, edge effects to the Burton Mesa Ecological Reserve, special status plant and animal species habitat (including up to 30 host plants to the El	Impacts would be less than significant with mitigation. No further mitigation is required.	Class II (SM)

Table S-1
Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
	Segundo blue butterfly, and native trees (including on-site removal of between 74 and 127~~131~~ coast live oaks), and nesting birds. Additionally, the project proposes off-site mitigation that would restore coast live oaks and maritime chaparral habitat at an off-site location within the geographic scope of the cumulative projects. The project would also implement avoidance and protection buffers for on-site resources during construction and require additional protection measures during project fuel management and vegetation maintenance in accordance with this EIR's mitigation measures. In addition, any potential impacts to El Segundo blue butterfly would require a permit through either the Section 10 or Section 7 processes under the FESA, as well as any other state and local permits. Other projects in the cumulative project list would also be subject to similar environmental review and mitigation requires as the project, and therefore would likely include mitigation for avoidance or reduction of impacts. Because the project's impacts to biological resources would be avoided, reduced, or mitigated through implementation of the mitigation measures described in this section, when considered with the cumulative impacts to biological resources from other projects in the area, the project's impact would not be cumulatively considerable. Therefore, cumulative impacts resulting from the project would be less than significant with project-level mitigation incorporated		
Cultural Resources			
Impact CR-1: Unearthing Previously Unidentified Subsurface Cultural Resources	Previous surveys, reports, and excavations have concluded that the project site does not contain known cultural resources. However, though unlikely, the potential for such resources to be encountered on the project site and proposed off-site restoration site exists. Potentially significant impact could be mitigated for both the on-site project area and off-site mitigation parcel by implementation of the proposed mitigation measures. In addition, consistent with state law, if human remains are encountered during excavation, all work must halt in the vicinity of the find, and the County Coroner must be notified and the appropriate protocol implemented (Section 7050.5-California Health and Safety Code). Implementation of MM CR-1, MM CR-2, and MM CR-3 would reduce impacts to less than significant (Class II impact).	***MM CR-1 Preconstruction/Pre-Restoration Meeting*** Prior to any construction or restoration activity conducted for the project, a pre-construction meeting shall be held by a County-qualified archaeologist and a local Native American (e.g., Chumash) representative funded by the applicant. Meeting attendees shall include the applicant, archaeologist, local Chumash representative, construction supervisors, and heavy equipment operators to ensure that all parties understand the cultural resources monitoring program and their respective roles and responsibilities. All construction and/or landscaping personnel who would work on the site during any phase of ground disturbance in archaeologically sensitive portions of the project area shall be required to attend the meeting. The names of all personnel who attend the meeting shall be recorded denoting that they have received the required training. The meeting shall review the following: types of archaeological resources that may be uncovered; provide examples of common archaeological artifacts and other cultural materials to examine; describe why monitoring is required; what makes an archaeological resource significant; identify monitoring procedures; what would temporarily halt construction and for how long; describe a reasonable resource discovery scenario (i.e., feature or artifact); and describe reporting requirements and the responsibilities of the construction supervisor and crew. The meeting shall make attendees aware of prohibited activities, including vehicle use in protected areas, and educate construction workers about the inappropriateness of unauthorized collecting of artifacts that can result in impacts on cultural resources.	Class II (SM)

Table S-1 Summary of Significant Environmental Analysis Results			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
		Plan Requirements and Timing: The pre-construction meeting requirements shall be shown on approved grading and building and restoration/planting/habitat protection plans**.** The pre-construction meeting shall be conducted prior to issuance of a grading permit. **Monitoring:** The Owner/Applicant shall provide P&D compliance monitoring staff with the names and responsibilities of persons who attended the meeting. ***MM CR-2 Stop Work at Encounter*** In the unlikely event that cultural resources are discovered during project construction, the Owner/Applicant and/or their agents, representatives, or contractors shall stop or redirect work immediately in the event archaeological remains are encountered during grading, construction, landscaping or other construction-related activity. The Owner/Applicant shall retain a County Planning and Development (P&D) approved archaeologist and Native American representative to evaluate the significance of the find in compliance with the provisions of Phase 2 investigations of the County Archaeological Guidelines and funded by the Owner/Applicant. **Plan Requirements and Timing:** This condition shall be printed on all building and grading and restoration/planting/habitat protection plans. **Monitoring:** County P&D permit Processing Planner shall check plans prior to approval of Zoning Clearance, and P&D Compliance Monitoring Staff shall spot check in the field throughout grading and construction. ***MM CR-3 Cultural Phase 2 & 3*** If during implementation of MM CR-2 significant resources are encountered and potential impacts are unavoidable, or if previously undetected resources are discovered during project construction, the Owner/Applicant shall have a P&D-approved archaeologist perform a Phase 2 subsurface testing program to evaluate the nature, extent, and significance of the cultural resources. This evaluation program shall assess each archaeological site consistent with County Archaeological Guidelines and shall include the following: a. Controlled hand excavation and surface collection of a representative sample of the site deposit determined by P&D staff archaeologist or a P&D-approved archaeologist b. A detailed analysis of the material recovered c. An assessment of cultural resource integrity d. The preparation of a final report with recommendations for impact mitigation if necessary If the Phase 2 program finds that one is warranted, the Owner/Applicant shall have a P&D approved archaeologist prepare a Phase 3 data recovery excavation consistent with County Archaeological Guidelines. All work shall be funded by the Owner/Applicant.	

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Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
		Plan Requirements: The Owner/Applicant shall submit the required archaeological studies for P&D review and approval. The Owner/Applicant shall include as notes or depictions all plan components, graphically depicting all those related to earth movement, construction, and temporarily and/or permanently installed protection measures. **Timing**: Notes and/or depictions of plan components shall be included on plans prior to issuance of grading/building permits. The Owner/Applicant shall install any required resource protection measures or carry out required recovery on-site prior to issuance of grading/building permits. **Monitoring**: P&D planning staff shall receive study(s) for review and approval prior to the commencement of construction activities in the vicinity of the cultural resource location. The Owner/Applicant shall demonstrate to P&D Compliance Monitoring Staff that if required protection measures are in place prior to construction, restoration/planting/habitat protection and that any areas identified for protection were not damaged or removed or, if damage or removal occurred, that correction is completed as required by the approved protection plan prior to Final Building Inspection Clearance.	
Cumulative Cultural Resources Impacts	Buildout of the Vandenberg Village area including the off-site habitat restoration proposed for APN 097-371-067 would have the potential to disturb known and unknown cultural resources. However, potential impacts to cultural resources would be addressed on a case-by-case basis through site-specific investigations and, if necessary, surveys, assessment, and documentation or other appropriate mitigation. Project-specific mitigation as discussed above would ensure that the project's contribution to cumulative impacts would be less than significant. Mitigation applied for each specific development project in the area would reduce cumulative impacts to cultural resources to a less than significant level. No additional mitigation measures are required, and cumulative impacts are less than significant.	Impacts would be less than significant. No additional mitigation is required.	Class III (LTS)
Geology and Soils			
Impact GEO-1: Unstable Soils, Steep Slopes, and Erosion	Shallow slope instability could occur on the south side of the site near Oak Hill Drive and along the drainage area if oversaturated conditions occur. However, development of the individual lots would not occur in areas with slopes of 30 percent or greater. Based on the preliminary analysis of the project grading plans and geotechnical reports, impacts related to unstable soils, steep slopes, and erosion at the project site have the potential to result in significant impacts. The off-site mitigation property would not require grading or construction of infrastructure or buildings that would expose such activities to geologic hazards. Proposed habitat restoration activities would include planting native vegetation in areas where invasive weeds have been removed, potentially leaving the ground surface without vegetative cover. However, planting native vegetation in the weed management areas would have the beneficial effect of minimizing the potential for erosion in areas where invasive plants have been removed.	***MM GEO-1 Geotechnical Recommendations*** The applicant shall follow the recommendations contained in the Geotechnical Investigation prepared by GSI Soils, Inc. (January 2015) and the Geotechnical Input (June 2016) prepared by Fugro for the project. Compliance with the recommendations of both reports would ensure that proper foundation and structural design criteria for the Oak Hills Estate project are implemented. These measures are described in detail in the reports and address (1) clearing and stripping; (2) preparation of building pads; (3) preparation of paved areas; (4) structural fill; (5) foundations; (6) slab-on-grade construction; (7) retaining walls; (8) pavement design; (9) underground facilities construction; (10) surface and subsurface drainage; (11) temporary excavations; and (12) percolation testing. **Plan Requirements and Timing**: The Owner/Applicant shall submit the GSI Soils, Inc. (2015) and Fugro (2016) studies for County Planning and Development (P&D) and	Class II (SM)

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Summary of Significant Environmental Analysis Results

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	Compliance with standard County erosion control and drainage requirements during and after construction of the project and adherence to MM GEO-1 and MM GEO-2 would minimize geologic hazards at the residential lots and reduce impacts to less than significant (Class II).	Public Works review and approval. Elements of the approved studies shall be reflected on grading and building plans as required. The Owner/Applicant shall submit the studies prior to approval of a Zoning Clearance. **Monitoring:** P&D staff shall review the GSI Soils, Inc. (2015) and Fugro (2016) studies. The Owner/Applicant shall demonstrate that the submitted plans conform to both required study components. Grading and building inspectors shall ensure compliance in the field. ***MM GEO-2 Erosion and Sediment Control Plan*** Where required by the latest edition of the California Green Code and/or Chapter 14 of the Santa Barbara County Code, a Storm Water Pollution Prevention Plan (SWPPP), Storm Water Management Plan (SWMP), and/or an Erosion and Sediment Control Plan (ESCP) shall be implemented as part of the project. Grading and erosion and sediment control plans shall be designed to minimize erosion during construction and shall be implemented for the duration of the grading period and until regraded areas have been stabilized by structures, long-term erosion control measures, or permanent landscaping. The Owner/Applicant shall submit the SWPPP, SWMP or ESCP using Best Management Practices (BMP) designed to stabilize the site, protect natural watercourses/creeks, prevent erosion, convey storm water runoff to existing drainage systems keeping contaminants and sediments on-site. The SWPPP or ESCP shall be a part of the Grading Plan submittal and will be reviewed for its technical merits by P&D. Information on erosion control requirements can be found in the County Code Chapter 14 – Grading Code (http://sbcountyplanning.org/building/grading.cfm). Information on SWPPP (projects < 1 acre) and/or SWMP requirements can be found in the California Green Code. **Plan Requirements and Timing:** The grading and SWPPP, SWMP, and/or ESCP shall be submitted for review and approved by P&D prior to approval of land use clearances. The plan shall be designed to address erosion and sediment and pollution control during all phases of development of the site until all disturbed areas are permanently stabilized. The SWPPP requirements shall be implemented prior to the commencement of grading and throughout the year. The ESCP/SWMP requirements shall be implemented between November 1st and April 15th of each year, except for pollution control measures, which shall be implemented year round. **Monitoring:** P&D staff shall perform site inspections throughout the construction phase.	
Impact GEO-2: Seismic Hazards	The project site is approximately 5 miles north from the potentially active Santa Ynez River Fault (Fugro 2016). Very loose to loose surficial sands associated with compressible/collapsible soils at the project site would be susceptible to seismic settlement as particles densify during seismic ground shaking. However, the underlying denser sands would be unlikely to experience significant seismic settlement from earthquakes, and incorporation of grading recommendations would reduce the potential for seismic settlement at the site resulting from strong ground shaking. Proposed off-site restoration would not include construction of infrastructure or buildings that would expose people to seismic hazards. In	Refer to MM GEO-1 above.	

Table S-1 Summary of Significant Environmental Analysis Results			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
	addition, implementation of the latest California Building Code design standards during grading and building pad construction at the project site would reduce the hazards from seismic hazards and ground shaking to a less than significant level. Compliance with foundation and design recommendations; proper engineering measures in accordance with existing state and County regulations; adherence with the standard County building permit review and inspection process would reduce geologic hazards and risks. Implementation of MM GEO-1 would further ensure that all building design and structural design recommendations within the Geotechnical Investigation and Geotechnical Input peer review are incorporated into the project to reduce potentially significant impacts related to seismic hazards (Class II impact).		
Impact GEO-3: Liquefaction	Restoration activities at the off-site mitigation parcel would not include grading or construction of structures or infrastructure that would expose people to the risk of liquefaction. Based on the encountered soils at the project site, the absence of groundwater, and dense to very dense sand consistency located up to 50 feet below existing grade, there is very low to low risk for liquefaction and impacts would be less than significant. Furthermore, compliance with the California Building Code would reduce potential risks associated with liquefaction and includes specific requirements to address such hazards. Therefore, impacts would be less than significant (Class III impact).	Impacts would be less than significant. No mitigation is required.	Class III (LTS)
Impact GEO-4: Lateral Spreading and Expansive Soils	The potential for lateral displacements from strong ground shaking at the project site would be minimal due to the presence of dense to very dense soils at depth and the absence of liquefiable soil materials to an interpreted depth of 50 feet below the ground surface. Therefore, no significant hazard associated with lateral spreading at the proposed development exists. Temporary restoration activities at the off-site mitigation parcel would not include grading or construction of structures or infrastructure that would be subject to lateral spreading. In addition, the expansion index testing of project on-site soils as indicating no expansion potential, though clayey sand was encountered in local areas at the site. Compliance and adherence to state and County building and grading codes would minimize risks associated with potentially expansive soils and impacts would be less than significant (Class III impact).	Impacts are less than significant. No mitigation measures are required.	Class III (LTS)
Cumulative Geology and Soils Impacts	The proposed project, in conjunction with other cumulative projects proposed in Vandenberg Village, the unincorporated County area, and City of Lompoc would expose additional people and property to seismic and geologic hazards that exist in the region. The proposed project's off-site restoration mitigation occurring on APN 097-371-067 would not be expected to require grading or construction that would expose life or property to the documented seismic or geologic hazards of this area. The severity of geologic hazards for individual projects would depend upon location, type, and size of development and the specific hazards associated with individual sites. Any specific geologic hazards associated with each individual site would be limited to that site without affecting other areas. In addition, standard County Code regulations and policies, including compliance with CBC requirements, would be	Impacts are less than significant. No mitigation measures are required.	Class III (LTS)

Table S-1 Summary of Significant Environmental Analysis Results			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
	expected to reduce seismic and geologic hazards to acceptable levels. Future projects with potential seismic and geologic hazards would be addressed on a case-by-case basis and be subject to individual California Environmental Quality Act (CEQA) review. Future projects would also be required to adhere and comply with County Code and CBC building and construction regulations to prevent potential significant impacts related to geologic hazards. Therefore, cumulative geologic hazard impacts are not cumulatively considerable and would be less than significant (Class III impact).		
Greenhouse Gas Emissions			
Impact GHG-1: GHG Emissions	Construction and operation of the project would result in the annual emission of 399 MT CO2E. As discussed in Section 4.6.2.2(c), off-site mitigation would include temporary sources of GHG emissions including commute and hauling trips for up to six years, resulting in an overall emission of approximately 17 MT CO2E. Therefore, project construction, operation and restoration efforts would result in emissions that are well below the County recommended San Luis Obispo Air Pollution Control District bright-line threshold of 1,150 MT CO2E, and the project would result in less than significant impacts (Class III impact).	Impacts would be less than significant. No mitigation is required.	Class III (LTS)
Impact GHG-2: Consistency with GHG Plans, Policies, and Regulations	The proposed project includes a request to change to the project site's zoning classification from RR-10 to DR-1.8, which would result in an increase the number of residences that could potentially be developed on the project site. Therefore, the project's expected GHG emissions were excluded from the County's Energy and Climate Action Plan's forecasted 2020 emissions. As described above under Impact GHG-1, the project's estimated GHG emissions of approximately 399 MT CO_2E would be substantially below the threshold of 1,150 MT CO_2E. Therefore, the project would not exceed a threshold of significance determined by the County to be applicable to the project and would be consistent with the County's Energy and Climate Action Plan. Project emissions would decline throughout its life as a result of federal, state and local implementation measures such as increased Federal and State vehicle efficiency standards and PG&E's increase renewable sources of energy in accordance with Renewable Portfolios Standard goals. Based on currently available models and regulatory forecasting, project emissions would continue to decline from 2030 through at least 2050. Given the reasonably anticipated decline in project emissions once fully constructed and operational, the project is in line with the GHG reductions needed to achieve the State's executive order interim (2030) and horizon-year (2050) goals. The project would not impede substantial progress toward long-term GHG goals. As such, the project's impacts with respect to EO B-30-15 and EO S-3-05 would be less than significant (Class III impact).	Impacts would be less than significant. No mitigation is required.	Class III (LTS)

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Cumulative GHG Impacts	Because recently observed increased concentrations of GHGs in the atmosphere are believed to be largely due to human activity taking place throughout the world, the current cycle of "global warming" is quintessentially a global or cumulative issue. The assessment of project GHG emissions in Impact GHG-1 is a cumulative emissions analysis. As concluded above, impacts would be less than significant (Class III impact).	Impacts would be less than significant. No mitigation is required.	Class III (LTS)
Hydrology/Water Quality			
Impact WQ-1: Water Supply and Groundwater Resources	The VVCSD Board will consider the proposed project with water efficiency measures and compliance with the VVCSD water conservation program, and the developer would be required to adhere to VVCSD's terms and conditions and enter into a development agreement in order to obtain a Can and Will Serve letter. Overall, the project would have a water demand of 11.3~~11.6~~ AFY sourced from the Lompoc Uplands groundwater basin, which would not exceed the 1992 County threshold of 12 AFY. Proposed restoration activities (i.e., temporary irrigation of native plants) at the off-site VVCSD open space parcel would temporarily increase water consumption but would not cause the project to exceed the water use threshold of 12 AFY on a long-term basis. While the estimated long-term project water demand would be approximately 0.7~~0.4~~ AFY below County groundwater threshold, the state and County are in declared water emergencies due to severe drought. Therefore, the proposed project could result in an impact on water supplies by contributing to regional water consumption during a severe drought. However, the increase in water consumption resulting from the proposed project would be slight in context of the entire VVCSD service territory and Lompoc Groundwater Basin, and the VVCSD has confirmed that service capacity is available for the project. Additionally, the VVCSD has met the mandated 25 percent statewide water conservation target, and the proposed project is not anticipated to obstruct continued compliance. Therefore, the project would have a less than significant impact to water supply and groundwater resources (Class III).	Impacts would be less than significant. No mitigation is required.	Class III (LTS)
Impact WQ-2: Water Quality Temporary (Construction and Grading)	Grading activities and vegetation removal associated with construction could result in short-term water quality impacts associated with increased erosion and the potential transport of pollutants into drainage swales. If construction grading on the proposed project site occurs during the rainy season or in the event of heavy storms, soils from the site could be entrained, eroded, and transported to drainages within and adjacent to the site. Uncontrolled discharges of sediment are considered a significant impact to water quality. All construction activities disturbing one or more acres exceed the County Environmental Threshold and are subject to the General Permit for Storm Water Discharge Associated with Construction and Land Disturbance activities (Order No. 2009-0009-DWQ), which require preparation of a Storm Water Pollution Prevention Plan (SWPPP) to control the discharge of pollutants, including sediment, into local surface water drainages. As such, the proposed project would be required to prepare a SWPPP, which would minimize water quality degradation through storm water monitoring and establishment of BMPs, erosion control and spill prevention measures, and containment measures.	***MM WQ-1 Storm Water Pollution Prevention Plan (SWPPP)*** The Owner/Applicant shall submit a copy of the Notice of Intent to obtain coverage under the Construction General Permit of NPDES issued by the California RWQCB. **Permit Requirements and Timing.** The Owner/Applicant shall submit proof of exemption of a copy of the Notice of Intent and shall provide a copy of the required SWPPP to the County's Planning & Development and Building & ad Safety Division. The Owner/Applicant shall keep a copy of the SWPPP on the project site during grading and construction activities. **Monitoring.** A County P&D permit processing planner shall review the documentation prior to approval of permits. The County P&D and the County Public Works, Project Clean Water compliance monitoring staff shall inspect the site during construction for compliance with the SWPPP.	Class II (SM)

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	As discussed above, the preparation and implementation of a project-specific SWPPP in accordance with regulatory requirements, including the County's grading ordinance, would serve to avoid or minimize potential water quality impacts during construction. MM WQ-1 would ensure the owner/applicant obtains Construction General Permit coverage and provides documentation to the County. The measure also requires County compliance monitoring staff to monitor the project site for SWPPP compliance during construction. Therefore, project-related impacts to water quality of nearby drainages from construction and grading would be less than significant with mitigation (Class II impact).	***Significance After Mitigation*** With implementation of MM WQ-1, construction-related impacts to water quality would be reduced to a less than significant level (Class II).	
Impact WQ-3: Drainage, Storm Water Flows, and Runoff	The analysis of drainage, storm water flows, and runoff is based upon the Project Drainage Study – Preliminary, Prepared for the Oak Hills Estate (Appendix G-1). A Peer Review of the drainage study was conducted by Rick Engineering in June 2016 (Appendix G-2), and indicated that further analysis and clarification of the project site drainage features should be studied, including boring/percolation tests conducted within the area of the three proposed drainage basins. Boring/percolation tests would provide data necessary to determine anticipated percolation rates and potential measures required to maximize percolation. Although the aforementioned low-impact development (LID) project features and adherence to the required County Storm Water Quality Management Plan (SWQMP) would reduce water quality impacts related to drainage and runoff, approval of the final design of proposed LID features would be required to ensure that project-related impacts to water quality from drainage would be less than significant. Therefore, potential impacts related to drainage on the project site and storm water runoff would be less than significant with implementation of Mitigation Measure MM WQ-2 (Class II impact).	***MM WQ-2 Final Drainage Plan and Drainage Study*** The Owner/Applicant shall submit a Final Drainage Plan and Drainage Study to the Planning & Development Department and the County Flood Control District. The Final Drainage Plan and Drainage Study shall incorporate and assess all additional components as stated in the Peer Review Drainage Report for the Oak Hills Estate, Vandenberg Village, dated June 9, 2016, by Rick Engineering Company (see Appendix G-2). **Plan Requirements and Timing**: The Owner/Applicant shall submit the Final Drainage Plan and Drainage Study to the County Planning and Development and Flood Control District for review and approval prior to issuance of Zoning Clearance for grading. Installation and maintenance of drainage components shall be ensured through a performance security provided by the Owner/Applicant. Long-term maintenance requirements shall be specified in the Oak Hills Estate Homeowners Association (HOA) Covenants, Conditions, and Restrictions. All property owners shall be aware of maintenance requirements. Drainage features shall be installed (landscaped and irrigated subject to P&D and Flood Control District approval) prior to Final Building Inspection Clearance. **Monitoring.** P&D building staff shall oversee drainage installation. The Owner/Applicant shall demonstrate to P&D compliance monitoring staff and Building and Safety grading inspector(s) that all required components of the approved Final Drainage Plan and Drainage Study are in place as required. The installation security shall be released upon satisfactory installation of all items in approved plans. Compliance monitoring staff will review required maintenance records.	Class II (SM)
Impact WQ-4: Impervious Surfaces & Long-Term Water Quality	According to the County Environmental Thresholds for surface and storm water quality, the County has a general urban runoff water quality problem. As such, the proposed project, which would introduce new residential development to an open space area, has the potential to result in significant water quality impacts. Operation of the project could decrease the quality and increase the quantity of storm water runoff due to an increase in impervious surfaces. The project-related use of fertilizers, pesticides, common cleaners, and chemicals, as well as increased litter, pet waste, and other urban waste have the potential to impact runoff water quality. Runoff from driveways and parking areas could introduce oil and other hydrocarbons into drainage facilities that also have the potential to impact water quality. All site runoff from proposed residential lots and roadways would be directed to the project's vegetated roadside swales, which discharge to adjoining	***MM WQ-3 Storm Water Quality Management Plan – Operation*** The Owner/Applicant shall submit and implement a SWQMP designed to prevent the entry of pollutants from the project site into the storm drain system after development. The SWQMP shall identify: a. A combination of structural and non-structural BMPs from the California Storm Water BMP Handbook for New Development and Redevelopment (California Storm Water Quality Association 2003), or other approved methods; b. Potential pollutant sources that may affect the quality of the storm water discharges;	Class II (SM)

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Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
	storm water basins for each of the three drainage subareas on the project site. Proposed MM WQ-3 would require a Storm Water Quality Management Plan (SWQMP) to be prepared and implemented in accordance with County standards. The SWQMP would reduce the operational water quality impact of the proposed project to the maximum extent practical through proper placement of structural and non-structural BMPs and implementation of an inspection and maintenance program. Therefore, impacts to water quality associated with the increase of impermeable surfaces and the introduction of new residential uses on the project site would be less than significant with mitigation (Class II impact).	c. Design and placement of structural and non-structural BMPs to address identified pollutants; d. Inspection and maintenance program; e. Method for ensuring maintenance of all BMPs over the life of the project. **Plan Requirements and Timing:** The Owner/Applicant shall: (1) submit the SWQMP to the Planning and Development Department for review and approval prior to issuance of permits; (2) include design and field components on land use, grading and building plans as applicable; (3) post performance securities prior to issuance of permits to ensure installation and maintenance. SWQMP measures shall be constructed and operational prior to Final Building Inspection Clearance. The Homeowners' Association shall maintain the SWQMP components for the life of the project and keep a record of maintenance and submit the maintenance record to the Planning and Development Department – Compliance Monitoring staff annually between October 1 and 31. The owner/applicant shall record a buyer notification prior to sale of lots that states: "IMPORTANT: BUYER NOTIFICATION" and contains the maintenance requirement language above. **Monitoring:** The owner/applicant shall demonstrate to Public Works, Project Clean Water staff that SWQMP components are in place prior to Final Building Inspection Clearance. The installation security shall be released upon satisfactory installation of all items in approved plans, and the maintenance security shall be released after five consecutive years of satisfactory maintenance and maintenance reporting. ~~Planning and Development Department compliance monitoring staff and~~ Public Works, Project Clean Water staff will review required maintenance records and once approved, provide a copy to the P&D Department compliance monitor.	
Impact WQ-5: Flooding	The entire project site is located outside of FEMA designated 100-year and 500-year flood zones. Furthermore, the project would not be expected to lead to significant upstream or downstream impacts in the floodplain. The proposed drainage and detention basin system would maintain post-project runoff equal to or less than pre-project (existing) conditions. The project site is also located inland, approximately eight miles east from the Pacific Ocean and would not be at risk at inundation or flooding from a tsunami. There are no large open water bodies near the project site that would have the potential to result in a significant seiche impact. The topography of the project site and surrounding area would not be susceptible to potential mudflow impacts. In addition, no dams or levees are located within the project vicinity that would expose people or structures to a significant risk of loss, injury or death involving flooding. Therefore, potential impacts of project development due to flooding would be less than significant (Class III impact).	Impacts would be less than significant. No mitigation is required.	Class III (LTS)
Impact WQ-6: Off-site Restoration Area	Project-related activities on the off-site mitigation parcel would be limited to restoration and habitat maintenance. The plant and seed material used for the off-site restoration may require temporary irrigation until the plants have become established. Temporary irrigation would not require permanent water supply connection to VVCSD nor would it substantially deplete local groundwater basins.	Impacts would be less than significant. No mitigation is required.	Class III (LTS)

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Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
	The off-site mitigation plan would not introduce any impervious surfaces or permanent structures to the off-site mitigation parcel and is not located within any jurisdictional wetlands, waters, streambed or riparian habitats. Therefore, potential impacts of the off-site mitigation plan related to hydrology and water quality would be less than significant (Class III impact).		
Cumulative Hydrology/Water Quality Impacts	**Water Supply and Groundwater.** This project would have a cumulatively significant impact to water supply and groundwater if it were, along with development in the region (see Tables 3-1 and 3-2), to exceed the available water supply of the VVCSD. Historically, the ongoing trends of the Lompoc Groundwater Basin have indicated overdraft. ~~However, r~~Recent publications indicate the Lompoc Groundwater Basin is in a state of overdraft by approximately ~~to be relatively stable and have a surplus of~~ 913 AFY (County of Santa Barbara 2013). ~~Additionally, based~~ Based on the Santa Barbara County 2015–2023 Housing Element, VVCSD has a current water service capacity of 1,800 AFY with a current (2015) usage level of 1,480 AFY. It is estimated that VVCSD can accommodate 617 new additional units (County of Santa Barbara 2015c). The proposed project and other development requiring VVCSD services would contribute to an increased demand for groundwater resources. VVCSD regularly monitors its supply and demand and periodically updates its Strategic Plan to prepare for future constraints, plans for upgrading or expanding water and wastewater infrastructure, and guidance for VVCSD's budget and rate structure. No water-intensive cumulative projects such as residential or agriculture projects were identified within the Vandenberg Village area. However, future or recently completed projects in the Lompoc Valley area would have water-consuming uses, such as the Village Country Club Development, Clubhouse Estates Tract Map, Scoggin/Sundheim Winery Tier II, Archdiocese Queen of Angles, Heritage II Senior Apartments, Pence Ranch Winery, and Santa Rosa Road Tier II Winery. The Burton Ranch Specific Plan and Summit View Homes project are~~is~~ in the City of Lompoc; however, projects within this city also depend on the Lompoc Groundwater Basin for water supply. These projects would be required to adhere and comply with the County Code, VVCSD's water conservation program, and City of Lompoc requirements as applicable, and other applicable water conservation policies. Although cumulative development projects would increase the demand for water resources, the proposed project's water demand would not be cumulatively considerable as it includes 29 homes whose water demand would not exceed the County's threshold of 12 AFY. The off-site mitigation plan for restoration on APN 097-371-067 would also not depend on water supply and demand from VVCSD and would not establish permanent water connections to the service district. Additionally, the proposed project and all other applicable cumulative projects would be required to comply with County Comprehensive Plan Land Use Element Policy 4 and obtain a Letter of Intent/Can and Will Serve letter prior to development, which would ensure availability of groundwater supply and capacity. Therefore, cumulative impacts related to water supply and groundwater would be less than significant (Class III).	Cumulative residual impacts would be less than significant with mitigation (Class II impact).	Class II (SM)

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Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
	Hydrology and Water Quality. The proposed project and development throughout the Vandenberg Village area would have the potential to contribute to hydrological and water quality impacts. Substantial portions of land have the potential to be developed with impermeable surfaces, which would alter drainage patterns, increase peak flows and risk of flooding, and degrade water quality. The proposed project's impacts to hydrology and water quality would be mitigated to less than significant with implementation of mitigation measures MM WQ-1 requiring a SWPPP. All other future development proposals would be subject to similar project implementation requirements such as implementation of a project-specific SWPPP that would reduce hydrology and water quality impacts due to site drainage-related issues, thereby minimizing the potential for significant cumulative impacts to occur. The proposed off-site mitigation on APN 097-371-067 would not introduce impermeable or permanent structures and would not impair cumulative hydrology and water quality in the open space parcel. Through the implementation of federal and state policies with Santa Barbara County and City of Lompoc standards, potential cumulative impacts of cumulative development projects would be minimized. Cumulative impacts related to hydrology and water quality would be less than significant (Class III). **Drainage, Storm Water Flows, and Runoff.** The proposed project and development throughout the Vandenberg Village area would have the potential to contribute to drainage, storm water flows, and runoff impacts. The proposed project would implement LID features and adhere to the required County SWQMP as required by MM WQ-3. In addition, implementation of mitigation measure MM WQ-2 requiring a Final Drainage Plan and Drainage Study would reduce potential impacts related to drainage, storm water flows, and runoff on the project site to less than significant. The proposed project's off-site mitigation on APN 097-371-067 would not introduce structures and would not impair cumulative drainage, storm water flows, and runoff impacts in the off-site mitigation area. All other development projects in the region would be subject to similar requirements to minimize post-construction impacts, thereby reducing the potential for cumulative drainage-related impacts. Therefore, cumulative impacts related to drainage, storm water flows, and runoff would be less than significant (Class III impact). **Impervious Surfaces & Water Quality.** The proposed project and cumulative development throughout the Vandenberg Village area would increase impervious surface in the region. An increase in impervious surfaces and urban uses introduced by cumulative development both decreases the quality and increases the quantity of storm water runoff from impervious surfaces. Runoff from driveways and parking lots could introduce oil and other hydrocarbons and urban pollutants into drainage facilities, thus resulting in potentially significant cumulative water quality impacts. Runoff from the proposed project site would be directed to vegetated roadside swales, which discharge to adjoining storm water basins for each of the three project site drainage subareas. Additionally, implementation of the mitigation measure MM WQ-3 for a SWQMP would further ensure that adequate BMPs are in place to minimize surface water pollution from the proposed project.		

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Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
	Implementation of restoration on the off-site restoration parcel would implement BMPs during planting, would not introduce impervious surfaces, and would therefore not affect water quality in the off-site area. Therefore, the proposed project's incremental contribution to a potentially significant cumulative impact would not be cumulatively considerable. Cumulative impacts related to impervious surface and water quality would be less than significant (Class III impact). **Flooding.** Although the proposed project and off-site mitigation parcel is not within a 100-year flood zone, other future developments within the Vandenberg Village area could include components located within a 100-year flood zone. Future development would be subject to review by the County Flood Control District for compliance with County floodplain development standards. Additional development proposed within a 100-year flood zone, is evaluated on a case-by-case basis and is required to ensure that all structures would not cause increased flooding elsewhere. Therefore, the project's cumulative impacts related to flooding would be less than significant (Class III impact). Cumulative impacts would be less than significant or the proposed project's incremental contribution to a cumulative impact would not be cumulatively considerable following implementation of project-specific mitigation measures detailed above Therefore, no additional mitigation would be required.		
Land Use			
Impact LU-1: Conflict with Plans and Policies	The proposed project would be compatible with the County Comprehensive Plan land use designation and LUDC zoning with approval of the proposed rezone from RR-10 to DR-1.8. Compliance with LUDC Development Plan requirements would ensure that the project would be consistent with the County zoning regulations and development standards. The proposed project is also compatible with the Inclusionary Housing Ordinance, Airport Land Use Plan, and Sustainable Communities Strategy. Future residences would be subject to review by the North County Board of Architectural Review and MM-AES-1 would require modifications to the project's design guidelines, which would ensure project consistency with applicable Comprehensive Plan land use requirements and LUDC regulations. As such, the project would not have a significant impact by creating an inconsistency with an adopted land use plan (Class III impact).	Impacts would be less than significant. No mitigation is required.	Class III (LTS)

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Impact LU-2: Land Use Compatibility	As noted above, the project site is located on the north side of Oak Hill Road, and the surrounding land uses include the Village Country Club Golf Course, Burton Mesa Ecological Reserve, and residential (both single-family and condominium) development. The proposed project would undergo review by North County Board of Architectural Review Board, who would evaluate the project's compatibility with surrounding residences. The proposed rezone would change the current zone district applied to the project property from RR-10 to DR-1.8. The proposed rezone would increase the number of residences that could be developed on the project site from 1 to the proposed 29. Land use compatibility impacts could result from project-related changes in existing environmental conditions, such as traffic generation, noise, interface with adjacent open space, and community character/project features. Development of the project site with 29 single-family residences would not create significant land use compatibility impacts given the features incorporated into the project design and with the noise, aesthetics, biology, and traffic characteristics of the project. No significant land use compatibility conflicts would result at the site or surrounding communities and impacts would be less than significant (Class III).	Impacts would be less than significant. No mitigation is required.	Class III (LTS)
Impact LU-3: Off-site Restoration Area	The proposed off-site mitigation would not cause land use compatibility conflicts related to the adopted plans discussed in Impact LU-1 or land use issue areas discussed in Impact LU-2 above. Implementation of the off-site mitigation would be limited to habitat restoration and enhancement to mitigate for on-site oak and maritime chaparral removal that would result from implementation of the proposed project. The proposed off-site restoration would not require a rezone or comprehensive plan amendment that would cause a land use incompatibility. Though sensitive receptors are located in the single-family residences to the north of the off-site mitigation parcel, the only sources of temporary impact (e.g., noise and traffic related) would be from small-scale vehicles and equipment used during restoration activities. Therefore, potential land use compatibility impacts associated with off-site mitigation on the VVCSD-owned parcel would be less than significant (Class III impact).	Impacts would be less than significant. No mitigation is required.	Class III (LTS)
Cumulative Land Use Impacts	The proposed project would be compatible with the development in the Vandenberg Village Urban Area and consistent with the anticipated land uses for the site as shown in the County Comprehensive Plan. Significant land use-related impacts would not result from the proposed project. Development of each of the proposed lots, as well as future development projects in the project region would be required to undergo a separate application and review process on a case-by-case basis to ensure consistency and compliance with applicable land use requirements. As such, the project's impacts would not be cumulatively considerable and would be less than significant from a cumulative perspective as well (Class III impact).	Impacts would be less than significant. No mitigation is required.	Class III (LTS)

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Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
Noise			
Impact N-1: Noise Standards	**On-site Noise Sources** Project-related daytime noise sources after completion of construction are anticipated to be typical of residential uses, such as vehicles arriving and leaving, children at play, and landscape maintenance machinery, which would not violate the noise level limits of the County Ordinance Code or result in a substantial permanent increase in existing noise level. Heating, ventilation, and air conditioning (HVAC) units with exterior condensers have the potential to produce noise in excess of Ordinance Code limits. However, given the 10-foot side yard setbacks, it is not anticipated that the HVAC units would be located closer than six feet from the property line; therefore, the units would be consistent with the County's night-time noise level limit of 60 dB(A) L_{eq} within 6 feet of a property line. The proposed project's off-site mitigation area would be limited to habitat restoration and enhancement and would not result in on-site noise sources. Impacts associated with noise would be less than significant (Class III impact). **On-site Traffic Noise** Traffic noise sources in the vicinity of the project site include Oak Hill Drive, a residential street with a speed limit of 25 mph that should not accommodate traffic volumes of more than 5,000 ADT based on Circulation Element policy capacity requirements. Under a maximum traffic volume of 5,000 ADT, noise levels on Oak Hill Drive would attenuate to 58 L_{dn} or below within the roadway right-of-way. As the project site would not be exposed to traffic noise levels in excess of the exterior noise compatibility threshold of 65 dB L_{dn} established in the Santa Barbara County Comprehensive Plan, the project would be compatible with the existing and future noise environment. Impacts would be less than significant (Class III impact).. **Off-site Traffic Noise** The project would increase traffic volumes on local roadways and thereby increase noise levels associated with those roadways. Noise level increases would be greatest nearest the project site, as this location would subject to the greatest concentration of project-related traffic. A significant impact would occur if the project resulted in a significant increase in the existing ambient noise levels. Based upon the Traffic & Circulation Study for the proposed project (Appendix I-1), the project would generate approximately 276 trips per weekday, which would not result in a noise increase of 3 dB(A) or greater, which is the minimum change in sound level that would be perceivable to the human ear and under the 5 dB(A) County threshold for change in ambient noise. Off-site mitigation would be limited to habitat restoration and enhancement and would not result in a permanent increase in traffic volumes on local roadways. Thus, potential noise level increases would also not result in high permanent noise levels that could impact off-site noise sensitive receivers. Impacts would, therefore, be less than significant (Class III impact)..	Impacts would be less than significant. No mitigation is required.	Class III (LTS)

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Impact N-2: Groundborne Noise and Vibration	The project and off-site mitigation would not require blasting or pile driving. Therefore, project-related construction would not expose persons to excessive ground-borne noise or vibration. Project operations (e.g., residential use) and habitat restoration at the off-site mitigation area would not include any substantial sources of groundborne noise and vibration. Impacts would be less than significant (Class III impact).	Impacts would be less than significant. No mitigation is required.	Class III (LTS)
Impact N-3: Permanent Noise Level Increases	As discussed previously in Impact N-1 above, the project would result in new residential land uses and associated noise sources, including traffic, that are similar to existing nearby uses and would not result in a substantial increase in the ambient noise levels. Off-site mitigation would be limited to habitat restoration and enhancement and would not increase traffic volumes on local roadways or result in new on-site noise sources. Therefore, the increase in noise levels would not be perceptible and would not result in a substantial increase in ambient noise levels. Impacts would be less than significant (Class III impact).	Impacts would be less than significant. No mitigation is required.	Class III (LTS)
Impact N-4: Temporary Noise Level Increases	Implementation of proposed off-site mitigation would not require the use of heavy-duty construction equipment. On-site project construction would include the use of common construction equipment such as graders, dozers, excavators, etc., which may generate substantial noise levels. There are residential uses within 100 feet of the eastern and southern edge of the project disturbance area (i.e. where grading and construction will occur), which may result in significant impacts per the County's thresholds. **MM N-1** is proposed to limit the construction and restoration schedule to reduce noise impacts on sensitive receptors. Therefore, impacts associated with temporary noise level increases would be less than significant with mitigation (Class II impact).	**MM N-1: Construction Hours** The Owner /Applicant, including all contractors and subcontractors shall limit construction activity, including equipment maintenance and site preparation, to the hours between 7:00 A.M. and 4:00 P.M. Monday through Friday. No construction shall occur on weekends or state holidays. Non-noise-generating interior construction activities such as plumbing, electrical, drywall and painting (which do not include the use of compressors, tile saws, or other noise-generating equipment) are not subject to these restrictions. Any subsequent amendment to the Comprehensive General Plan, applicable Community or Specific Plan, or Zoning Code noise standard upon which these construction hours are based, shall supersede the hours stated herein. **Plan Requirements and Timing:** The Owner/Applicant shall provide and post a sign stating these restrictions at all construction site entries. Signs shall be posted prior to commencement of construction and maintained throughout construction. **Monitoring:** The Owner/Applicant shall demonstrate that required signs are posted prior to grading/building permit issuance and pre-construction meeting. Building inspectors and permit compliance staff shall spot-check and respond to complaints.	Class II (SM)
Impact N-5: Aircraft Noise Level Increases	The project site is approximately 3.7 miles north of Lompoc Airport and 6.4 miles from the Vandenberg Air Force Base. As discussed in Section 4.9.1.2, the project site is outside the 60 CNEL compatibility contour for both airports. Less than significant impacts would result.	Impacts would be less than significant. No mitigation is required.	Class III (LTS)
Cumulative Noise Impacts	***Construction Noise*** Noise is a localized issue and attenuates rapidly with distance. Therefore, only future development projects in the vicinity of the project site could add to construction noise generated by the project and result in a cumulative noise impact. The only cumulative development project identified on EIR Table 3-1 located in the vicinity of the project site is the Village Country Club project, which would result in the development of 14 residential units. The Clubhouse Estates project currently	Impacts would be less than significant. No mitigation is required.	Class III (LTS)

Table S-1 Summary of Significant Environmental Analysis Results			
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	under construction is located immediately north of the off-site mitigation area on APN 097-371-067 and would result in the development of 52 residential units. Mitigation measure **MM N-1** would ensure that construction noise associated with the proposed project would be limited to daytime hours, consistent with County standards. Similarly, construction noise from other cumulative projects would be mitigated by limiting construction to daytime hours on weekdays. The habitat restoration and enhancement occurring at the off-site mitigation area on APN 097-371-067 would not require the use of heavy-duty construction equipment and, therefore, would not generate a substantial noise levels. Therefore, cumulative noise impacts would be less than significant (Class III impact). ***On-site Noise Sources*** The areas surrounding the project site include developed residential areas, a golf course, and dedicated open space areas. The areas surrounding the off-site mitigation area located approximately 1 mile southeast of the project site include open space and roadways with single-family residences to the north. Based on noise measurements taken near the project site, ambient daytime noise conditions in the project area (51–54 dB(A) Leq) are relatively low. One cumulative development project identified on EIR Table 3-1 located in the vicinity of the project site is the Village Country Club project, which would result in the development of 14 residential units. Another cumulative development project currently under construction located immediately north of the off-site mitigation area on APN 097-371-067 is the Clubhouse Estates project with 52 residential units. The off-site mitigation area would not result in new on-site noise sources. The additional residential uses that may be developed in the project area and by the off-site mitigation area could result in additional noise sources that are similar to other residential uses in the project area, and are not expected to be substantial long-term source of noise. Given the surrounding residential and open space characteristics of the project and off-site mitigation area, it is unlikely that future cumulative development would result in a significant long-term increase in existing ambient noise levels in the vicinity of the project site. As such, cumulative noise impacts would be less than significant. ***Traffic*** As discussed under Impact N-1 and N-3, the addition of a maximum of 276 trips to roadways in the project area would not result in a noise increase of 3 dB(A) or greater. Additionally, for roadways included in the traffic study area, when comparing existing traffic volumes to cumulative plus project volumes, there would not be a doubling in traffic volumes. Therefore, cumulative plus project traffic conditions would not result in a noise increase of 3 dB(A) or greater. In addition, off-site mitigation on APN 097-371-067 would be limited to habitat restoration and enhancement. Off-site mitigation would result in a limited short-term increase in traffic volumes during restoration and no permanent increase traffic volumes on local roadways. The increase in traffic noise levels resulting from cumulative traffic conditions would not be perceptible and would not result in a substantial increase in ambient noise levels. Cumulative noise impacts would be less than significant.		

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Public Services and Utilities			
Impact PSU-1: Public Schools	At the present time, LUSD has limited district-wide information regarding individual school capacity status. However, LUSD produced a 2016 Developer Fee Justification Study, containing existing school site capacity information by grade levels (Spectrum 2016). The LUSD is projected to have a deficit in capacity for grade levels K-6 and is anticipated to have available capacity for all other grade levels based on State guidelines. As detailed in Table 4.10-6, the project is projected to yield approximately 7 students in grades K-6, 2 students in grades 7–8, and 6 students in grades 9–12, for a total of 15 students in grades K-12. As such, the proposed project would not generate the number of students to necessitate funding of an additional school room based on the County Interim School Threshold of 29 students for elementary/middle school and 28 for high school students. The proposed project would also be required to pay the LUSD Statutory Level 1 fees for new residential development. As such, the project would be consistent with applicable state and County policies related to school capacities and facilities and therefore, impacts to school facilities would be less than significant (Class III impact).	Impacts would be less than significant. No mitigation is required.	Class III (LTS)
Impact PSU-2: Water Supply	See Hydrology and Water Quality.	Not Applicable (N/A)	N/A
Impact PSU-3: Wastewater	The project would be served by the VVCSD's existing wastewater collection system. Collected wastewater is treated at the City of Lompoc Regional Wastewater Reclamation Plant. VVCSD has a current wastewater service capacity of 0.89 MGD and a current usage level of 0.5 MGD. Based on current capacity and wastewater generation characteristics, it is anticipated that the VVCSD can serve an additional 2,600 residential units. The project proposes the construction of 29 new single-family residences and would not cause impairment on the existing wastewater treatment facilities. Therefore, no expansion of existing wastewater treatment facilities is required and project impacts to existing wastewater facilities and capacity would be less than significant (Class III impact).	Impacts would be less than significant. No mitigation is required.	Class III (LTS)
Impact PSU-4: Solid Waste	**Short-Term Waste from Construction** Based on the County waste generation rates for new residential construction multiplied by the range of square footage of new residential development on the project site, the project would generate an estimated 1,044,000 to 1,392,000 pounds (522 to 696 tons) of construction-related waste. This exceeds the County threshold of 350 tons of construction and demolition debris that is considered to have a significant impact on County public services and landfills. Impacts would be significant but mitigable with implementation of a solid waste management plan and construction recycling of at least 50 percent (Class II impact). With the implementation of a construction waste recycling/diversion plan that reduces waste disposal by at least 50 percent, the project would dispose of approximately 261 to 348 tons of construction waste, which is under the County threshold.	***MM PSU-1: Solid Waste – Recycle*** The Owner/Applicant and their contractors and subcontractors shall separate demolition and excess construction materials on-site for reuse/recycling or proper disposal (e.g., concrete, asphalt, wood, brush). The Owner/Applicant shall provide separate on-site bins as needed for recycling. **Plan Requirements and Timing**. The Owner/Applicant shall print this requirement on all grading and construction plans. Owner shall provide P&D with receipts for recycled materials or for separate bins. Materials shall be recycled as necessary throughout construction. All materials shall be recycled prior to Final Building Inspection Clearance. **Monitoring**. The Owner/Applicant shall provide P&D compliance staff with receipts prior to Final Building Inspection Clearance.	Class II (SM)

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	Long-Term Waste Generation During Occupancy Waste generation during project occupancy is based upon the following County generation rates for residential projects. The residential per capita waste generation rate in the County is 0.95 tons (1,900 pounds), including interior and exterior waste. The average household occupancy rate in Vandenberg Village is 2.58 people. Following the County Environmental Thresholds and Guidelines Manual formula for waste generated from project occupancy, the project's solid waste generation would be 71 tons/year. This long-term generation of solid waste would not exceed the County's significance threshold of 196 tons per year. Further, the estimated 71 tons of solid waste generated by the project per year would be reduced to approximately 36 tons per year with state and local recycling policies and implementation measures in place. While the long-term operational solid waste impacts from the project would be less than significant, construction impacts would exceed the County thresholds. Therefore, the solid waste impact would result in a less than significant impact with mitigation (Class II impact).	***MM PSU-2: Solid Waste – Construction Site*** The applicant shall provide an adequate number of covered receptacles for construction and employee trash to prevent trash and debris from blowing off-site, shall ensure waste is picked up weekly or more frequently as needed, and shall ensure site is free of trash and debris when construction is complete. **Plan Requirements**. All plans shall contain notes that the site is to remain trash-free throughout construction. **Timing**. Prior to building permit issuance, the applicant shall designate and provide Planning and Development (P&D) with the name and phone number of a contact person(s) responsible for trash prevention and site clean-up. Additional covered receptacles shall be provided as determined necessary by P&D. **Monitoring**. Permit compliance monitoring staff shall inspect periodically throughout grading and construction activities and prior to Final Building Inspection Clearance to ensure the construction site is free of all trash and debris.	
Impact PSU-5 Police Protection, Emergency Services, and Other Facilities	The proposed project would accommodate approximately 75 residents. This new development and increase in population would not have a significant impact on existing police protection or other public facilities. Existing levels of service for police protection and fire protection (see Section 4.12) are adequate to serve the additional demand. The state and County have plans and policies in place for adequate police and healthcare facility planning, including the County Emergency Medical Services Plan and the MJHMP, which are all regularly updated. Additionally, the project would not interfere with emergency and evacuation routes, as proposed streets would be constructed with the proper widths and turnarounds, and the project would comply with the appropriate vegetation clearance and signage standards to facilitate emergency access. Because the proposed project would result in a negligible increase in demand on police, health, emergency, and other services, impacts would be less than significant (Class III impact).	Impacts would be less than significant. No mitigation is required.	Class III (LTS)
Cumulative Public Services Impacts	***Public Schools*** Cumulative projects could potentially result in a need for additional schools to serve the development in the project area. Under the County Interim School Threshold, the project's student generation would not be cumulatively considerable, because its contribution to school impacts would not be significant. Additionally, all new development would be required to pay proportional development impact fees to the County and City of Lompoc for schools. Therefore, cumulative impacts to schools would be less than significant (Class III impact). ***Wastewater Facilities*** The proposed project in conjunction with other projects occurring in the service area of the VVCSD could result in a cumulative increase in the demand for wastewater services if they cause the VVCSD to exceed its contractual entitlement to the LRWRP capacity, thus requiring the construction of additional wastewater	Impacts would be less than significant. No mitigation is required.	Class III (LTS)

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Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
	facilities. However, VVCSD has indicated that adequate facilities and capacity exist to serve the proposed project and regularly updates long-range management plans to prepare for future facility upgrades. New residential units resulting from the proposed and cumulative projects located in the VVCSD service area identified previously in Table 3-1 would not result in an exceedance of the available wastewater service capacity of the VVCSD. Because no new wastewater facilities are required for the project, cumulative impacts to wastewater treatment facilities would be less than significant (Class III impact). ***Solid Waste Management*** Cumulative projects would increase solid waste disposal and management needs within the region both in the short term through construction debris and in the long term through project occupancy or operation. Either new landfill facilities and/or recycling facilities could be needed to meet the anticipated disposal needs of the cumulative projects. The construction and operation of new waste management facilities would have the potential to result in significant environmental impacts. However, the County Environmental Thresholds and Guidelines states that projects that generate less than 40 tons per year of solid waste would not be considered to have an adverse effect due to the small amount of solid waste generated and the existing waste reduction provisions in the SRRE. As discussed previously, development of the Oak Hills Estate project would not exceed the County's 40-ton per year cumulative threshold for long-term solid waste disposal. Therefore, the project's incremental contribution to cumulative solid waste management impacts would not be cumulatively considerable, and a less than significant impact would result (Class III impact). ***Police Protection, Emergency Services, and Other Facilities*** Cumulative projects could result in a need for additional law enforcement, healthcare, emergency, and other services due to increased demand. The projects listed in Table 3-1, Cumulative Projects List, include four residential projects in the Vandenberg Village area, which when combined with the proposed project would have a cumulative total of 179 residential units. This increase in residences would consequently increase demand on public services. However, the proposed project would not exceed the Sheriff's established service goal of one officer per 1,200 people, and the proposed project's incremental increase on the demand for police services would not be cumulatively considerable. Additionally, the County of Santa Barbara Emergency Medical Services Plan confirms that Santa Barbara County is meeting the minimum standards and in many cases exceeding recommended guidelines. Therefore, the existing emergency medical services are anticipated to be adequate to meet the needs of the cumulative projects. Cumulative projects would also have the potential to impair emergency response capabilities and evacuation plans. This could occur from an increase in population that emergency response teams are unable to service adequately in the event of a disaster; or evacuation route impairment if multiple development projects concurrently block multiple evacuation or access roads. However, each of the		

Table S-1
Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
	cumulative projects would be reviewed to ensure that sites are designed with appropriate access. Compliance with existing regulations would ensure that impacts related to emergency response relative to the proposed project are less than significant. Similarly, cumulative projects would be required to comply with applicable emergency response and evacuation policies outlined in regulations such as the California Emergency Services Act and local fire codes. Regardless, the proposed project's incremental contribution to impacts on emergency and evacuation plans would not be cumulatively considerable due to its relatively small scale (29 single-family residential units). Therefore, less than significant impacts would result (Class III impact). Because no new school or public services/facilities are required to serve the project's off-site mitigation in conjunction with other potential off-site mitigation efforts in the cumulative study area, cumulative impacts to public services and facilities from the proposed off-site mitigation would be less than significant (Class III impact). ***Off-site Restoration*** The proposed project's off-site mitigation on APN 097-371-067 is strictly limited to habitat restoration and enhancement activities and would not develop any residential, commercial, or industrial land uses on the off-site mitigation parcel. No irrigation or permanent structures would be installed at the site as part of the off-site mitigation plan. As such, implementation of the Offsite Mitigation Area Baseline Biological Report and Conceptual Mitigation Plan (Rincon 2016a) would not necessitate or require additional infrastructure to be built on the off-site mitigation area. Additionally, there would be no potential for the off-site mitigation parcel to result in additional student growth for local school districts, dependence on local water supply, wastewater, and solid waste providers, and would not require additional police and emergency services or facilities. Therefore, the off-site mitigation plan would not induce population growth or require additional infrastructure, and impacts and cumulative impacts associated with public services and utilities with the off-site mitigation plan would be less than significant (Class III impact).		
Transportation and Circulation			
Impact T-1: Impacts on Roadways	With the addition of project-generated traffic, roadway segments in the Vandenberg Village area would continue to operate at LOS A. The proposed off-site restoration would require a small number of staff (six to eight maximum) to be transported daily to and from the off-site mitigation parcel, resulting in a maximum of approximately six roundtrips per day. Considering the limited trip generation of the proposed project and off-site restoration, traffic impacts would be less than significant. The project would not generate a substantial amount of traffic and would not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system for roadways. Therefore, project impacts to the operation of roadways would be less than significant (Class III impact).	Impacts would be less than significant. No mitigation is required.	Class III (LTS)

Table S-1
Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
Impact T-2: Impacts on Intersections	The small increase in traffic resulting from off-site restoration (e.g., approximately 6 trips per day) would not contribute to substantial delays or otherwise significantly impact area intersections. With the addition of project-generated traffic, the study area intersections would continue to operate at LOS B or better during the AM and PM peak hours, which is acceptable based on the County's LOS C standard. Thus, the project would also not conflict with an applicable plan, policy, or ordinance establishing measures of effectiveness for the performance of the circulation system for intersections. Therefore, project impacts to the operation of local intersections would be less than significant (Class III impact).	Impacts would be less than significant. No mitigation is required.	Class III (LTS)
Impact T-3: Conflicts with Existing Plans (CMP)	The project does not propose new residential land uses beyond what could currently be developed under the project site's existing Comprehensive Plan land use designation RES-12.3. The project would add an average of approximately 276 average daily trips and would be located on a parcel with access to existing County roads, and State Route 1. The Purisima Road– State Route 1/Harris Grade Road intersection is the only intersection in the vicinity of the project site that is included in the County's congestion management plan (CMP) network. The intersection currently operates in the LOS C range and no change to LOS would occur under the cumulative conditions after improvements from the Burton Ranch project in the City of Lompoc are implemented. Therefore, the proposed project would not result in an impact at an intersection covered by the County's CMP and would not conflict with the CMP. Impacts would be less than significant (Class III impact).	Impacts would be less than significant. No mitigation is required.	Class III (LTS)
Impact T-4: Traffic Hazards, Emergency Access, and Parking	The project would be subject to the County's roadway design standards, County Code, and California Fire Code emergency access requirements, as well as the County Comprehensive Plan goals and policies related to traffic safety and parking. **a. Traffic Hazards and Emergency Access.** The preliminary site plan indicates that access to the project site is proposed via three driveway connections to Oak Hill Drive and three residential units (Lots 27-29) having direct access from Oak Hill Drive. The Traffic and Circulation Study determined that both the stopping and corner sight distance requirements (275 feet for 25 miles per hour [mph]) appear to be satisfied for all proposed project driveway connections, with the exception of the center driveway connection to Oak Hill Drive which is located on a sag curve and may restrict sight distance to the east depending on roadway shoulder slope and vegetation height. Implementation of MM TRAF-1 is proposed to address impacts associated with traffic hazards at this driveway connection. Therefore, impacts would be less than significant with mitigation (Class II impact). **b. Airport Traffic Hazards.** The project site is located approximately 3.85 miles north of the Lompoc Airport and 6.5 miles east of the Vandenberg Air Force Base. The project site is not located within the Lompoc Airport or Vandenberg Air Force Base safety zone areas. As such, the project would not result in impacts related to air traffic patterns or safety risks. Therefore, project impacts to air safety would be less than significant (Class III impact).	***MM TRAF-1 Sight Distance Study*** Sight distance requirements at the center project driveway connection to Oak Hill Drive shall be reevaluated in a study prepared by a County-approved consultant or engineer once a more detailed site plan is developed to ensure traffic safety. **Plan Requirements and Timing:** The line of sight analysis shall be conducted when detailed site plans are available and shall be approved by the County Planning & Development Department (P&D) and County Public Works Transportation Division. **Monitoring:** The County P&D processing planner and Public Works transportation engineer shall check sight analysis prior to approval of permit issuance, and P&D Compliance Monitoring Staff shall spot check in the field throughout grading and roadway construction.	Class II (SM)

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Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
	c. Parking. The County Land Use and Development Code (Chapter 35.36) specifies parking standards for the residential uses. For one-family dwelling units, the number of parking spaces required under Section 35.36.050 of the County Code is two spaces per dwelling unit. Thus, the County's parking requirements for the project's 29 units would be 58 parking spaces. The Oak Hills Estates Design Guidelines (Appendix C-1) indicate that each residence will require a minimum of four off-street parking spaces, with a minimum of two of the four off-street parking spaces to be located within a garage ~~or a separate off-street guest parking area~~. Therefore, the project would provide double the County Code requirements for residential off-street parking, resulting in a total of 116 parking spaces. In addition, as discussed in detail in Chapter 2, Project Description, and as shown in Figure 2-4, project Development Site Plan, the number of proposed on-street guest parking spaces consists of 21 spaces on "Road A" and eight spaces on "Road B". No street parking is proposed on Oak Hill Drive. No significant impacts related to parking would occur as the project provides sufficient parking and guest parking spaces (Class III impact). **d. Need for New Roads or Road Maintenance.** As detailed under Impact T-1 and T-2, a limited amount of traffic would be generated by the project and off-site restoration that would use local roadways and intersections. The proposed project would not result in significant impacts to public streets that would require the construction of additional new roads or a significant amount of increased roadway maintenance. As such, impacts would be less than significant (Class III impact).		
Impact T-5: Alternative Transportation Modes	The existing roadways in the vicinity of the project site provide pedestrian opportunities; however, sidewalks are intermittent along the majority of the north side of Oak Hill Drive along the project site boundary. Sidewalks are present primarily along the southern side of Oak Hill Drive adjacent to existing residential development and the project proposes to construct sidewalk paths along the north side of Oak Hill Drive along the project site and on Roads A and B to increase pedestrian access and safety along the roadway. The City of Lompoc (City) provides public transit bus services to the project area through its "COLT" routes. The nearest bus stop is located within 0.50 mile to the east of the project site, located at the intersection of Titan Avenue and Vanguard Drive. No designated bike routes are located in the immediate vicinity of the project site. The nearest bike route is the Caltrans Pacific Coast Bike Route, which runs along State Route 1 southwest of the project site along Lompoc–Casmalia Road as a Class II bike lane and is located approximately 1 mile south of the project site as its nearest point. The proposed project would not affect any existing alternative transportation facilities during construction or following construction. In addition, the project would improve pedestrian access with the sidewalks designed along Oak Hill Drive and Roads A and B. Therefore, impacts related to alternative transportation modes would be less than significant (Class III impact).	Impacts would be less than significant. No mitigation is required.	Class III (LTS)

Table S-1
Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
Cumulative Traffic Impacts	Tables 4.11-10 through 4.11-12 indicate that the study area roadways and intersections would operate in the LOS A-B range under AM and PM cumulative and cumulative plus project conditions. In addition, implementation of the off-site mitigation plan for restoration would not add any permanent additional traffic to the area on APN 097-371-067. Only temporary vehicle trips for initial restoration efforts, maintenance, and monitoring would add approximately six roundtrips daily but would not add any development that would add a permanent increase in traffic to the area roadways. Therefore, the project and proposed project's off-site mitigation plan would not exceed the County's LOS thresholds and cumulative impacts on project roadways and intersections would be less than significant (Class III impact).	Impacts would be less than significant. No mitigation is required.	Class III (LTS)
Fire Protection			
Impact FP-1: Wildland Fire Hazards	The project site is ranked through CAL FIRE's Fire and Resource Assessment Program (FRAP) as being located within a High Fire Hazard Severity Zone (HFHSZ), characterized by dense vegetation and steep slopes. Construction would result in the potential for accidental ignition of a wildfire due to sparks or heat from heavy equipment interacting with vegetation on-site, which would be exacerbated during the dry season and/or high winds. The risk of fire ignition from construction activities in a HFHSZ results in a potentially significant impact. However, implementation of mitigation measure MM FP-1 as part of the project will ensure that standard fire protection and avoidance procedures implemented during construction for each phase of development and each individual lot. Potential wildfire impacts from construction of the project would be significant and mitigated (Class II impact). Future development of new residential structures on the project site would expose approximately 75 additional people and structures to a significant risk of loss, injury, or death involving wildland fires. Occupancy of these homes would also introduce additional sources of wildland fire ignition due to the increase in human activities. The proposed project's Open Space Management Plan (OSMP) and design guidelines include landscaping and fire safety design measures, propose fuel management zones and procedures that are to be implemented, identify defensible space areas to be managed by the project's HOA, ~~, and indicate that the first 0-15 feet of defensible space adjacent to future residences are to be managed by property owners.~~ However, inadequate maintenance of the 30-foot~~first 15 feet of~~ defensible space by property owners could potentially result in an increased risk of structure or exterior fires that could lead to a wildfire and is a potentially significant impact of this project. Implementation of mitigation measure MM FP-2 requiring adherence to SBCFD Development Standard 6 through development of a stand-alone fuel management plan and coordination with SBCFD pertaining to the adequacy of HOA maintenance, management, and implementation of fuel management strategies would ensure that the potential structural fire and wildfire impacts related to occupation of future homes at the project site wildland-urban interface would be mitigated to less than significant levels (Class II impact).	**MM FP-1 Construction Fire Protective Measures** To reduce the risk of fires from project construction and off-site restoration activities, the following measures shall be implemented to reduce the potential for vegetative fires resulting from the use of construction equipment, welding, vehicles with catalytic converters, etc. These requirements include but are not limited to: 1. On-site supervisor(s) shall have a cell phone or other means of initiating a 911 response time in a timely manner in the event of a medical emergency and/or fire; 2. Personnel shall be briefed on the dangers and causes of wildfire and be able to respond accordingly should the need arise; 3. All equipment with the potential to work off-road shall be equipped with appropriate mufflers and have extinguishers mounted on each vehicle; 4. All dead and decadent vegetation immediately surrounding the facility should be removed, and soil disturbance should be kept at a minimum; 5. A water tender will be available on each construction site during the entire phase of construction; 6. A knowledgeable water tender operator shall be available on-site during all construction and remain on-site a minimum of 30 minutes after all construction has concluded for the day; 7. Hot work permit is required when necessary; 8. Smoking shall be prohibited or limited to a designated area and/or enclosed off-site area only; and 9. Any additional requirements deemed applicable by the SBCFD or County Planning and Development Department. **Plan Requirements and Timing:** The contractor shall include the provisions for construction fire protection on all grading and building plans. The name and number(s) of on-site supervisor(s) shall be provided to the SBCFD and County Planning and Development (P&D) prior to commencement of any construction or	Class II (SM)

Table S-1 Summary of Significant Environmental Analysis Results			
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
	Implementation of MM FP-3 requires revisions to the design guidelines for consistency with the fuel management provisions of MM FP-1 and MM FP-2 and to accurately reflect the revised project FMZ 1: 0–30 feet and FMZ 2: 30–100 feet will ensure that the design of residences including development envelope boundaries, landscaping, fuel management plan, and future design guidelines amendments by the HOA remain consistent throughout the life of the project.	grading activities. All fuel ignition protection measures shall be implemented throughout construction. **Monitoring:** The County P&D and Building and Safety Division shall ensure that measures are on plans prior to issuance of any land use permits and grading permits. Designated monitoring staff shall spot check for compliance during construction for each phase of development and individual lot development.	
		MM FP-2 Fuel Management Plan To mitigate the potential impact associated with residential development within the designated HFHSZ, the Owner/Applicant shall prepare a stand-alone fuel management plan that meets all SBCFD Development Standards. The fuel management plan shall describe all actions that will be taken to reduce wildfire~~life~~ risks to the structures and lots on the project site. The plan shall incorporate the fuel management strategies proposed in the OSMP to be implemented by the HOA, including: 1. Impacts associated with fuel management shall be confined to the specified fuel management zones. 2. Vegetation within proposed fuel management zones shall be thinned by removing vegetation in a mosaic pattern, which would result in reduced plant density or aerial coverage rather than completely clearing the vegetation. This shall be implemented to the maximum extent possible. 3. Fuel management thinning shall focus on the removal of non-native, diseased, dying, or dead vegetation and on faster growing species (e.g., coyote brush and deerweed) rather than slower growing species (e.g., manzanitas). 4. Removal of sensitive plant species and oak trees shall be avoided to the extent feasible. Prior to the onset of vegetation clearing, highly visible orange construction fencing shall be installed at a buffer/extent radius of 10 feet from vegetation to be retained, wherever feasible, or otherwise marked in the field to protect them from inadvertent harm during vegetation thinning activities. 5. All such maintenance activities shall be completed using hand tools only. 6. One week prior to any fuel management activities located within the open space lot that will be selectively pruned and thinned (FMZ-2), a qualified biologist approved by the County shall demarcate coastal buckwheat avoidance areas. 7. Avoidance areas shall be demarcated in the field with protective fencing installed at an appropriate distance that would not disturb the plant or the underlying leaf litter.	

Table S-1
Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
		8. The intent of the avoidance areas is to document the location(s) and number(s) of any and all host plants for the federally endangered El Segundo blue butterfly so that fuel management activities can successfully avoid impacts to the life cycle of this species. 9. Should avoidance prove infeasible, relocation and/or off-site restoration to an appropriate receiver site approved by the County shall be undertaken at the appropriate ratios only after take authorization has been secured from the U.S. Fish and Wildlife Service through Section 10 of the FESA. ~~8.~~10. Mitigation measures and ratios for p~~P~~ermanent impacts to the El Segundo blue butterfly's host plant shall be contingent upon USFWS guidance and the final Habitat Conservation Plan measures.~~that are authorized by the U.S. Fish and Wildlife Service shall be salvaged (including underlying litter and soils) and relocated to an approved location. Mitigation for host plants shall be provided at a minimum ratio of 2:1.~~ 11. Protective fencing and signage (stating to keep out of the area) would be placed between the spikerush emergent wetland and the proposed development (specifically located at a lower elevation on the development side of the topographical divide) that separates the wetland from the adjoining areas of the project site). Also depict the type and location of protective fencing on the project site to prevent trespass onto the adjacent Burton Mesa Ecological Reserve. In addition, the plan shall, at a minimum, include the following additional requirements: •1. Copy of the site plan that indicates topographic reference lines; •2. Copy of the landscape plan and areas where fuel management activities are to occur; •3. Methods to confine fuel management activities to the specified fuel management zones. •4. Methods and timetables for implementing the proposed fuel management activities on the residential lots and open space lot; •5. Description of water supply, defensible space, fuel modification/vegetation management, emergency ingress and egress, access, special event parking, and resident and visitor safety; and •6. Maintenance schedule for the landscape/vegetation management plan. **Plan Requirements and Timing:** A fuel management plan that at a minimum contains the above-listed components shall be submitted to the SBCFD and the County P&D for review and approval prior to ~~building permit~~ zoning clearance approval for~~of~~ building permits. SBCFD shall review the HOA's implementation plan, conditions, and strategies for the long-term maintenance of the fuel management	

Table S-1
Summary of Significant Environmental Analysis Results

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation (SU) Significant Unavoidable (SM) Less than Significant with Mitigation (LTS) Less than Significant
		zones for adequacy and consistency with applicable state and County requirements. **Monitoring:** The SBCFD and P&D Permit Compliance shall inspect to verify that all landscaping and open space areas and landscaping maintenance and fuel management activities are in compliance with the plan. Inspections will occur once prior to issuance of occupancy permits and annually each year or on as-needed during each season to monitor landscape maintenance. The HOA shall ensure that the fuel management zones are properly managed and maintained in safe conditions and report to the County consistent with SBCFD requirements. ***MM FP-3 Oak Hills Estate Design Guidelines Fuel Management Revisions*** The Oak Hills Estate Design Guidelines shall be revised to ensure consistency with the revised project description, to ensure the construction safety and fuel management provisions of MM FP-1 and MM FP-2, ~~and~~ to accurately reflect the revised development envelope boundaries and contiguous 100-foot Fuel Management Zones (FMZ 1: 0–30 feet and FMZ 2: 30–100 feet), and to implement Fire Department and USFWS approved fuel management requirements adjacent to the on-site spikerush wetland. FMZ 1: 0–30 feet shall be located entirely within the parcel boundaries of parcels located adjacent to open space, and FMZ 2: 30–100 shall be located immediately adjacent to FMZ 1and outside these parcel boundaries. Future HOA revisions to the Oak Hills Estates Design Guidelines shall be submitted to SBCFD and the County P&D for review to ensure fuel management remains consistent throughout the life of the project. **Plan Requirements and Timing:** Revised Oak Hills Estates Design Guidelines shall be submitted to o the SBCFD and the County P&D for review and approval prior to approval of building permits. SBCFD and the County P&D shall review the Design Guidelines for consistency with the HOA's implementation plan, conditions, and strategies for the long-term maintenance of the fuel management zones for adequacy and consistency with applicable state and County requirements. **Monitoring:** The SBCFD shall inspect to verify that the Revised Oak Hills Estates Design Guidelines depict FMZ 1: 0-30 feet entirely within parcel boundaries and that all building envelopes are located outside of FMZ 1. Depictions of landscaping and open space areas and landscaping maintenance and fuel management areas shall be in compliance with the Fuel Management Plan. Future HOA revisions to the Oak Hills Estates Design Guidelines shall be submitted to SBCFD and the County P&D for consistency with the Fuel Management Plan. The HOA shall ensure that the fuel management zones are properly managed and maintained in safe conditions and shall report to the County consistent with SBCFD requirements.	

Table S-1
Summary of Significant Environmental Analysis Results

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Impact FP-2: Fire Safety	The OSMP and design guidelines prepared for the project include strategies intended to minimize fire risk and ensure appropriate fuel management. However, landscaping would still remain a high fire hazard fuel source and the project is located close to highly flammable vegetation in the adjacent open space. In accordance with MM FP-2 and MM FP-3, a comprehensive Fuel Management Plan and revised design guidelines must be completed and approved by the SBCFD and County P&D prior to issuance of the building permit. The proposed off-site mitigation site for maritime chaparral habitat and oak restoration is located within a HFHSZ. However, the off-site mitigation (i.e., the creation of new native habitat) would occur outside of any 100-foot wide fuel management zones (as required by MM BIO-2.2) established for adjacent development, and would also be located away from adjacent roadways. Therefore, proposed restoration activities would not substantially increase wildfire risk near residences or roadways. Considering the habitat restoration activities would use no heavy equipment (other than transport vehicles), significant impacts related to fire safety and fire hazards are not be anticipated. Nevertheless, the off-site parcel's designation as HFHSZ can pose a risk to staff during implementation, monitoring, and maintenance. Compliance with measures in MM FP-1 would ensure impacts associated with wildland fire risks in the off-site mitigation area are less than significant with mitigation. As described in the above discussion, with implementation of mitigation measures, both the project and off-site mitigation would not expose people or structures to a significant risk of loss, injury or death involving wildland fires. Potential impacts related to fire safety would be significant but mitigated with implementation of MM FP-1, MM FP-2, and FP-3 (Class II impact).	Implementation of MM FP-1, ~~and~~ MM FP-2, and MM FP-3 would ensure that preparation of a standalone fuel management plan would minimize fire safety risks resulting from development and long-term occupation of the project's residences in the HFHSZ.	Class II (SM)
Impact FP-3: Emergency Access and Evacuation	As discussed in Chapter 4.11, Transportation and Circulation, the level of service (LOS) on adjoining collector roadways and at intersections would remain at LOS A and/or LOS B after construction of the proposed project. Buildout of the proposed project with 29 lots is anticipated to add approximately 75 residents to the area. Considering the absence of existing or project-related significant traffic impacts in the project area, and minor population increase from the development of 29 lots, the project is not expected to result in significant emergency access and egress impacts. Thus, project impacts related to emergency access and evacuation would be less than significant (Class III impact).	Impacts would be less than significant. No mitigation is required.	Class III (LTS)
Impact FP-4: Fire Protection Services and Facilities	County Fire Station 51 serves the Vandenberg Village area. The travel distance between Fire Station 51 and the project site is 3 miles, with a response time of approximately 5 to 6 minutes. Generally, the SBCFD seeks to maintain a service ratio of one firefighter per 2,000 people, with a maximum service ratio of one firefighter per 4,000 people, and to maintain a 5-minute response time within the Urban Area, both of which are currently met. Buildout of the project site would result in additional residents within the service area for Fire Station 51, which would somewhat increase the service ratio; however, the estimated increase of 75 people would not substantially change the existing service ratios. Future	Impacts would be less than significant. No mitigation is required.	Class III (LTS)

Table S-1
Summary of Significant Environmental Analysis Results

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	development on the project site would be required to pay SBCFD impact mitigation fees, which fees are applied toward the construction of new fire stations and acquisition of new equipment and apparatus when necessary. With the payment of the required County Fire Department Impact Mitigation Fees in accordance with Chapter 15 of the Santa Barbara County Code, project impacts to fire protection services and facilities would be less than significant (Class III impact).		
Cumulative Fire Services Impacts	Continued urban development along urban interfaces with densely vegetated open space in northern Santa Barbara County could cumulatively increase the risk for exposure to wildland fires, and would increase the demand on fire protection services. The Village Country Club Development Plan was approved in 2008 as a 14-unit, two-story detached single-family residential project located southeast directly across Oak Hill Drive from the project site and has not been constructed yet. All other planned, pending, approved, or under construction projects in the Vandenberg Village and Lompoc Valley region are listed in Table 3-1, Cumulative Projects List, including buildout of the Providence Landing project at the southern end of Vandenberg Village and the Burton Ranch project in the City of Lompoc. The off-site mitigation activity parcel on APN 097-371-067 would be required to comply with MM BIO-2.2 to be located outside of fire management zones associated with existing and potential future development on a parcel that is owned by the Vandenberg Village Community Services District. SBCFD provides fire prevention, fire suppression, and life safety services to unincorporated Santa Barbara County, and has 16 stations throughout the County. As discussed in Impact FP-4, service levels in the Vandenberg Village area currently meet SBCFD standards. The Vandenberg Village area's firefighter-to-resident ratio is approximately 1:3,250, which is under the SBCFD's 1:4,000 standard. The project's 75 residents would not substantially impact service times as it would not cause a substantial change in service ratios and would be required to pay an SBCFD impact mitigation fees. The off-site restoration occurring on APN 097-371-067 would not result in development that would affect existing and future service ratios but would be required to comply with the fire safety requirements in MM-FP-1 during implementation. The increase in population and development associated with the proposed project in conjunction with the planned, pending, approved, and under construction projects in the area surrounding the project site would also not significantly impact the service level. Additional residential development attributable to the proposed project would incrementally reduce the service ratios, as would other development within the SBCFD service area. However, each of the identified cumulative projects would also be required to pay SBCFD impact mitigation fees, which would be applied to the construction of new fire stations and acquisition of new equipment and apparatus when they become necessary. New fire protection facilities would be subject to CEQA environmental analysis with identified mitigation measures if such additional facilities are determined to be necessary.	Impacts would be less than significant. No mitigation is required.	Class III (LTS)

Table S-1 Summary of Significant Environmental Analysis Results			
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	Impacts associated with individual development proposals will be addressed on a case-by-case basis as needed, including the application of development standards or mitigation measures for development in HFHSZs to reduce fire-related risks. Each individual home constructed in the Oak Hills Estate project would be required to meet all County Fire Department requirements and conditions and maintain defensible space during occupancy. Through the implementation of existing development standards and mitigation measures **MM FP-1, MM FP-2,** and **MM FP-~~2~~ 3** and payment of SBCFD impact mitigation fees, the proposed project's contribution to cumulative wildland fire hazards would not be cumulatively considerable. The proposed project's off-site mitigation plan would also be required to comply with MM FP-1 to reduce fire hazard risks during implementation and the potential off-site mitigation plan would not be cumulatively considerable. Therefore, cumulative fire protection or wildland fire impacts would be less than significant (Class III impact).		

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Chapter 1.0 Introduction

This chapter provides an overview of the Environmental Impact Report (EIR) for the proposed Oak Hills Estate Tentative Tract Map, Rezone, and Development Plan (Oak Hills Estate project). The proposed project is described in detail in Chapter 2.0, Project Description. This introduction provides the following about the EIR: the purpose and intended uses; legal authority; the type, scope, content, and format of the document; and the review process and approach.

A Draft EIR for the Oak Hills Estate project was circulated for public review between February 2 and March 20, 2017. Comments submitted by the United States Fish and Wildlife Service and California Department of Fish and Wildlife stated that the project would have the potential to result in significant impacts to the El Segundo blue butterfly (*Euphilotes battoides allyni*), which is listed as an endangered species under the Federal Endangered Species Act. Information about the El Segundo blue butterfly and an evaluation of potential project-related impacts to the butterfly were not included in the original Draft EIR prepared for the project. A~~This~~ Revised Draft EIR was ~~has been~~ prepared to evaluate the potential for the project to result in significant impacts to the El Segundo blue butterfly.

California Environmental Quality Act (CEQA) Guidelines Section 15088.5, Recirculation of an EIR Prior to Certification, states that a lead agency (County of Santa Barbara Planning & Development) is required to recirculate an EIR when significant new information is added before it has been certified. The~~is~~ Revised Draft EIR include~~s~~ significant new information about the El Segundo blue butterfly and potential project-related impacts to the butterfly and its habitat. Therefore, as required by CEQA, ~~this~~a Revised Draft EIR ~~h~~was ~~been~~ prepared and recirculated for public review and comment between July 11 and August 25, 2017.

In addition to providing new information and analysis pertaining to the El Segundo blue butterfly, the~~is~~ Revised Draft EIR addresse~~s~~ comments from the United States Fish and Wildlife Service and California Department of Fish and Wildlife regarding potential project-related impacts to vernal pool fairy shrimp, California red-legged frog, and Vandenberg monkeyflower. The Revised Draft EIR also evaluated changes to the project made by the

applicant to minimize potential impacts to El Segundo blue butterfly and its habitat. Changes to the project description addressed by the~~is~~ Revised Draft EIR included:

- A previously proposed private trail located within the on-site open space area has been removed from the project.

- Building envelopes on proposed Lots 2, 7, 8, 23, 24, 25, and 26 have been reconfigured. As revised, all required fuel modification within 30 feet of new structures would occur on proposed residential lots.

Additional information regarding the proposed changes to the project is provided in Section 2.0, Project Description~~. of this Revised Draft EIR.~~

Changes made to the original Draft EIR in the Revised Draft EIR to address potential project-related impacts to the El Segundo blue butterfly, other listed species, and to address changes made to the project to minimize potential impacts to the El Segundo blue butterfly and its habitat, are shown using ~~strikeout~~ and underline format ~~in this Revised Draft EIR~~. All of the public review comments submitted and the responses to comments on the ~~original~~ Draft EIR and Revised Draft EIR are included in Chapter 11 ~~Appendix J~~ of this Final~~Revised Draft~~ EIR. For clarity, double strikeout and underline text (~~strikeout~~/underline) has been used to identify Revised Draft EIR changes in this Final EIR.

~~Appendix J includes preliminary responses to the major comments received on the original Draft EIR. Preliminary responses address the following review comment issues and describe how those comments have been addressed in the Revised Draft EIR:~~

~~Impacts to the El Segundo blue butterfly and its habitat~~

~~Impacts to other sensitive species~~

~~Suitability of the proposed off-site mitigation area~~

~~The potential for impacts to a vernal pool and federal and State waters~~

~~An addition to the cumulative project list and clarification that the project is outside a pipeline hazard area~~

As described by CEQA Guidelines Section 15088.5(f)(1), responses to all comments received on the original Draft EIR and the Revised Draft EIR are~~will be~~ included in Chapter 11 in the Final EIR prepared for the Oak Hills Estate Project.

1.1 Project Overview

The project parcel Assessor's Parcel Number 097-371-010 has been subject of other permit applications dating back to 1988. The current project under evaluation in this EIR was presented to the County Planning Commission for conceptual review on April 29, 2015. The

Oak Hills Estate project proposes to create 30 lots on a project site that is approximately 16.88 acres in size and located on the north side of Oak Hill Drive in Vandenberg Village in the unincorporated area of northwestern Santa Barbara County (County). The project site is vacant and is adjacent to the Burton Mesa Ecological Reserve to the north and west. The project Owner/Applicant is seeking approval of the following discretionary permits:

- A Rezone (Case No. 15RZN-0002) to change the zoning on the project parcel from RR-10 (Residential Ranchette, 1 unit per 10 acres) to DR-1.8 (Design Residential, 1.8 units per acre).

- A Vesting Tentative Tract Map (Case No. 15TRM-00001/TRM 14,180) to subdivide a vacant 16.88-acre parcel into 30 parcels. The proposed tentative map would create 29 single-family lots that would range in size from 9,269 ~~9,725~~square feet to 14,837 square feet, and one open space lot that would have 9.45 ~~9.86~~acres of dedicated common open space area, drainage features, and private roads.

- A Development Plan (Case No. 15DVP-00001) to develop 29 single-family residential units.

The proposed project would not require a Comprehensive Plan Amendment, as the project site would retain its existing RES 12.13 (Residential 12.3 units per acre) land use designation. The proposed open space lot would be ~~include a private trail and would be~~ designated as common open space and be managed by a homeowners association (HOA). The common open space lot would be located along the northern and western perimeters of the project site and serve both as a buffer between the proposed residential lots and the Burton Mesa Ecological Reserve and as a fuel management zone. The proposed project also includes the Offsite Mitigation Area Baseline Biological Report and Conceptual Mitigation Plan (Rincon 2016a) (see Appendix D-3) that details the potential for 13.84 ~~13.5~~ acres of off-site restoration to mitigate for 6.92 ~~6.38~~ acres of sensitive on-site oak tree and habitat removal.

1.2 Purpose of EIR and Legal Authority

The CEQA was enacted in 1970 by the California legislature to disclose to decision makers and the public the environmental effects of proposed activities and the ways to avoid or reduce those effects by requiring implementation of feasible alternatives or mitigation measures. CEQA applies to all California government agencies at all levels, including local government agencies that must issue permits or provide discretionary approvals for projects proposed by private applicants. Accordingly, the County is required to undertake the CEQA process before making a decision on a project. In accordance with Section 21067 of CEQA and Sections 15367 and 15050 through 15053 of the State CEQA Guidelines, the County is the Lead Agency under whose authority this document has been prepared and it will be taking primary responsibility for conducting the environmental review and certifying the EIR.

Guidance for the process and contents for the preparation of an EIR are codified in the CEQA Statutes provided in California Public Resources Code (PRC) Section 21000 et seq. and the CEQA Guidelines (California Code of Regulations [CCR], Title 14, Section 15000 et seq.). Additionally, in June 2010, the County published the revised Guidelines for the Implementation of the California Environmental Quality Act of 1970, as Amended (County of Santa Barbara 2010). This document provides definitions, procedures, and forms to be used in the implementation of CEQA and to supplement the CEQA Guidelines to the specific operations of the County. The purpose of these local guidelines is to help the County accomplish the following basic objectives of CEQA:

- To enhance and provide long-term protection for the environment;
- To provide information to governmental decision makers and the public regarding the potential significant environmental effects of a proposed project;
- To identify ways that environmental damage can be avoided or significantly reduced;
- To prevent significant avoidable environmental damage through utilization of feasible project alternatives or mitigation measures; and
- To disclose and demonstrate to the public the reasons why a governmental agency approved a project in the manner chosen.

The County also republished, in July 2015, the amended Environmental Thresholds and Guidelines Manual (County of Santa Barbara 2015a). This manual was prepared to assist the public, applicants, environmental consulting firms, and County decision makers in understanding the use and application of various environmental impact thresholds as they relate to project proposals. The thresholds of significance and guidelines in the manual are intended to implement and/or supplement provisions in the CEQA Guidelines for determination of significant environmental effect, including Sections 15064, 15065, 15382, and Appendix G. Thresholds of significance supplemented by the manual that are applicable to the proposed project include additional visual aesthetic impact guidelines; air quality thresholds; biological resources guidelines; cultural resources guidelines; archaeological, historical, and ethnic elements; geologic constraints guidelines; noise thresholds; public safety thresholds; surface and storm water quality significance guidelines; solid waste thresholds; and traffic impact thresholds. This EIR applies the County's thresholds of significance where applicable, which are described in each section contained in Chapter 4 of this EIR.

While Section 15021(a) of the CEQA Guidelines requires that major consideration be given to avoiding environmental damage, the Lead Agency and other responsible public agencies must balance adverse environmental effects against other public objectives, including social and economic goals, in determining whether and in what manner a project should be approved.

1.3 EIR Type, Scope, Content, and Format

This EIR addresses the potential environmental effects of the proposed project, including associated development and operational changes, and was prepared following input from the public, as well as responsible and affected agencies, through the EIR scoping process. This process was conducted using several of the tools available under CEQA, as described below.

1.3.1 Notice of Preparation

The environmental impact analysis provided by this EIR is based upon the findings in the Notice of Preparation (NOP) and the EIR Scoping Document that preceded the NOP, as well as public and agency input during the scoping period. Pursuant to Section 15082 of the CEQA Guidelines, the NOP was prepared and distributed to responsible and affected agencies and other interested parties for a 30-day public review. The County distributed the NOP, and the public review period began on November 23, 2015 and ended on December 22, 2015. The NOP was also posted in Santa Barbara County Clerk's office for 30 days and sent to the State Clearinghouse at the Governor's Office of Planning and Research to solicit statewide agency participation in determining the scope of the EIR. A copy of the NOP and comments received during the NOP review period are included in Appendix A.

1.3.2 Scoping Meeting

A public scoping meeting was held on December 3, 2015 at the County's Public Works Department conference room, located at 620 West Foster Road, Santa Maria, California. A public notice of the EIR scoping meeting was published in the local newspaper and sent to various local agencies, special interest groups, and owners/tenants of properties in proximity of the project site. The meeting was intended to solicit comments with regard to environmental concerns, feasible ways in which project impacts may be minimized to insignificant levels, and potential alternatives to the proposed project.

1.3.3 Original Draft EIR Circulation and Review

The original Draft EIR was circulated for a 45-day review period between February 2 and March 20, 2017. A hearing to accept comments regarding the adequacy of the environmental impact analysis included in the EIR was conducted at the County's Public Works Department conference room, located at 620 West Foster Road, Santa Maria, California, on March 8, 2017. Comments submitted on the original Draft EIR are included in Chapter 11 of this Final EIR.~~as Appendix J.~~

1.3.4 Revised Draft EIR Recirculation and Review

CEQA Guidelines section 15088.5 requires a lead agency to recirculate an EIR when significant new information is added to the EIR after public notice is given of the

availability of the Draft EIR for public review. In this case, "Significant new information" requiring recirculation was the addition of new information about a new significant environmental impact that would result from the project that required new mitigation. As discussed previously in Section 1.0 of this Introduction, changes made to the original Draft EIR in the Revised Draft EIR to address the previously undisclosed potential project-related impacts to special status species necessitated recirculation under section 15088.5. Comments submitted on the Revised Draft EIR are included in Chapter 11 of this Final EIR.

1.3.5~~43~~ Areas of Known Controversy/Issue Areas to be Resolved

Based on the results of the public scoping meeting and responses to the NOP, the County identified issues known to be of concern to the Lead Agency, the public, and other agencies. Such issues include aesthetic/visual resource impacts to public views; biological resource impacts to special status plant/animal species and chaparral and oak tree habitat, and off-site restoration; impacts to cultural resources; groundwater resources; land use impacts; public facilities impacts, traffic-related impacts; and impacts related to fire protection.

1.4 Required EIR Contents and Document Organization

The content and organization of this EIR are designed to meet the current requirements of CEQA and the CEQA Guidelines. The required CEQA sections are referenced along with the contents below to demonstrate compliance with CEQA.

Table of Contents (Section 15122) provides a list of the contents included within the EIR.

Executive Summary (CEQA Section 15123) presents a summary of the proposed project and alternatives, and the potential impacts and mitigation measures.

Chapter 1.0, Introduction, provides a list of the contents included within the EIR.

Chapter 2.0, Project Description (CEQA Section 15124), describes the project location, project details, and the objectives for the proposed project.

Chapter 3.0, Environmental Setting (CEQA Setting 15125), describes the existing conditions of the project site and region.

Chapter 4.0, Environmental Impact Analysis, of this EIR is divided into sections for each issue area and includes a detailed discussion of the potential impacts. The significance of each identified impact was determined using Appendix G of the CEQA Guidelines and the County Environmental Thresholds and Guidelines Manual. The following categories are used for classifying proposed project-related impacts:

- **Class I – Significant and unavoidable:** Significant unavoidable adverse impacts that cannot be feasibly mitigated or avoided. If the project is approved, decision-makers are required to adopt a statement of overriding considerations pursuant to CEQA Guidelines Section 15093, explaining why project benefits outweigh the damage caused by these significant environmental impacts.
- **Class II – Less than significant with mitigation:** Significant environmental impacts that can be feasibly avoided or mitigated to a less than significant level. If the project is approved, decision-makers are required to make findings pursuant to CEQA Guidelines Section 15091 that impacts have been mitigated to the maximum extent feasible. After application of feasible mitigation measures, the residual impact would not be significant.
- **Class III – Less than significant:** Adverse impacts found not to be significant. These impacts do not require that findings be adopted by the decision-making body. These impacts are less severe than Class I or Class II impacts and would not exceed the thresholds of significance established for the issue area.
- **Class IV – Beneficial impacts:** Impacts beneficial to the environment. These are listed in Chapter 4 as applicable when the project would result in solely beneficial effects on the environment. They may be used as considerations for balancing any potentially adverse environmental effects resulting from the proposed project.

For each significant adverse impact identified, mitigation measures are presented where feasible to reduce the impacts to acceptable levels. In those instances where mitigation measures cannot reduce adverse impacts to less than significant levels, the impacts are categorized as Class I impacts. The individual issue areas are organized in the following EIR sections:

- 4.1 Aesthetics
- 4.2 Air Quality
- 4.3 Biological Resources
- 4.4 Cultural Resources
- 4.5 Geology and Soils
- 4.6 Greenhouse Gas
- 4.7 Hydrology and Water Quality
- 4.8 Land Use
- 4.9 Noise
- 4.10 Public Services and Utilities
- 4.11 Transportation and Circulation
- 4.12 Fire Protection

The cumulative impacts discussion in each environmental issue section describes potentially significant impacts resulting from the project in combination with the impacts resulting from the development of reasonably foreseeable projects in the area. The reasonably foreseeable projects (proposed and approved, but not built) are listed in Chapter 3.0, Environmental Setting. The end of each issue section also discusses residual

cumulative impacts or the level of environmental impact of project contribution to cumulative impacts remaining after consideration and implementation of mitigation measures.

Chapter 5.0, Policy Consistency, discusses inconsistencies between the proposed project and applicable general plans and regional plans. In this case, the plan most relevant to the project is the Santa Barbara County Comprehensive Plan.

Chapter 6.0, Other CEQA Mandated Sections, includes a discussion of the issue area effects found not to be significant, the direct and indirect growth-inducing impacts, discussion of the significant adverse environmental impacts that cannot be reduced to a less than significant level, irreversible environmental changes of the project, and energy conservation.

Chapter 7.0, Alternatives, evaluates the environmental effects of project alternatives, including the No Project Alternative. It also identifies the environmentally superior project alternative.

Chapter 8.0, References Cited, identifies documents and individuals (personal communications) consulted during preparation of this EIR.

Chapter 9.0, Agencies Consulted, lists the agencies consulted in preparing this EIR.

Chapter 10.0, List of Preparers (Section 15129), lists the individuals involved in preparing this EIR.

Chapter 11, Letters of Comment and Responses, provides the comments received on both the original Draft EIR and the Revised Draft EIR and the responses to each of those comments.

~~**Chapter 11.0, Mitigation Monitoring and Reporting Program.** A Mitigation Monitoring and Reporting Plan (MMRP) component, as required under CEQA Guidelines Sections 15091(d) and 15097, will be included in the Final EIR and will contain a list of all proposed mitigation measures with plan requirements, timing, and monitoring components. This MMRP structure is consistent with County procedures; the MMRP component of each measure is subsequently incorporated with the measures adopted by decision-makers as development standards. The residual impacts, or level of environmental impacts remaining after implementation of a given mitigation measure, are listed after each mitigation measure.~~

Technical Appendices provide information and technical studies that support the environmental analysis contained within this document. Comment letters received during public review of the original Draft EIR were previously ~~are~~ included as Appendix J in the Revised Draft EIR. These comments along with the comments received on the Revised Draft EIR are now included in Chapter 11. Appendices A-1 through I-3 are listed in the same order as the original Draft EIR. Appendices B and D-1 were revised for technical

consistency. The technical appendices have been renumbered as shown in the revised Table of Contents.

~~The cumulative impacts discussion in each environmental issue section describes potentially significant impacts resulting from the project in combination with the impacts resulting from the development of reasonably foreseeable projects in the area. The reasonably foreseeable projects (proposed and approved, but not built) are listed in Chapter 3.0, Environmental Setting. The end of each issue section also discusses residual cumulative impacts, or the level of environmental impact of project contribution to cumulative impacts remaining after consideration and implementation of mitigation measures.~~

1.5 Project EIR Review Process and Approach

One of the primary objectives of CEQA is to enhance public participation in the process of planning a project. In addition to providing information and disclosing environmental impacts, the environmental review process provides several opportunities for the public to participate through scoping, public notice, public review of the CEQA document, and public hearings. Thus, public involvement is considered an essential feature of CEQA, and community members are encouraged to participate in the environmental review process, request to be notified, monitor newspapers for formal announcements, and submit substantive comments at every possible opportunity afforded by the agency. Additionally, agencies are required to consider comments from the scoping process in the preparation of the EIR and respond to public comments in the Final EIR.

The Draft and Revised Draft EIRs were ~~has been~~ distributed to federal, state, and county agencies; interested members of the public; citizens' groups; and local libraries for a 45-day comment period. The EIRs ~~is~~ were also posted on the County's website and ~~is~~ were available for review and download at http://sbcountyplanning.org/environmental/active.cfm. Comments received during the public review periods are~~will be~~ addressed in the Final EIR. ~~Comments may be addressed to:~~

~~County of Santa Barbara~~

~~Planning and Development Division~~

~~624~~620 West Foster Road

~~Santa Maria, CA 93455~~

~~Phone: (805) 934-6250~~

~~Fax: (805) 934-6258~~

Chapter 2.0
Project Description

This project is a request for entitlements for the proposed Oak Hills Estate Subdivision project (project) from the County of Santa Barbara Planning and Development Department. The applicant is seeking approval of the following discretionary permits:

- A Rezone (Case No. 15RZN-0002) to change the zoning on the project parcel from RR-10 (Residential Ranchette, 1 unit per 10 acres) to DR-1.8 (Design Residential, 1.8 units per acre).

- A Vesting Tentative Tract Map (Case No. 15TRM-00001/TRM 14,180) to subdivide an existing vacant ~~16.82~~16.88-acre parcel into 30 parcels. The proposed tentative map would create 29 single-family lots that would range in size from 9,269~~725~~ square feet to 14,837 square feet, and one open space lot that would have 9.8~~4~~5~~6~~ acres of dedicated common open space area, drainage features, and private roads and existing easements.

- A Development Plan (Case No. 15DVP-00001) to develop 29 single-family residential units.

The project also includes the proposed Oak Hills Estate LLC, Oak Hills Estate Open Space Management Plan (OSMP) (May 2017~~5~~) for management of common areas and habitat on the project site to be maintained by a Homeowners Association (HOA) and the Oak Hill Estate Design Guidelines (design guidelines) (June 2015) that would establish standards for the future development of single-family residences on the project site. The design guidelines would be reviewed and approved by the North County Board of Architectural Review. The OSMP and design guidelines are Appendices B and C to this EIR, respectively.

The project site is identified as Assessor's Parcel Number (APN) 097-371-010 and is located within the Vandenberg Village area in unincorporated northwest Santa Barbara County and the Third Supervisorial District.

2.1 Lead Agency

County of Santa Barbara, Planning and Development Department
123 East Anapamu Street
Santa Barbara, CA 93101

2.1.1 Trustee and Responsible Agencies

California Department of Fish and Wildlife (CDFW)
State Water Resources Control Board (SWQCB)
Regional Water Quality Control Board (RWQCB)
Santa Barbara Air Pollution Control District (SBAPCD)
Vandenberg Village Community Services District (VVCSD)

2.2 Property Owner

Oak Hills Estate, LLC
3130 Skyway Drive, Suite 601
Santa Maria, California 93455

2.3 Project Applicant's Representative

Urban Planning Concepts
2624 Airpark Drive
Santa Maria, California 93455

2.4 Project Location

The ~~16.82~~ 16.88-acre Oak Hills Estate project site is located north of Oak Hill Drive in Vandenberg Village, within the unincorporated area of Santa Barbara County (County) approximately 6 miles north of the City of Lompoc. Figure 2-1 shows the regional location of the project site, Figure 2-2 shows the project location on the U.S. Geological Survey Map, and Figure 2-3 shows the project location on an aerial photograph.

2.4.1 Surrounding Land Uses

The Burton Mesa Ecological Reserve is located adjacent to the project site to the north and west, single-family residences are located immediately to the east, and multi-family residences are located southwest of the project site along the Vandenberg Village Country Club Golf Course. The land use designation of the properties to the north and west of the project site that are in the Burton Mesa Ecological Reserve is Agriculture II (A-II-100; 100~~40~~-acre minimum parcel size) and Resource Management (RMZ). The properties to the north and west are zoned Unlimited Agriculture (U).

Project Location

FIGURE 2-1
Regional Location

RECON

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Map Source: USGS 7.5 minute topographic map series, LOMPOC quadrangle, 1982, MISSION PURISIMA Landgrant

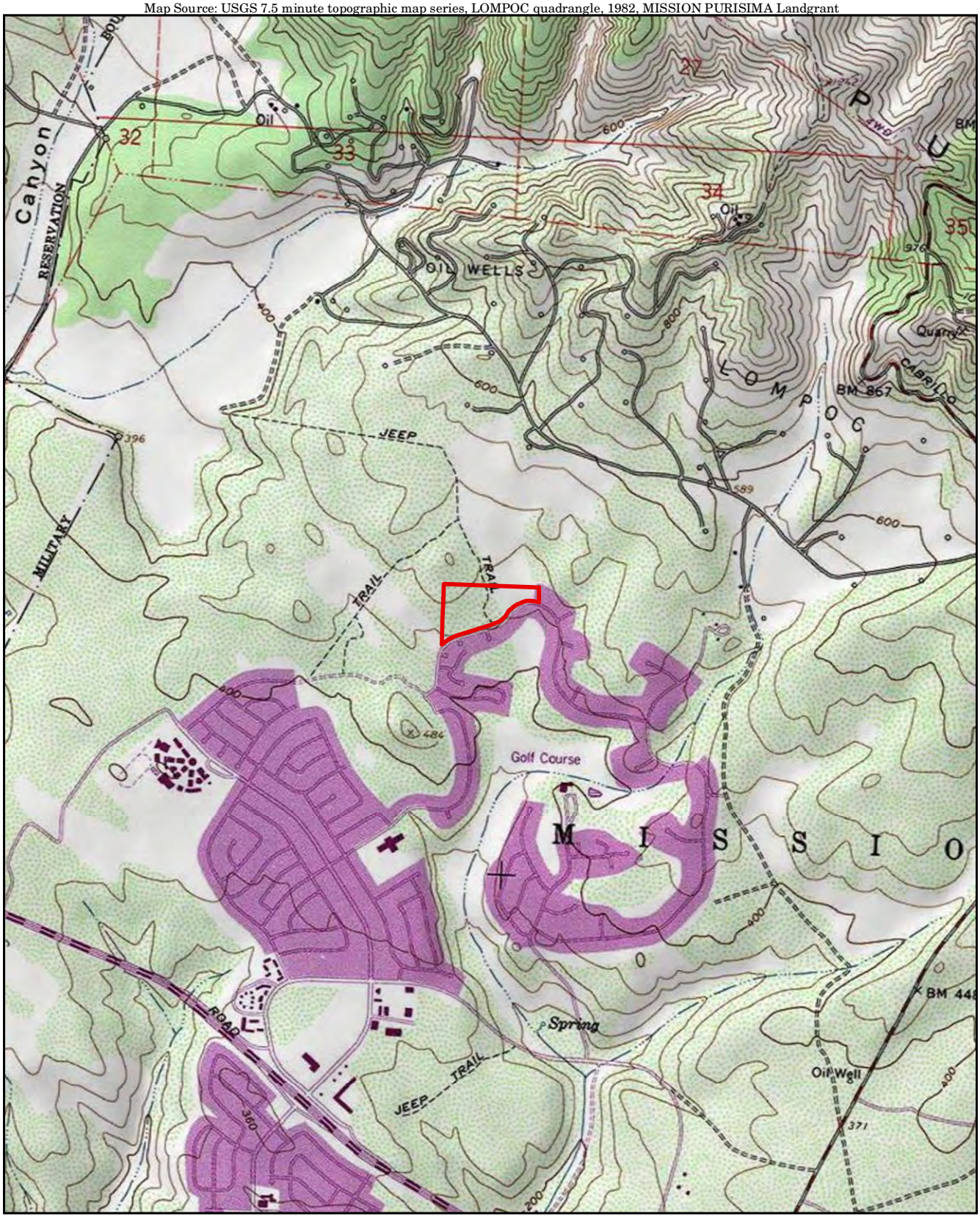

FIGURE 2-2

Project Location on USGS Map

RECON

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Image Source: USDA FSA NAIP (flown June 2014)

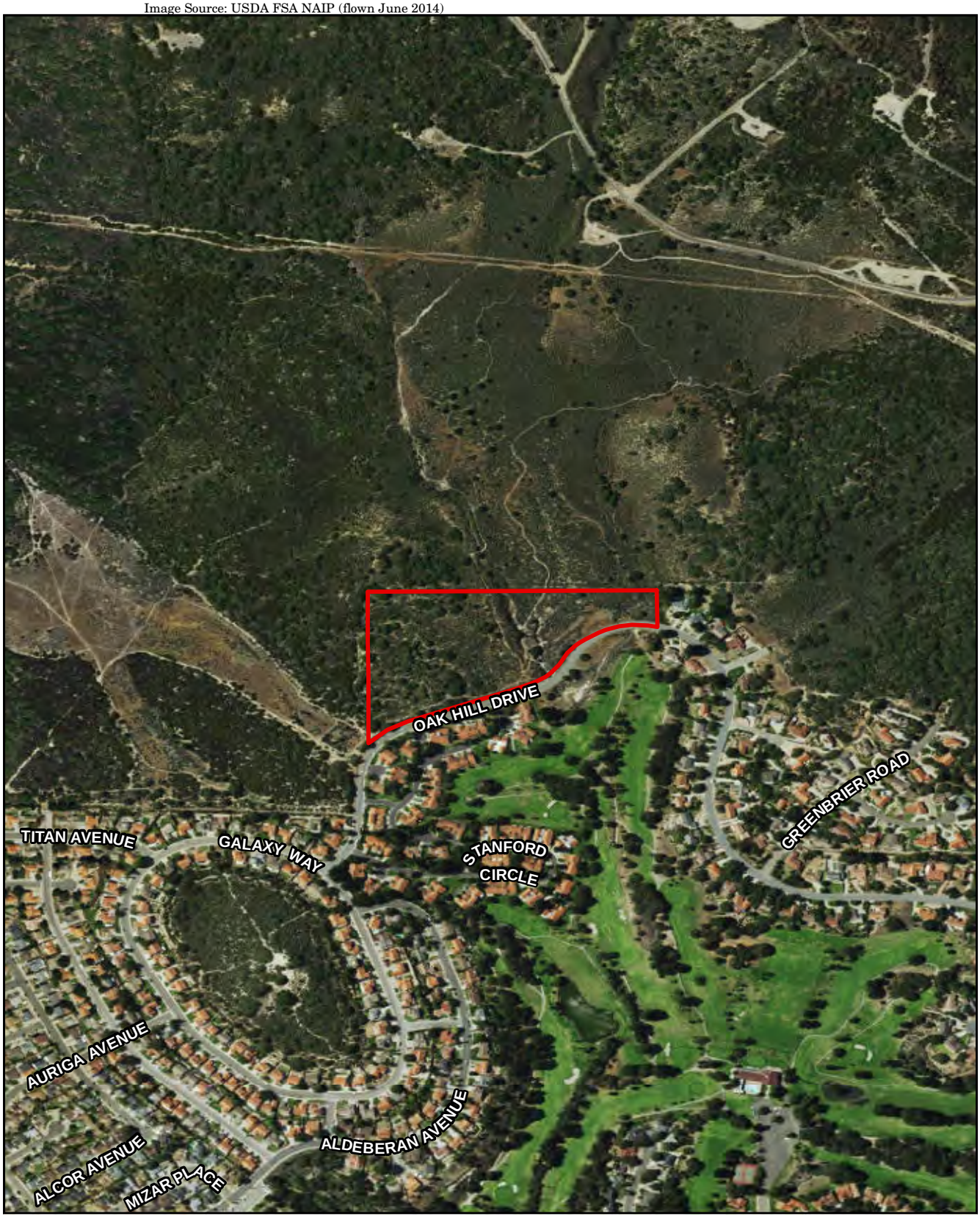

FIGURE 2-3

Project Location on Aerial Photograph

RECON

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No development or agricultural uses occur in the open space areas to the north and west of the project site. The single-family residences to the east of the project site have a Residential (RES-1.8) land use designation and are zoned Single Family Residential (20-R-1; 20,000-square-foot minimum lot area). Land uses to the south of the project site consist of multi-family residential development on properties that have a Residential (RES-12.3) land use designation and are zoned Design Residential (DR-6; 6 dwelling units per acre). An approved but not constructed 14~~0~~-unit residential project (~~Stoker~~Village Country Club Residential Development) is located to the southeast across Oak Hill Drive. The Vandenberg Village Country Club Golf Course is also south of the project site and is zoned Recreation (REC).

2.5 Existing Site Characteristics

The project site is undeveloped and is characterized by a rolling hillside with a mix of oak woodlands, coastal scrub, non-native grassland, and chaparral habitat. Two ephemeral drainage channels are present, one near the center of the site, and a second near the eastern portion of the site. The central on-site channel was created from the runoff of historic oil and gas development, and there remain remnants of the concrete flumes in the channel. This ephemeral drainage bisects the parcel from north to south, entering the project site from the Burton Mesa Ecological Reserve. The eastern on-site drainage is artificial, created through past modification of drainage patterns on-site. Both drainages run approximately south toward existing culverts under Oak Hill Drive. These features continue southwest in constructed channels and meet in a flood control basin adjacent to the golf course.

The project site generally slopes to the south and west. Site elevations vary from 495 feet above mean sea level in the northwest corner of the western portion of the site to 425 feet above mean sea level in the southwest corner. According to the Biological Resources Assessment, by Rincon Consultants, Inc. (2017~~5~~a), the majority of the parcel contains sensitive native vegetation consisting of central maritime chaparral, including La Purisima manzanita (*Arctostaphylos purissima*), and approximately 360 coast live oaks (*Quercus agrifolia*), 3 bishop pines, and 1 red willow located on the western portion of the property. Coyote brush scrub predominantly characterizes the east half of the project site.

The Oak Hills Estate project site has a Residential (RES-12.3) land use designation of 12.3 dwelling units per acre, with corresponding zoning of Residential Ranchette (RR-10; 1 unit per 10 acres minimum) under the County's Land Use and Development Code (LUDC). Table 2-1 summarizes the existing land use and regulatory characteristics of the site.

Table 2-1 Existing Site Property Information	
Site Characteristic	Description
APN	097-371-010
Land Use Designation	Residential, R-12.3
Zoning	Residential Ranchette (RR-10), 1 unit per 10 acres
Size	~~16.82~~ 16.88 acres
Existing Use	Vacant
Adjacent Zoning and Uses	North: Unlimited Agriculture (U); Burton Mesa Ecological Reserve South: Design Residential (DR-6) and Recreation (REC); multi-family residences, and Vandenberg Village Country Club Golf Course south of Oak Hill Drive East: Single-Family Residential (20-R-1); single-family residences adjacent to Oak Hill Drive West: Unlimited Agriculture (U); Burton Mesa Ecological Reserve
Site Access	The site is accessed directly from Oak Hill Drive.
Public Services	Water Supply: Vandenberg Village Community Services District Sewage: Vandenberg Village Community Services District Fire: Santa Barbara County Fire Protection, Station 51 (3500 Harris Grade Road, Lompoc, CA 93436) Police: Santa Barbara County Sheriff's Department Schools: Lompoc Unified School District

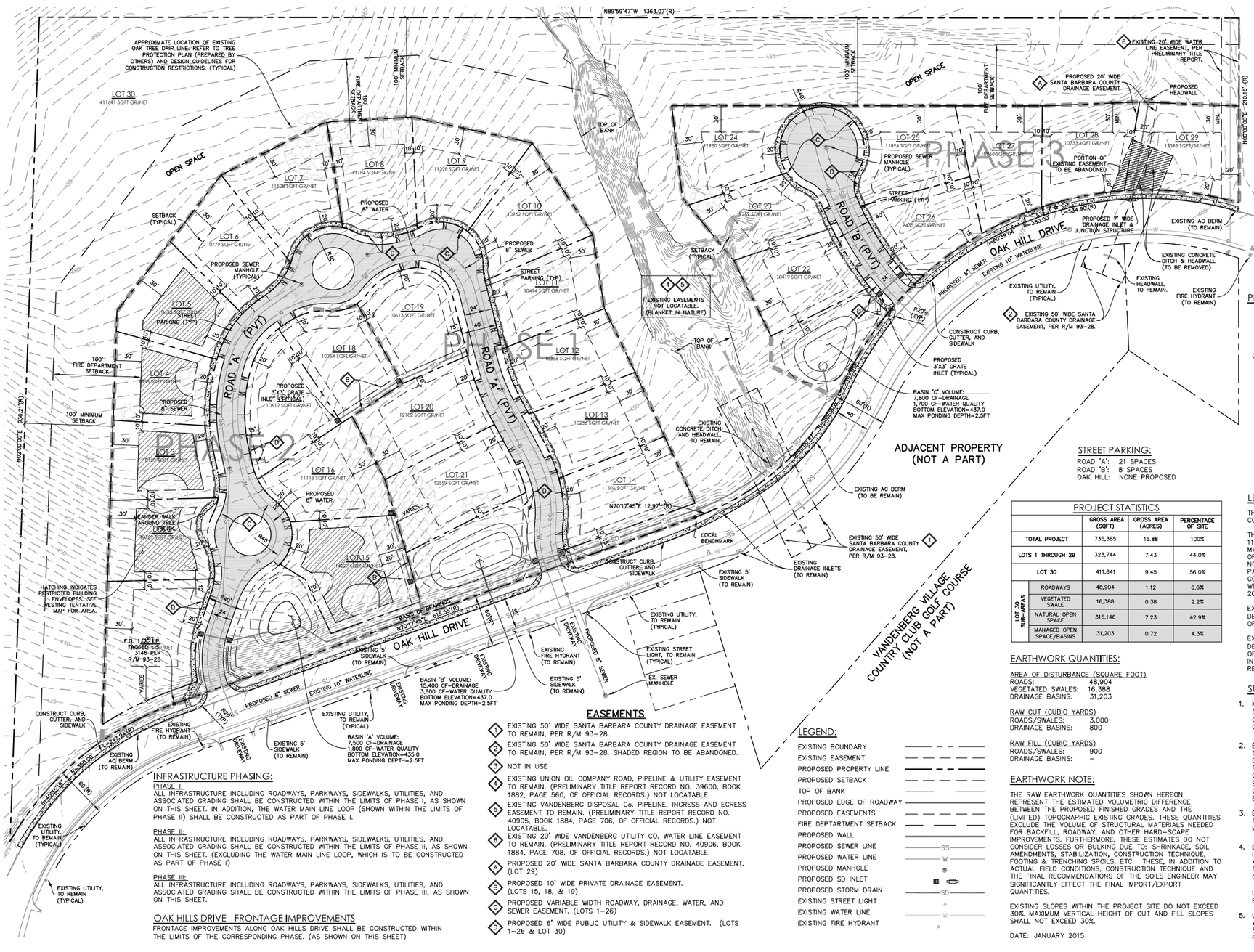
2.6 Project Characteristics

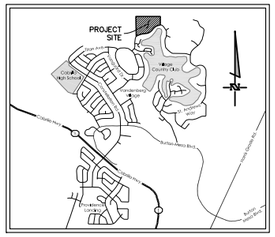
The proposed project is a request by Urban Planning Concepts, as agent for the owner, Oak Hills Estate, LLC, for approval of a Rezone, Vesting Tentative Tract Map (TRM), and Development Plan entitlements. Figure 2-4 illustrates the proposed development site plan, and Figure 2-5 shows the project tentative tract map.

The project proposes to subdivide the existing ~~16.82~~16.88-acre parcel into 30 lots consisting of 29 lots for single-family homes and one open space lot. The proposed residential lots would consist of 21 lots west of the drainage that bisects the project site, and 8 lots on the east side of the drainage. The open space lot (Lot 30) would be designated as common open space managed by a HOA and include roadways, drainage features, and natural open space. The ~~common open space lot~~natural open space would be located along the northern and western perimeters of the project site and serve both as a buffer between the proposed residential lots and the Burton Mesa Ecological Reserve and as a fuel management zone.

The project site's current Residential Ranchette (RR-10) zoning would allow only one residential dwelling unit on the entire project site. The proposed rezone would change the site's zoning to DR-1.8 (1.8 units per acre) (Figure 2-6). LUDC Section 35.23.060 states that the purpose of the Design Residential (DR) zone is to ensure comprehensively planned and well- designed residential development, while allowing flexibility, encouraging innovation and diverse design, and requiring that substantial open space (minimum of 40 percent of the net site area) be preserved and maintained. As proposed, 44~~43.5~~ percent of the project

Map Source: RRM Design Group





VICINITY MAP

NTS

OWNER/APPLICANT:

OAK HILLS ESTATE, LLC

CONTACT:
GARY BLAKE, MANAGING MEMBER
3130 SKYWAY DRIVE, SUITE 601
SANTA MARIA, CA 93455
PH (805) 698-1510

TITLE:

COMPANY: FIDELITY NATIONAL TITLE, SAN LUIS OBISPO
CONTACT: REECE BENSON
TITLE NUMBER: FSLC-511500043-RB
DATE: JANUARY 2015

PROJECT INFO:

APN:	097-371-010
ADDRESS:	LOCATED ON THE NORTH SIDE OF OAK HILL DRIVE, VANDENBERG VILLAGE; LOMPOC, CA, FOURTH SUPERVISORIAL DISTRICT
AREA:	GROSS = 16.88 ac (735,385 sqft)
GENERAL PLAN DESIGNATION:	RES 12.3 RESIDENTIAL 12.3 UNITS/ACRE
EX. ZONING:	RR-10 RESIDENTIAL RANCHETTE (10 ACRE MINIMAL PARCEL SIZE)
PROPOSED ZONING:	DR-1.8 DESIGN RESIDENTIAL 1.8 UNITS/ACRE
FLOOD ZONE:	ZONE 'X' - MAP NO. 06083C0730F
# OF LOTS:	30 (29 RESIDENTIAL & 1 COMMON LOT)
EXISTING EASEMENTS:	50' WIDE S.B.C. DRAINAGE EASEMENTS, PER R/M 93-28 UNION OIL COMPANY EASEMENT, PER PRELIM. TITLE REPORT VANDENBERG DISPOSAL CO. EASEMENT, PER PRELIM. TITLE REPORT 20' WIDE UTILITY CO. WATERLINE EASEMENT, PER PRELIM. TITLE RPT.
PROPOSED EASEMENTS:	20' WIDE S.B.C. DRAINAGE EASEMENT 10' WIDE PRIVATE DRAINAGE EASEMENT 6' WIDE PUBLIC UTILITY EASEMENT VARIABLE WIDTH ROADWAY & SWALE EASEMENT

STREET PARKING:

ROAD 'A': 21 SPACES
ROAD 'B': 8 SPACES
OAK HILL: NONE PROPOSED

PROJECT STATISTICS

		GROSS AREA (SQFT)	GROSS AREA (ACRES)	PERCENTAGE OF SITE
TOTAL PROJECT		735,385	16.88	100%
LOTS 1 THROUGH 29		323,744	7.43	44.0%
LOT 30		411,641	9.45	56.0%
LOT 30 SUB-AREAS	ROADWAYS	48,904	1.12	6.6%
	VEGETATED SWALE	16,388	0.38	2.2%
	NATURAL OPEN SPACE	315,146	7.23	42.9%
	MANAGED OPEN SPACE/BASINS	31,203	0.72	4.3%

EARTHWORK QUANTITIES:

AREA OF DISTURBANCE (SQUARE FOOT)
ROADS: 48,904
VEGETATED SWALES: 16,388
DRAINAGE BASINS: 31,203

RAW CUT (CUBIC YARDS)
ROADS/SWALES: 3,000
DRAINAGE BASINS: 800

RAW FILL (CUBIC YARDS)
ROADS/SWALES: 900
DRAINAGE BASINS: –

EARTHWORK NOTE:

THE RAW EARTHWORK QUANTITIES SHOWN HEREON REPRESENT THE ESTIMATED VOLUMETRIC DIFFERENCE BETWEEN THE PROPOSED FINISHED GRADES AND THE (LIMITED) TOPOGRAPHIC EXISTING GRADES. THESE QUANTITIES EXCLUDE THE VOLUME OF STRUCTURAL MATERIALS NEEDED FOR BACKFILL, ROADWAY, AND OTHER HARD-SCAPE IMPROVEMENTS. FURTHERMORE, THESE ESTIMATES DO NOT CONSIDER LOSSES OR BULKING DUE TO: SHRINKAGE, SOIL AMENDMENTS, STABILIZATION, CONSTRUCTION TECHNIQUE, FOOTING & TRENCHING SPOILS, ETC. THESE, IN ADDITION TO ACTUAL FIELD CONDITIONS, CONSTRUCTION TECHNIQUE AND THE FINAL RECOMMENDATIONS OF THE SOILS ENGINEER MAY SIGNIFICANTLY EFFECT THE FINAL IMPORT/EXPORT QUANTITIES.

EXISTING SLOPES WITHIN THE PROJECT SITE DO NOT EXCEED 30% MAXIMUM VERTICAL HEIGHT OF CUT AND FILL SLOPES SHALL NOT EXCEED 30%.

DATE: JANUARY 2015

LEGAL DESCRIPTION:

THE LAND REFERRED TO HERIN IS SITUATED IN THE UNINCORPORATED AREA IN COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA AND IS DESCRIBED AS FOLLOWS:

THAT PORTION OF PARCEL A, AS SHOWN AND DESIGNATED ON PARCEL MAP NO. 11989, IN THE COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA, AS SHOWN ON MAP FILED BOOK 13, PAGE 73 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, WHICH LIES NORTHERLY AND NORTHWESTERLY OF THE NORTHWESTERLY LINE OF TRACT NO. 11983 AS SHOWN ON MAP FILED IN BOOK 91, PAGE 26 AND 27 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY AND THAT PORTION WHICH LIES NORHWESTERLY OF THE NORTHWESTERLY AND WESTERLY LINE OF TRACT NO. 12278, AS SHOWN ON MAP FILED IN BOOK 93, PAGES 26, 27, AND 28 OF MAPS, RECORDS OF SAID COUNTY.

EXCEPTING THEREFROM THAT PORTION OF SAID REAL PROPERTY LYING BELOW A DEPTH OF FIVE HUNDRED (500) FEET BELOW THE SURFACE THEROF WITH NO RIGHT OF SURFACE ENTRY THEREON.

EXCEPTING THEREFROM THAT PORTION OF SAID REAL PROPERTY LYING BELOW A DEPTH OF FIVE HUNDRED (500) FEET BELOW THE SURFACE THEREOF WITH NO RIGHT OF SURFACE ENTRY THEREON AS RESERVED BY UNION OIL COMPANY OF CALIFORNIA IN DEED RECORDED JANUARY 30, 1987, INSTRUMENT NO. 87-7719, OFFICIAL RECORDS.

SURVEYOR'S NOTES:

1. MAPPING
TOPOGRAPHIC MAPPING WAS COMPILED AT A SCALE OF 1"=40', WITH A ONE FOOT CONTOUR INTERVAL, FROM DATA COLLECTED IN A FIELD SURVEY PERFORMED USING CONVENTIONAL EQUIPMENT AND PROCEDURES ON JUNE 5, 2014.

2. BOUNDARY & EASEMENT INFORMATION
THE BOUNDARY INFORMATION SHOWN HEREON IS BASED UPON THE LEGAL DESCRIPTION PROVIDED IN THE PRELIMINARY TITLE REPORT BY FIDELITY NATIONAL TITLE COMPANY NO. FSLC-511500043-RB DATED JANUARY 6, 2015 AND WAS COMPILED FROM RECORD DATA AND IS FOR INFORMATIONAL PURPOSES ONLY. THIS SURVEY TIED TO SEVERAL MONUMENTS OF RECORD (R/M 93-28) IN ORDER TO ORIENT THE TOPOGRAPHIC AND PLANIMETRIC MAPPING TO THE COMPILED BOUNDARY, THIS MAP DOES NOT REPRESENT A BOUNDARY ESTABLISHMENT SURVEY

3. BASIS OF BEARING & COORDINATES
THE BASIS OF BEARINGS FOR THIS PLAN IS THE LINE BETWEEN TWO FOUND MONUMENTS SHOWN HEREON HAVING A BEARING OF N70°17'45"E PER M/B 93-28.

4. BENCHMARK
INITIAL: TOP OF BRASS CAP MONUMENT IN MONUMENT WELL LOCATED ON THE ALLAN HANCOCK COLLEGE LOMPOC CAMPUS AT THE CENTER LINE INTERSECTION OF THE EAST CAMPUS ACCESS ROAD AND THE NORTH ENTRANCE TO THE SOUTH CAMPUS PARKING LOT, ELEV=187.77(FT) PER NAVD29 DATUM.

LOCAL: TOP OF 1/2" IRON PIPE ON THE NORTHERLY R/W LINE OF OAK HILL ROAD, ELEV=433.48(FT) PER NAVD29 DATUM.

5. UTILITY SERVICES
WATER: VANDENBERG VILLAGE CSD
SEWER: VANDENBERG VILLAGE CSD
PHONE: VERIZON
ELECTRIC: PG&E
GAS: SOCAL GAS
CABLE: COMCAST

INFRASTRUCTURE PHASING:

PHASE I:
ALL INFRASTRUCTURE INCLUDING ROADWAYS, PARKWAYS, SIDEWALKS, UTILITIES, AND ASSOCIATED GRADING SHALL BE CONSTRUCTED WITHIN THE LIMITS OF PHASE I, AS SHOWN ON THIS SHEET. IN ADDITION, THE WATER MAIN LINE LOOP (SHOWN WITHIN THE LIMITS OF PHASE II) SHALL BE CONSTRUCTED AS PART OF PHASE I.

PHASE II:
ALL INFRASTRUCTURE INCLUDING ROADWAYS, PARKWAYS, SIDEWALKS, UTILITIES, AND ASSOCIATED GRADING SHALL BE CONSTRUCTED WITHIN THE LIMITS OF PHASE II, AS SHOWN ON THIS SHEET. (EXCLUDING THE WATER MAIN LINE LOOP, WHICH IS TO BE CONSTRUCTED AS PART OF PHASE I)

PHASE III:
ALL INFRASTRUCTURE INCLUDING ROADWAYS, PARKWAYS, SIDEWALKS, UTILITIES, AND ASSOCIATED GRADING SHALL BE CONSTRUCTED WITHIN THE LIMITS OF PHASE III, AS SHOWN ON THIS SHEET.

OAK HILLS DRIVE - FRONTAGE IMPROVEMENTS

FRONTAGE IMPROVEMENTS ALONG OAK HILLS DRIVE SHALL BE CONSTRUCTED WITHIN THE LIMITS OF THE CORRESPONDING PHASE. (AS SHOWN ON THIS SHEET)

EASEMENTS

1. EXISTING 50' WIDE SANTA BARBARA COUNTY DRAINAGE EASEMENT TO REMAIN, PER R/M 93-28.
2. EXISTING 50' WIDE SANTA BARBARA COUNTY DRAINAGE EASEMENT TO REMAIN, PER R/M 93-28. SHADED REGION TO BE ABANDONED.
3. NOT IN USE
4. EXISTING UNION OIL COMPANY ROAD, PIPELINE & UTILITY EASEMENT TO REMAIN. (PRELIMINARY TITLE REPORT RECORD NO. 39600, BOOK 1882, PAGE 560, OF OFFICIAL RECORDS.) NOT LOCATABLE.
5. EXISTING VANDENBERG DISPOSAL Co. PIPELINE, INGRESS AND EGRESS EASEMENT TO REMAIN. (PRELIMINARY TITLE REPORT RECORD NO. 40905, BOOK 1884, PAGE 706, OF OFFICIAL RECORDS.) NOT LOCATABLE.
6. EXISTING 20' WIDE VANDENBERG UTILITY CO. WATER LINE EASEMENT TO REMAIN. (PRELIMINARY TITLE REPORT RECORD NO. 40906, BOOK 1884, PAGE 708, OF OFFICIAL RECORDS.) NOT LOCATABLE.
- A. PROPOSED 20' WIDE SANTA BARBARA COUNTY DRAINAGE EASEMENT. (LOT 29)
- B. PROPOSED 10' WIDE PRIVATE DRAINAGE EASEMENT. (LOTS 15, 18, & 19)
- C. PROPOSED VARIABLE WIDTH ROADWAY, DRAINAGE, WATER, AND SEWER EASEMENT. (LOTS 1-26)
- D. PROPOSED 6' WIDE PUBLIC UTILITY & SIDEWALK EASEMENT. (LOTS 1-26 & LOT 30)

LEGEND:

EXISTING BOUNDARY
EXISTING EASEMENT
PROPOSED PROPERTY LINE
PROPOSED SETBACK
TOP OF BANK
PROPOSED EDGE OF ROADWAY
PROPOSED EASEMENTS
FIRE DEPTARTMENT SETBACK
PROPOSED WALL
PROPOSED SEWER LINE
PROPOSED WATER LINE
PROPOSED MANHOLE
PROPOSED SD INLET
PROPOSED STORM DRAIN
EXISTING STREET LIGHT
EXISTING WATER LINE
EXISTING FIRE HYDRANT

0 Feet 100

FIGURE 2-4
Project Development Site Plan

RECON

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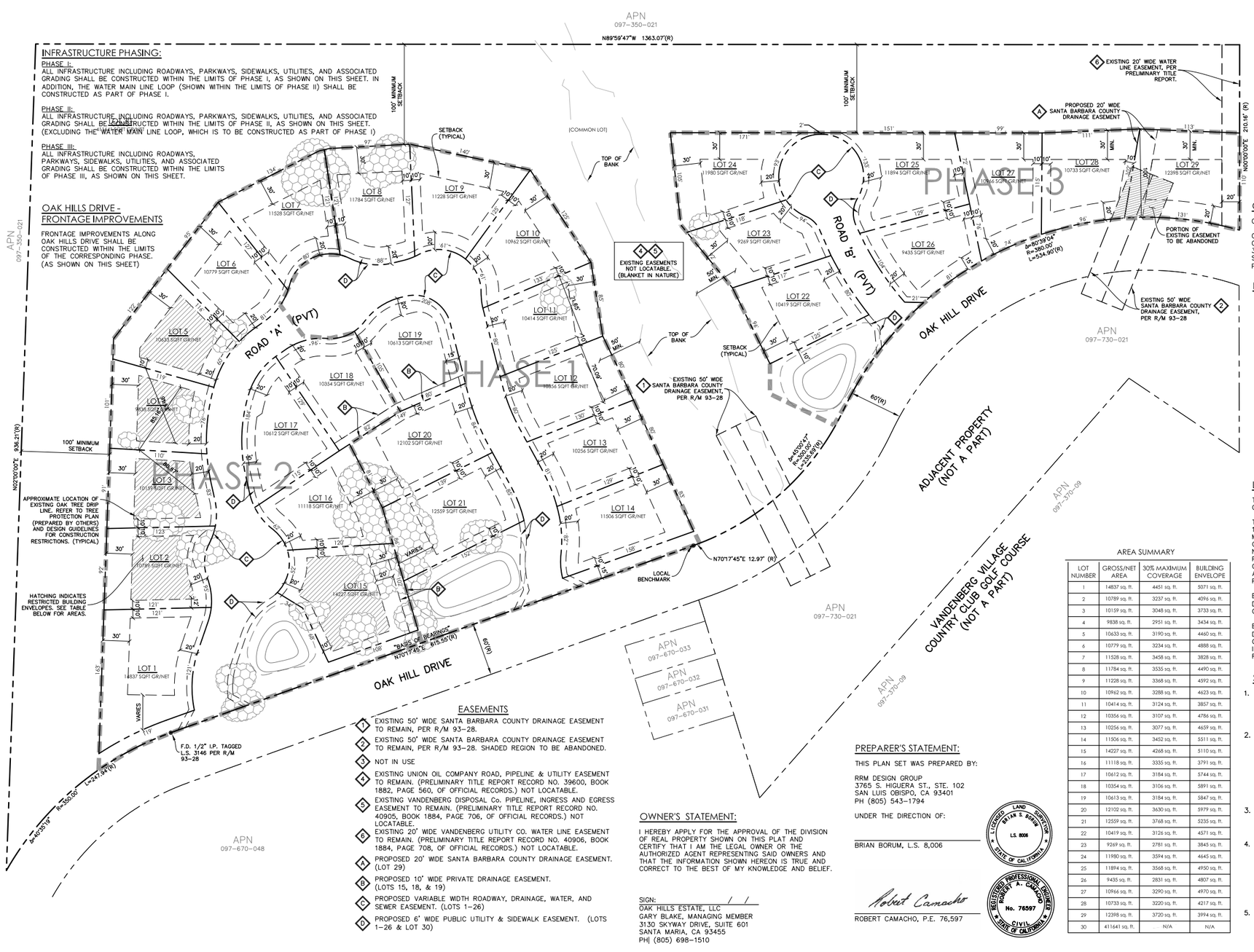
Map Source: RRM Design Group



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OAK HILLS DRIVE - FRONTAGE IMPROVEMENTS

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3. NOT IN USE
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4. PROPOSED 20' WIDE SANTA BARBARA COUNTY DRAINAGE EASEMENT. (LOT 29)
8. PROPOSED 10' WIDE PRIVATE DRAINAGE EASEMENT. (LOTS 15, 18, & 19)
C. PROPOSED VARIABLE WIDTH ROADWAY, DRAINAGE, WATER, AND SEWER EASEMENT. (LOTS 1-26)
D. PROPOSED 6' WIDE PUBLIC UTILITY & SIDEWALK EASEMENT. (LOTS 1-26 & LOT 30)

OWNER'S STATEMENT:

I HEREBY APPLY FOR THE APPROVAL OF THE DIVISION OF REAL PROPERTY SHOWN ON THIS PLAT AND CERTIFY THAT I AM THE LEGAL OWNER OR THE AUTHORIZED AGENT REPRESENTING SAID OWNERS AND THAT THE INFORMATION SHOWN HEREON IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

SIGN: _____ / /
OAK HILLS ESTATE, LLC
GARY BLAKE, MANAGING MEMBER
3130 SKYWAY DRIVE, SUITE 601
SANTA MARIA, CA 93455
PH| (805) 698-1510

PREPARER'S STATEMENT:

THIS PLAN SET WAS PREPARED BY:

RRM DESIGN GROUP
3765 S. HIGUERA ST., STE. 102
SAN LUIS OBISPO, CA 93401
PH (805) 543-1794

UNDER THE DIRECTION OF:

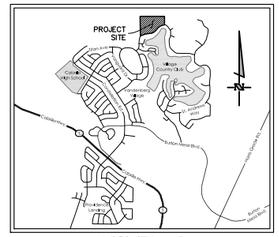
BRIAN BORUM, L.S. 8,006

LICENSED LAND SURVEYOR BRIAN S. BORUM L.S. 8006 STATE OF CALIFORNIA

Robert Camacho

ROBERT CAMACHO, P.E. 76,597

REGISTERED PROFESSIONAL ENGINEER ROBERT A. CAMACHO No. 76597 CIVIL STATE OF CALIFORNIA



VICINITY MAP
NTS

OWNER/APPLICANT:

OAK HILLS ESTATE, LLC

CONTACT:
GARY BLAKE, MANAGING MEMBER
3130 SKYWAY DRIVE, SUITE 601
SANTA MARIA, CA 93455
PH (805) 698-1510

TITLE:

COMPANY: FIDELITY NATIONAL TITLE, SAN LUIS OBISPO
CONTACT: REECE BENSON
TITLE NUMBER: FSLC-511500043-RB
DATE: JANUARY 2015

PROJECT INFO:

APN:	097-371-010
ADDRESS:	LOCATED ON THE NORTH SIDE OF OAK HILL DRIVE, VANDENBERG VILLAGE; LOMPOC, CA, FOURTH SUPERVISORIAL DISTRICT
AREA:	GROSS = 16.88 ac (735,385 sqft)
GENERAL PLAN DESIGNATION:	RES 12.3 RESIDENTIAL 12.3 UNITS/ACRE
EX. ZONING:	RR-10 RESIDENTIAL RANCHETTE (10 ACRE MINIMAL PARCEL SIZE)
PROPOSED ZONING:	DR-1.8 DESIGN RESIDENTIAL 1.8 UNITS/ACRE
FLOOD ZONE:	ZONE 'X' - MAP NO. 06083C0730F
# OF LOTS:	30 (29 RESIDENTIAL & 1 COMMON LOT)
EXISTING EASEMENTS:	50' WIDE S.B.C. DRAINAGE EASEMENTS, PER R/M 93-28 UNION OIL COMPANY EASEMENT, PER PRELIM. TITLE REPORT VANDENBERG DISPOSAL CO. EASEMENT, PER PRELIM. TITLE REPORT 20' WIDE UTILITY CO. WATERLINE EASEMENT, PER PRELIM. TITLE RPT.
PROPOSED EASEMENTS:	20' WIDE S.B.C. DRAINAGE EASEMENT 10' WIDE PRIVATE DRAINAGE EASEMENT 6' WIDE PUBLIC UTILITY EASEMENT VARIABLE WIDTH ROADWAY & SWALE EASEMENT

LEGAL DESCRIPTION:

THE LAND REFERRED TO HERIN IS SITUATED IN THE UNINCORPORATED AREA IN COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA AND IS DESCRIBED AS FOLLOWS:

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EXCEPTING THEREFROM THAT PORTION OF SAID REAL PROPERTY LYING BELOW A DEPTH OF FIVE HUNDRED (500) FEET BELOW THE SURFACE THEROF WITH NO RIGHT OF SURFACE ENTRY THEREON.

EXCEPTING THEREFROM THAT PORTION OF SAID REAL PROPERTY LYING BELOW A DEPTH OF FIVE HUNDRED (500) FEET BELOW THE SURFACE THEREOF WITH NO RIGHT OF SURFACE ENTRY THEREON AS RESERVED BY UNION OIL COMPANY OF CALIFORNIA IN DEED RECORDED JANUARY 30, 1987, INSTRUMENT NO. 87-7719, OFFICIAL RECORDS.

AREA SUMMARY

LOT NUMBER	GROSS/NET AREA	30% MAXIMUM COVERAGE	BUILDING ENVELOPE
1	14837 sq. ft.	4451 sq. ft.	5071 sq. ft.
2	10789 sq. ft.	3237 sq. ft.	4096 sq. ft.
3	10159 sq. ft.	3048 sq. ft.	3733 sq. ft.
4	9838 sq. ft.	2951 sq. ft.	3434 sq. ft.
5	10633 sq. ft.	3190 sq. ft.	4460 sq. ft.
6	10779 sq. ft.	3234 sq. ft.	4888 sq. ft.
7	11528 sq. ft.	3458 sq. ft.	3828 sq. ft.
8	11784 sq. ft.	3535 sq. ft.	4490 sq. ft.
9	11228 sq. ft.	3368 sq. ft.	4592 sq. ft.
10	10962 sq. ft.	3288 sq. ft.	4623 sq. ft.
11	10414 sq. ft.	3124 sq. ft.	3857 sq. ft.
12	10356 sq. ft.	3107 sq. ft.	4786 sq. ft.
13	10256 sq. ft.	3077 sq. ft.	4659 sq. ft.
14	11506 sq. ft.	3452 sq. ft.	5511 sq. ft.
15	14227 sq. ft.	4268 sq. ft.	5110 sq. ft.
16	11118 sq. ft.	3335 sq. ft.	3791 sq. ft.
17	10612 sq. ft.	3184 sq. ft.	5744 sq. ft.
18	10354 sq. ft.	3106 sq. ft.	5891 sq. ft.
19	10613 sq. ft.	3184 sq. ft.	5847 sq. ft.
20	12102 sq. ft.	3630 sq. ft.	5979 sq. ft.
21	12559 sq. ft.	3768 sq. ft.	5235 sq. ft.
22	10419 sq. ft.	3126 sq. ft.	4571 sq. ft.
23	9269 sq. ft.	2781 sq. ft.	3845 sq. ft.
24	11980 sq. ft.	3594 sq. ft.	4645 sq. ft.
25	11894 sq. ft.	3568 sq. ft.	4950 sq. ft.
26	9435 sq. ft.	2831 sq. ft.	4807 sq. ft.
27	10966 sq. ft.	3290 sq. ft.	4970 sq. ft.
28	10733 sq. ft.	3220 sq. ft.	4217 sq. ft.
29	12398 sq. ft.	3720 sq. ft.	3994 sq. ft.
30	411641 sq. ft.	N/A	N/A

SURVEYOR'S NOTES:

1. MAPPING
   TOPOGRAPHIC MAPPING WAS COMPILED AT A SCALE OF 1"=40', WITH A ONE FOOT CONTOUR INTERVAL, FROM DATA COLLECTED IN A FIELD SURVEY PERFORMED USING CONVENTIONAL EQUIPMENT AND PROCEDURES ON JUNE 5, 2014.
2. BOUNDARY & EASEMENT INFORMATION
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3. BASIS OF BEARING & COORDINATES
   THE BASIS OF BEARINGS FOR THIS PLAN IS THE LINE BETWEEN TWO FOUND MONUMENTS SHOWN HEREON HAVING A BEARING OF N70°17'45"E PER M/B 93-28.
4. BENCHMARK
   INITIAL: TOP OF BRASS CAP MONUMENT IN MONUMENT WELL LOCATED ON THE ALLAN HANCOCK COLLEGE LOMPOC CAMPUS AT THE CENTER LINE INTERSECTION OF THE EAST CAMPUS ACCESS ROAD AND THE NORTH ENTRANCE TO THE SOUTH CAMPUS PARKING LOT, ELEV=187.77(FT) PER NAVD29 DATUM.

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5. UTILITY SERVICES
   WATER: VANDENBERG VILLAGE CSD
   SEWER: VANDENBERG VILLAGE CSD
   PHONE: VERIZON
   ELECTRIC: PG&E
   GAS: SOCAL GAS
   CABLE: COMCAST

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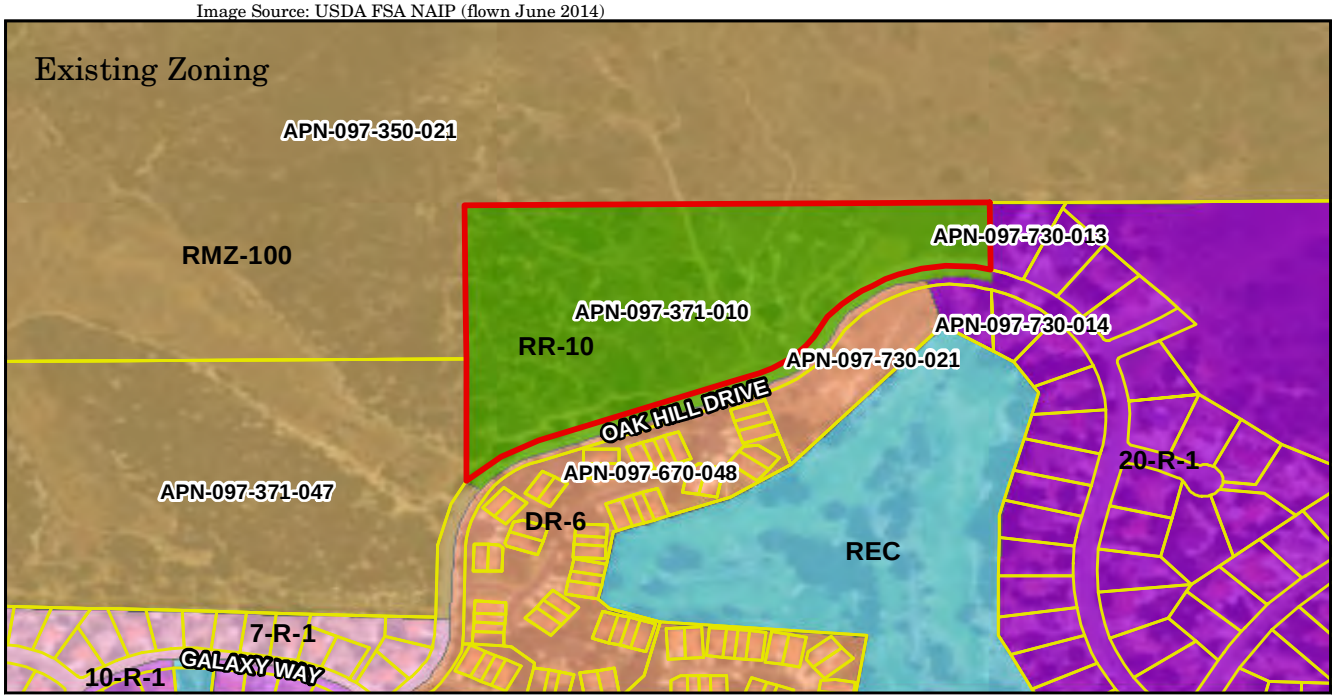
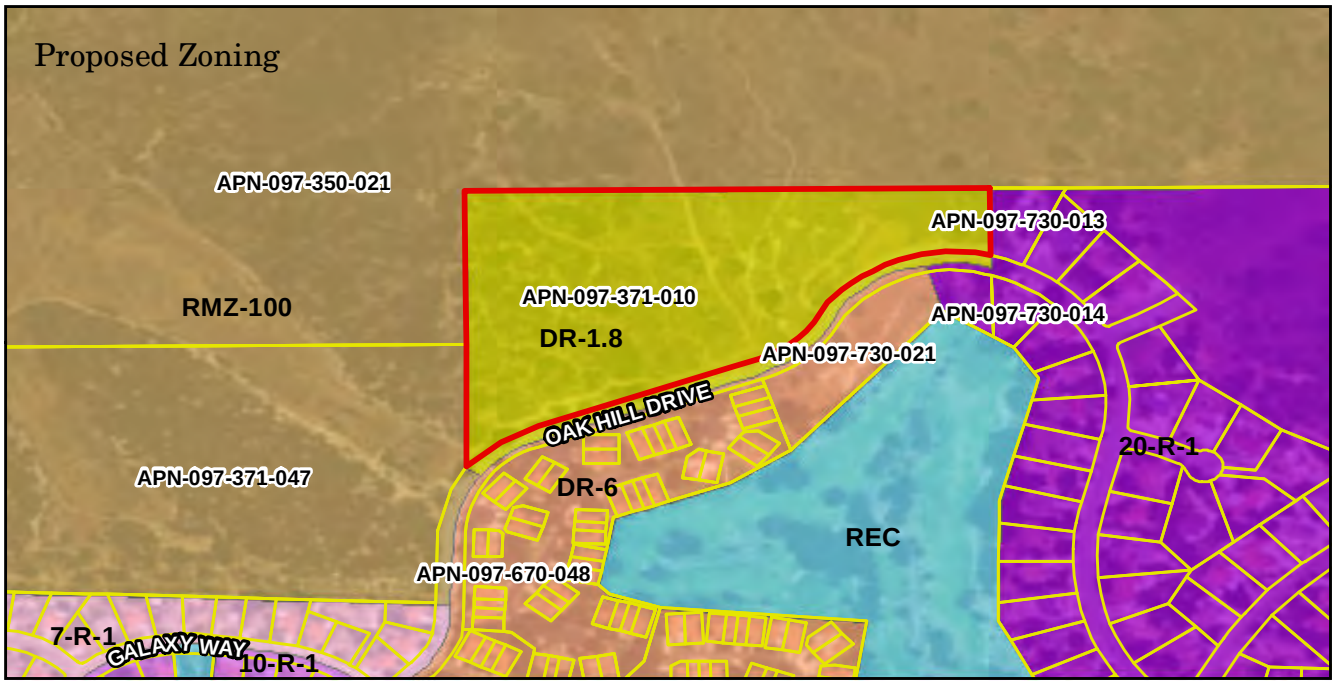
FIGURE 2-5
Vesting Tentative Map

Image Source: USDA FSA NAIP (flown June 2014)





Project Boundary

Parcel Lines

0 Feet 600

Zoning Category

- (RR-10) Residential Ranchette Inland Section/Minimum Lot Size 10 ac.
- (DR-1.8) Proposed - Design Residential 1.8 units/ac.
- (DR-6) Design Residential 6 units/ac.
- (7-R-1) Single Family/Minimum Lot Size - 7,000 sq. ft.
- (10-R-1) Single Family/Minimum Lot Size - 10,000 sq. ft.
- (20-R-1) Single Family/Minimum Lot Size - 20,000 sq. ft.
- (RMZ–100) RMZ (Resource Management) Minimum Lot Area 100 ac
- (REC) Recreation

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FIGURE 2-6

Existing and Proposed Zoning Map

site would be used for the development of 29 single-family homes and 56~~.5~~ percent of the project site would be retained as open space.

a. Project Components. This section describes the proposed Oak Hills Estate project components, including development characteristics for proposed residential and ~~recreation/~~open space areas.

- *Vesting Tentative Tract Map* (Case No. 15TRM-00001/TRM 14,180) is a request for approval of a vesting tentative tract map in compliance with County Code Chapter 21 to subdivide an existing parcel into 30 lots. Table 2-2 lists the proposed project site characteristics.

Table 2-2
Proposed Site Characteristics

Project Component		Gross Area (square feet)	Gross Area (acres)	Percentage of Site
Total Project		735,385 ~~732,505~~ ~~735,385~~	~~16.82~~ 16.88	100%
Lots 1 – 29		323,744~~320,356~~320,356	7.43~~7~~7.35	44~~43.7~~43.5%
Lot 30		411,641~~412,149~~415,029	9.45~~6~~9.53	56.~~3~~56.5%
Lot 30 Subareas	Roadways	48,904	1.12	6.6~~7~~%
	Vegetated Swale	16,388	0.38	2.2%
	Natural Open Space	315,146~~654~~318,534	7.23~~5~~31	42.9~~43.1~~3%
	Managed Open Space/Basins	31,203	0.72	4.3%

Table 2-3 shows the square footage details of the proposed lots. Lots 1–29 would range in size from 9,269~~330~~ square feet to 14,837 square feet. The open space lot (Lot 30) would be approximately 9.45~~6~~53 acres and would consist of ~~natural~~ dedicated common open space area, drainage features and private roads. ~~and existing easements, drainage features, and private roads~~. Approximately 7.23~~5~~31 acres of the open space lot would remain as ~~undisturbed~~ natural open space, covering 42.9~~3.1~~3 percent of the site. The natural open space would be managed in perpetuity by the HOA.

Table 2-3
Vesting Tentative Tract Map Proposed Lots

Lot Number	Lot Area (square feet)	Lot Number	Lot Area (square feet)	Lot Number	Lot Area (square feet)
1	14,837	11	10,414	21	12,559
2	~~9,330~~10,789	12	10,356	22	10,419
3	10,159	13	10,256	23	~~10,457~~9,269
4	9,838	14	11,506	24	~~10,792~~11,980
5	10,633	15	14,227	25	~~10,595~~11,894
6	10,779	16	11,118	26	~~10,734~~9,435
7	~~10,831~~11,528	17	10,612	27	10,966
8	~~11,058~~11,784	18	10,354	28	10,773~~10,494~~
9	11,228	19	10,613	29	12,398~~12,129~~
10	10,962	20	12,102	30 (Open Space)	411,164~~415,029~~ ~~412,149~~

- *Development Plan* (Case No. 15DVP-00001) is a request for approval of a Development Plan under the provisions of Section 35.82.080 (Development Plans) of the LUDC to construct 29 single-family residential lots and conduct mitigation and restoration activities on one open space lot. The Development Plan describes the proposed development details for the project site, including the associated infrastructure, open space area, two access drives, and on-site detention basins (see Figure 2-4). The single-family residences would range in size from approximately 2,400 square feet to 3,200 square feet, and would be single story with a maximum height of 22~~18~~ feet.

  The development on the project site would be located in two general areas separated by the ephemeral drainage located near the center of the project site. This ephemeral drainage would be retained within the common open space lot. A second, smaller ephemeral drainage crosses the site and is located to the east between lots 28 and 29. The project includes a proposed 20-foot Santa Barbara County drainage easement and installation of a headwall just inside the proposed open space and an underground 48-inch pipe to convey water between Lots 28 and 29. The pipe would connect to a new 7-foot-wide drainage inlet and junction structure located along the north side of Oak Hill Road. The junction would connect to the drain under Oak Hill Road to an overland outfall on the adjacent property to the south. Development of the project site also includes the installation of landscaping, roads, utilities, and the implementation of the OSMP in Appendix B for the common open space areas that would be owned and maintained by the HOA. Common area landscaping would be provided in disturbed areas outside the private lots and slopes adjacent to Oak Hill Drive.

- *Rezone.* The project proposes rezoning the site from Residential Ranchette (RR-10) to Design Residential (DR-1.8). The project would maintain the existing County General Plan Residential (RES-12.3) land use designation, and a County Comprehensive Plan Amendment is not proposed. Figure 2-6 shows the existing and proposed project site zoning.

- *Design Guidelines*. The Oak Hills Estate Design Guidelines are proposed to establish requirements for the architectural design of the homes that would subsequently be developed on proposed lots by the lot owners. The architectural design for proposed residences would be Mediterranean style, defined by simple massing, rectilinear L-shaped or courtyard plans, and accented primary facades. A front-facing porch arrangement or U-shaped courtyard would define proposed entries. Other key details include stucco walls, red or earth-toned tile roofs, articulated door surrounds, and the use of wrought iron. The design of individual residences would be considered for conformance with the proposed design guidelines on a case-by-case basis during review by County staff and the North County Board of Architectural Review.

  Adherence to the design guidelines would become a condition of approval for the development of the individual residences. The design guidelines address three main residential development components: Site Design, Building Design, and Landscape

Design. The design guidelines introductory section describes the organization, purpose, users, submittal requirements, administration, and enforcement of the design guidelines. Specifics addressed include site design, grading, floor area, building form and height, accessory structures, materials and finishes, mechanical and electrical equipment, lighting, driveways, fencing and walls, and landscape design planting and irrigation. A common interest HOA would be established to operate and maintain all interior and exterior common open areas. The proposed design guidelines are included in Appendix C-1 of this environmental impact report.

- *Building Setbacks and Heights*. The project would be designed to meet the requirements of the LUDC (Section 35.23.060) for the Design Residential (DR) Zone District, and would be designed to meet or exceed all applicable setbacks.

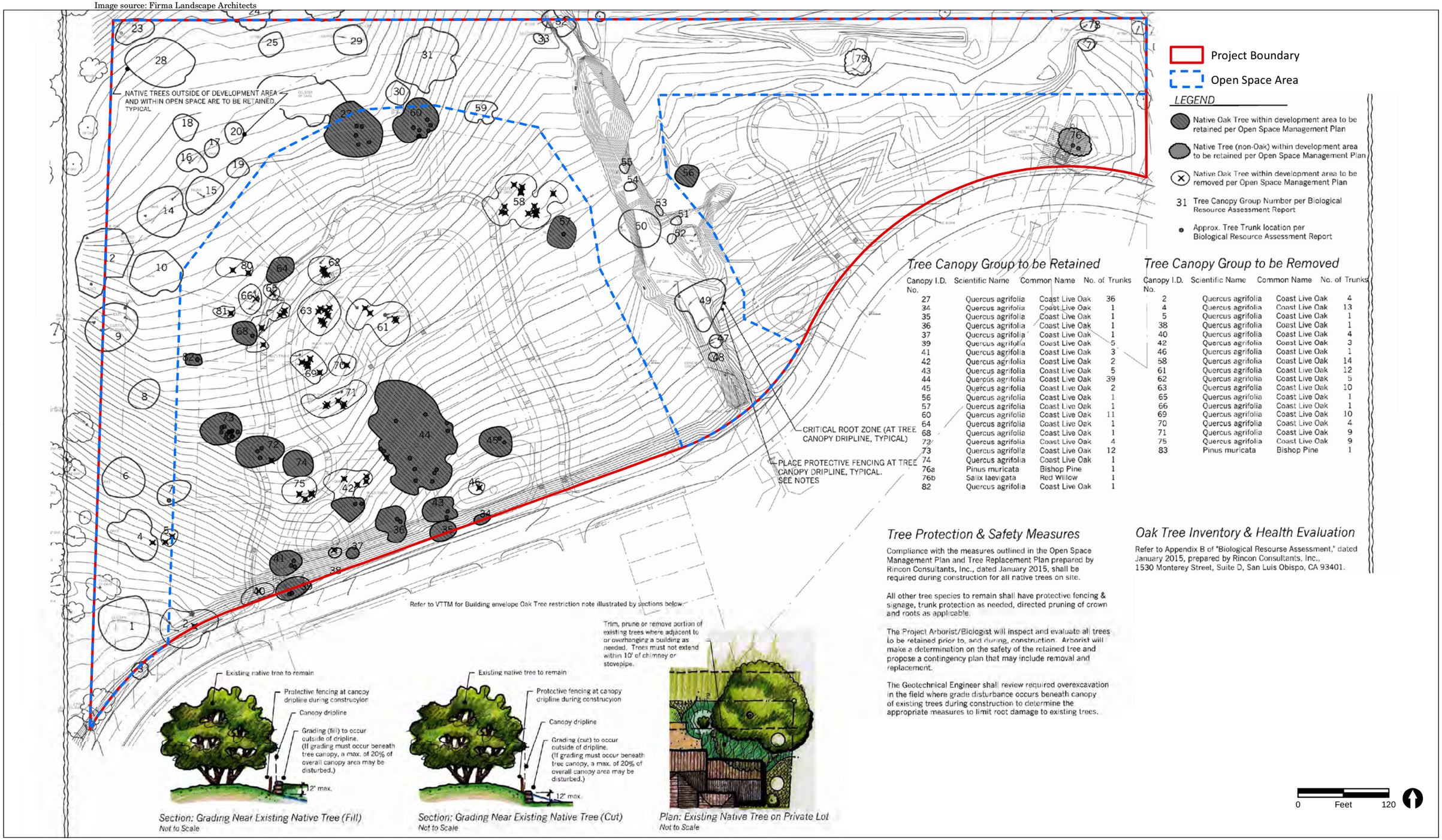
  The LUDC specifies the maximum height limit standard for the Design Residential Zone as 35 feet; however, the design guidelines limit the proposed single-family homes to a height of 22 feet and one story.

- *Open Space and Amenities.* The project proponent prepared the Biological Resources Assessment and Wetlands Delineation for the Oak Hills Estate Project (May 2017)~~(July 2015)~~ (Appendix D-1) that identifies habitat and wetland values on the project site. The project is designed to provide a contiguous open space area adjacent to the Burton Mesa Ecological Reserve, which borders the project site to the north and west. Approximately 9.45~~6~~53 acres of the site would be designated as common open space area (56~~.5~~ percent of the project site) managed by the HOA. Of this area, 0.72~~1.1~~ acre~~s~~ would consist of managed open space and basin~~s~~, and 0.38 acre of vegetated ~~bioswale~~ areas, and approximately 7.23~~31~~ acres would consist of unfragmented habitat (42.9~~3.1~~3 percent of the site) area. The remaining open space lot area (1.12 acres) would be used for road improvements.

  The habitat within the open space area includes a mixture of primarily central maritime chaparral and oak woodlands, as well as coyote brush scrub. The OSMP, a Tree Removal and Protection Plan, and HOA Managed Landscape/Habitat Plan for the Oak Hills Estate project (see Appendix B; Figures 2-7 and 2-8) propose measures addressing the enhancement, restoration, and protection of habitat and trees both on- and off-site.

  ~~A private trail would be provided for residents of the subdivision and located within the open space area along the western and northern perimeter of the project site. Three entrances to the proposed private trail would be located between Lots 1 and 2, between Lots 7 and 8, and from the Road B cul-de-sac between Lots 24 and 25. The trail creates a meandering half-loop through the open space area and would provide on-site hiking but would not provide access to the Burton Mesa Preserve. The trail would be 3 feet wide, constructed of native soil, and follow a meandering path along the contours of the existing topography. Figure 2-9 shows a cross section of the proposed trail.~~

Image source: Firma Landscape Architects



Tree Canopy Group to be Retained

Canopy I.D. No.	Scientific Name	Common Name	No. of Trunks
27	Quercus agrifolia	Coast Live Oak	36
34	Quercus agrifolia	Coast Live Oak	1
35	Quercus agrifolia	Coast Live Oak	1
36	Quercus agrifolia	Coast Live Oak	1
37	Quercus agrifolia	Coast Live Oak	1
39	Quercus agrifolia	Coast Live Oak	5
41	Quercus agrifolia	Coast Live Oak	3
42	Quercus agrifolia	Coast Live Oak	2
43	Quercus agrifolia	Coast Live Oak	5
44	Quercus agrifolia	Coast Live Oak	39
45	Quercus agrifolia	Coast Live Oak	2
56	Quercus agrifolia	Coast Live Oak	1
57	Quercus agrifolia	Coast Live Oak	1
60	Quercus agrifolia	Coast Live Oak	11
64	Quercus agrifolia	Coast Live Oak	1
68	Quercus agrifolia	Coast Live Oak	1
72	Quercus agrifolia	Coast Live Oak	4
73	Quercus agrifolia	Coast Live Oak	12
74	Quercus agrifolia	Coast Live Oak	1
76a	Pinus muricata	Bishop Pine	1
76b	Salix laevigata	Red Willow	1
82	Quercus agrifolia	Coast Live Oak	1

Tree Canopy Group to be Removed

Canopy I.D. No.	Scientific Name	Common Name	No. of Trunks
2	Quercus agrifolia	Coast Live Oak	4
4	Quercus agrifolia	Coast Live Oak	13
5	Quercus agrifolia	Coast Live Oak	1
38	Quercus agrifolia	Coast Live Oak	1
40	Quercus agrifolia	Coast Live Oak	4
42	Quercus agrifolia	Coast Live Oak	3
46	Quercus agrifolia	Coast Live Oak	1
58	Quercus agrifolia	Coast Live Oak	14
61	Quercus agrifolia	Coast Live Oak	12
62	Quercus agrifolia	Coast Live Oak	5
63	Quercus agrifolia	Coast Live Oak	10
65	Quercus agrifolia	Coast Live Oak	1
66	Quercus agrifolia	Coast Live Oak	1
69	Quercus agrifolia	Coast Live Oak	10
70	Quercus agrifolia	Coast Live Oak	4
71	Quercus agrifolia	Coast Live Oak	9
75	Quercus agrifolia	Coast Live Oak	9
83	Pinus muricata	Bishop Pine	1

Tree Protection & Safety Measures

Compliance with the measures outlined in the Open Space Management Plan and Tree Replacement Plan prepared by Rincon Consultants, Inc., dated January 2015, shall be required during construction for all native trees on site.

All other tree species to remain shall have protective fencing & signage, trunk protection as needed, directed pruning of crown and roots as applicable.

The Project Arborist/Biologist will inspect and evaluate all trees to be retained prior to, and during, construction. Arborist will make a determination on the safety of the retained tree and propose a contingency plan that may include removal and replacement.

The Geotechnical Engineer shall review required overexcavation in the field where grade disturbance occurs beneath canopy of existing trees during construction to determine the appropriate measures to limit root damage to existing trees.

Oak Tree Inventory & Health Evaluation

Refer to Appendix B of "Biological Resourse Assessment," dated January 2015, prepared by Rincon Consultants, Inc., 1530 Monterey Street, Suite D, San Luis Obispo, CA 93401.

Refer to VTTM for Building envelope Oak Tree restriction note illustrated by sections below:

Section: Grading Near Existing Native Tree (Fill)
Not to Scale

Section: Grading Near Existing Native Tree (Cut)
Not to Scale

Trim, prune or remove portion of existing trees where adjacent to or overhanging a building as needed. Trees must not extend within 10' of chimney or stovepipe.

Plan: Existing Native Tree on Private Lot
Not to Scale

0 Feet 120

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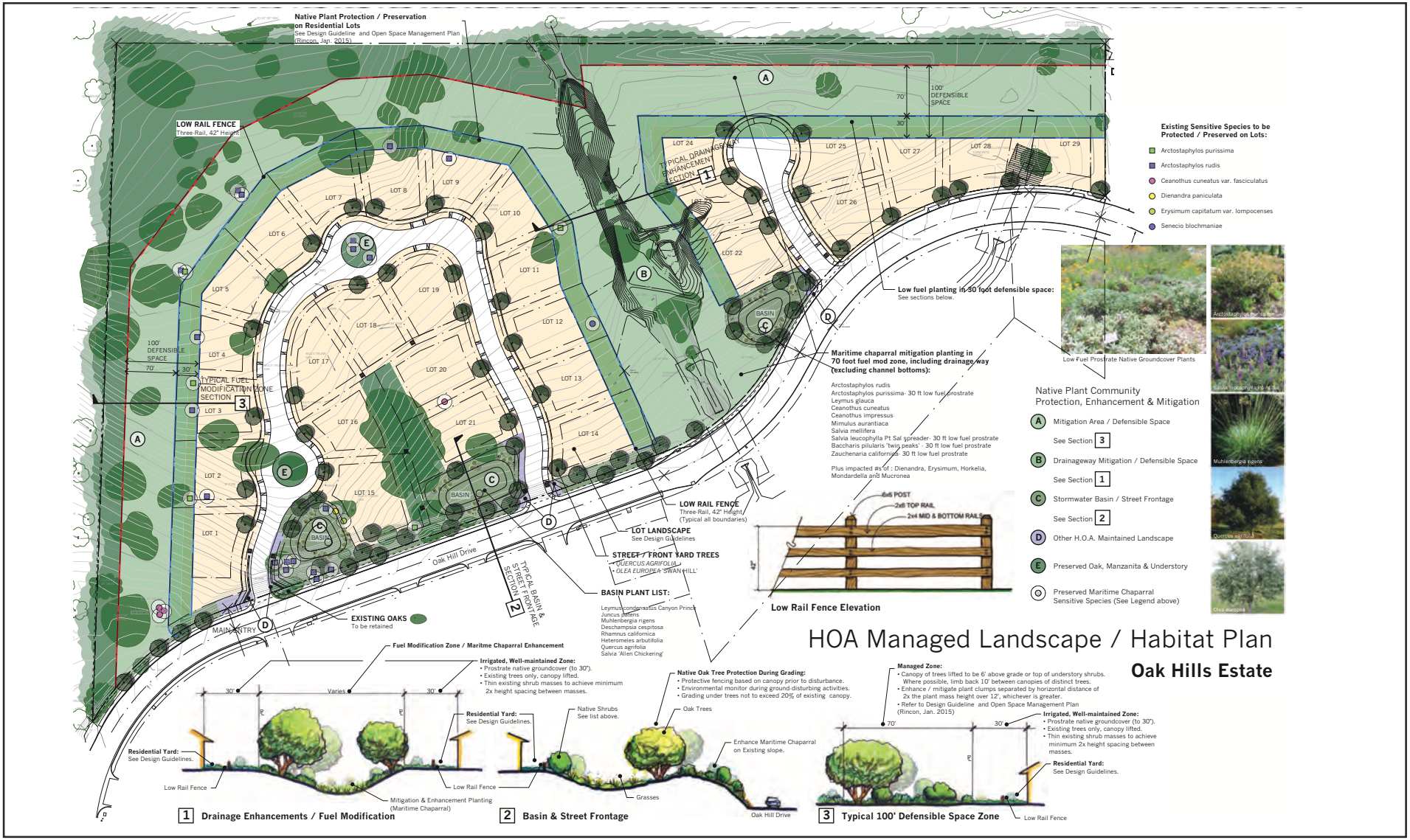
FIGURE 2-7
Tree Removal and Protection Plan

Map Source: Firma Landscape Architects



0 Feet 200

FIGURE 2-8

HOA Managed Landscape/Habitat Plan

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- *Landscaping*. Proposed landscaping would be implemented through the design guidelines (see Appendix C-1) and consist of a mix of trees including existing coast live oak trees, shrubs, perennials, succulents, annuals, and ground cover. Native and drought-tolerant species would be incorporated into the landscape design. Landscape lighting would be low-wattage, subtle, and colored lights would be prohibited. Three landscape planting zones would be applied to the residential lots. All landscape designs regardless of shape and location of the homesites would be considered utilizing two or three of the planting zones discussed below to facilitate the transition from the front yard and street area to retained clumps of oaks on the lot and wildland areas outside the development. Plant materials described in the design guidelines were chosen for their particular adaptability to the Burton Mesa weather and soils and for their resistance to pests and diseases. The three planting zones include:

  Zone 1: Front Yard/Streetscape. The Streetside Zone is the area adjoining the street in the front of the home and is reserved for the most "formalized and manicured" design elements, if desired. Zone 1 may contain the greatest diversity of plant materials – including non-native varieties. Elements such as birdbaths, sculptures, stream beds, water features, and others may be located in this area and must be submitted to the Oak Hills Estate Design Review Board for review.

  Zone 2A and 2B: Transition and Side Yards. Transition landscape Zone 2A is the area adjoining and blending to: (1) any preserved oak trees with native understory, (2) special chaparral scrubs, and (3) naturally planted storm water basins outside the homesite. This area needs limited irrigation around its edges.

  Transition landscape Zone 2B is the side yard area on the lots. Solid wood fences are allowed in the side yards, creating a private area appropriate for dog runs, vegetable gardens, and storage. These areas would be appropriately screened from the street and neighbors.

  Zone 3: Rear Yard/Defensible Space. This zone consists of the rear yard setback area that adjoins the open space. As described above, under fuel management for fire safety, this area is required by the Santa Barbara County Fire Department to be maintained as defensible space. The landscape would be mostly low to the ground, plants carefully maintained to keep dead wood from building up, and shrubs and trees from resting against the residence walls or eaves.

- *Fuel Management.* The project ~~includes a~~ propose~~d~~s a 100-foot wide defensible space fuel management zone that ~~would include a 100-foot defensible space area~~ extends outward from proposed residence building envelopes~~located between the proposed structures and the on-site open space area~~ (Figure 2-9 Fuel Management Zones). The defensible space area would be constructed and maintained as required by the Santa Barbara County Fire Department Development Standard 6 – Defensible Space.

Image source: USDA FSA NAIP (flown July 2016), Brush Management Zone Data Source: RECON, CAD Lines Data Source: RRM Design Group (Modified by RECON)

Project Boundary
Open Space Area
Fire Management Zone 1 (FMZ-1): 0 to 30 feet
Fire Management Zone 2 (FMZ-2): 30 to 100 feet

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FIGURE 2-9

Fuel Management Zones

As discussed in the OSMP (see Appendix B), ~~beginning at the exterior edge of the foundations of structures,~~ a "low fuel zone" ~~bordering the outer edge~~ and would ~~encompasse~~encompasses ~~a~~a 30-foot wide area extending outward from ~~n area located 30 feet inside the proposed lot limits~~proposed building envelopes ~~of~~ on Lots 1 through 14 and Lots 22 through 29 as shown on Figure 2-9. Fuel management in this 30-foot wide zone ~~, and~~ would ~~separating the residences from the open space lot where~~consist of ~~moderately~~ intensive fuel management activities, including ~~such as selective pruning and thinning of dead vegetation~~a substantial reduction in flammable vegetation ~~, , would occur~~ in accordance with the General Guidelines for Creating Defensible Space ~~(by the~~ California Department of Forestry and Fire Protection ~~(~~2006). ~~An additional 70 feet of defensible space from the low fuel zone is incorporated into the project's fuel management strategy.~~

Vegetation within the low fuel zone ~~on each of these lots from 0 to 30 feet of the exterior edges of foundations of structures~~ would ~~be thinned and would~~ receive periodic maintenance to maintain or reduce the current fuel load on the project site and reduce the potential for wildland fires to affect on-site structures and adjacent properties. The low fuel zone would be located entirely within the proposed lot limits ~~on these lots~~ and would not be located within the proposed open space lot.

Beyond the 30 foot low fuel zone, an additional 70 feet of defensible space would be incorporated into the project's fuel management zone. This area would be located within the open space lot and ~~would be~~long-term maintenance and management ~~d~~ provided ~~According to the OSMP, the on-site open space that will be preserved and provide mitigation for project impacts is Mitigation areas located more than 30 feet from structures.~~

~~The aforementioned strategies provided in the OSMP will be implemented~~ by the HOA. ~~for long-term maintenance.~~

The project's fuel management zone ~~and~~ would be in compliance with the California Department of Forestry and Fire Protection General Guidelines for Creating Defensible Space (2006) and County Fire Department Development Standard 6 – Defensible Space. Additional strategies include:

1. Vegetation within proposed fuel management zones would be thinned by removing vegetation in a mosaic pattern, which would result in reduced plant density or aerial coverage rather than completely clearing the vegetation. This will be implemented to the maximum extent possible~~.~~
2. Impacts associated with fuel management would be confined to the specified fuel management zones.
3. Fuel management thinning would focus on the removal of non-native, diseased, dying, or dead vegetation. In addition, thinning will be focused on faster growing species, such as coyote brush and deerweed rather than slower growing species (e.g., manzanitas).

4. All sensitive plant species and oak trees would be avoided with supervision by a qualified biologist.
5. All such maintenance activities would be completed using hand tools only.

The Oak Hills Ddesign gGuidelines (Appendix C-1) and Figure 2-8 HOA, Managed Landscape/Habitat Plan, also specify requirements for fire safety, habitat management, and landscaping. ~~in the 30-foot low fuel zone. The homeowner will be required to be responsible for the design and care of the first 15 feet of this zone in the rear yard. An added distance of 15 feet of low vegetative fuel space is required between the rear yard and the adjoining natural wildland around the residence and must include irrigation. No woody, flammable vegetation will be allowed to exist in this zone. New trees will be required to be planted at least 10 feet from the roof eave, and existing large trees must be trimmed and well maintained. In addition, the design guidelines includes an appropriate plant list and Planting Zone specifications for fire safety (see the Landscaping discussion below for details). Refer to Figure 2-8 for the HOA Managed Landscape/Habitat Plan and Figure 2-10 for the Fuel Management Zones.~~

- *Affordable Housing*. The applicant would comply with the County's Inclusionary Ordinance by paying in-lieu fees for affordable housing.

b. Infrastructure and Access Components. This section describes infrastructure (including roadways, landscaping, and grading) proposed for the project site (see Figures 2-4 through 2-9~~10~~).

- *Roadway Access and Parking*. A two-way road loop "Road A" and a cul-de-sac "Road B" would both be private roads that provide access to the project site from Oak Hill Drive. Both roads would be up to 24 feet wide with variable widths to accommodate sidewalks and parking. Road A would provide access for Lots 1–21. Road B, on the east half of the project site, would provide access to Lots 22–26, and end with a cul-de-sac. To accommodate for guest and overflow on-street parking, 21 spaces would be provided for Road A and Road B would provide 8 street parking spaces. Lots 27–29 would be accessed directly from Oak Hill Drive. The design guidelines require parking standards for each lot to be provided within garages or driveways, which would be able to accommodate up to a minimum of four spaces, in which a minimum of two would be located in a garage. No street parking is proposed on Oak Hill Drive.

  Preliminary design review and consultation meetings were conducted with the County Fire and Public Works Department to incorporate appropriate emergency vehicle road access, safety, and parking criteria. For pedestrian safety and access, 5-foot-wide sidewalks with curbs and cutters would be constructed along the north edge of Oak Hill Drive, and would connect to existing adjacent sidewalks on Oak Hill Drive to the east and west of the project site. The sidewalks would continue along the front lot entryways on Roads A and B. In addition, a 6-foot-wide public utility easement is proposed along Lots 1–26 and Lot 30.

- *Public Services and Infrastructure*. VVCSD would provide water and sewer service to the project site. VVCSD has indicated that there is sufficient wastewater system capacity, and approximately 13.68 acre-feet of water per year from VVCSD have already been reserved in an Intent to Serve letter for the project dated October 9, 1995 from previous proposals to develop the project parcel. This capacity was confirmed in a March 12, 2015 letter from VVCSD (VVSCD 2015). Water supply infrastructure to the project site would be provided by new 8-inch water pipelines to be located in Roads A and B and connecting to the existing and VVCSD 10-inch water line located in Oak Hill Road. Sewer infrastructure to serve the project site would be provided by new 8-inch sewer lines constructed in Roads A and B and within Oak Hill Road. Internal and external water demand for the project is estimated to be 11.3 acre-feet per year using the County of Santa Barbara Environmental Thresholds and Guidelines Manual (2015).

  Pacific Gas and Electric would provide electric service, and Southern California Gas would provide gas service to the project site. Verizon would provide phone and internet service, and Comcast would provide cable TV and internet service to the project site.

- *Grading*. The preliminary grading plan for the project (dated ~~August 25, 2015~~April 5, 2017) includes three phases, not including grading for the 29 individual for sale residential home sites and the open space lot (see the grading summary in Table 2-4 below). As discussed above, specific designs for individual residences and development of the residential lots are not a part of the proposed project. The residential lots will be separate actions and will undergo subsequent design, building, and grading review by the County at the time of development of the lots, either individually or together. The project application, dated June 22, 2015, describes the grading of the project site as being designed to minimize impacts and preserve existing on-site native vegetation and natural terrain to the extent feasible. Based on input from the project engineer, the size of the proposed lots and typical grading quantities for similar residential projects, the proposed grading for the individual residential lots has been assumed to average 600 square feet of cut and fill per lot with a potential 20 percent margin of variance. Therefore, grading on the 29 residential lots would approximate 17,400 cubic yards of cut and 17,400 cubic yards of fill, with a 3,480 cubic yard margin of variance.

- The project grading plans assume that any excess soils/material would be retained and distributed throughout the site (pers. comm. Walters, May 26, 2016). As no residential construction is proposed as part of the project, for environmental review purposes the grading estimates assume maximum disturbance of lots. Actual grading requirements would likely be less than estimated, as individual lots would minimize grading in accordance with the Oak Hills Estate Design Guidelines (see Appendix C-1).

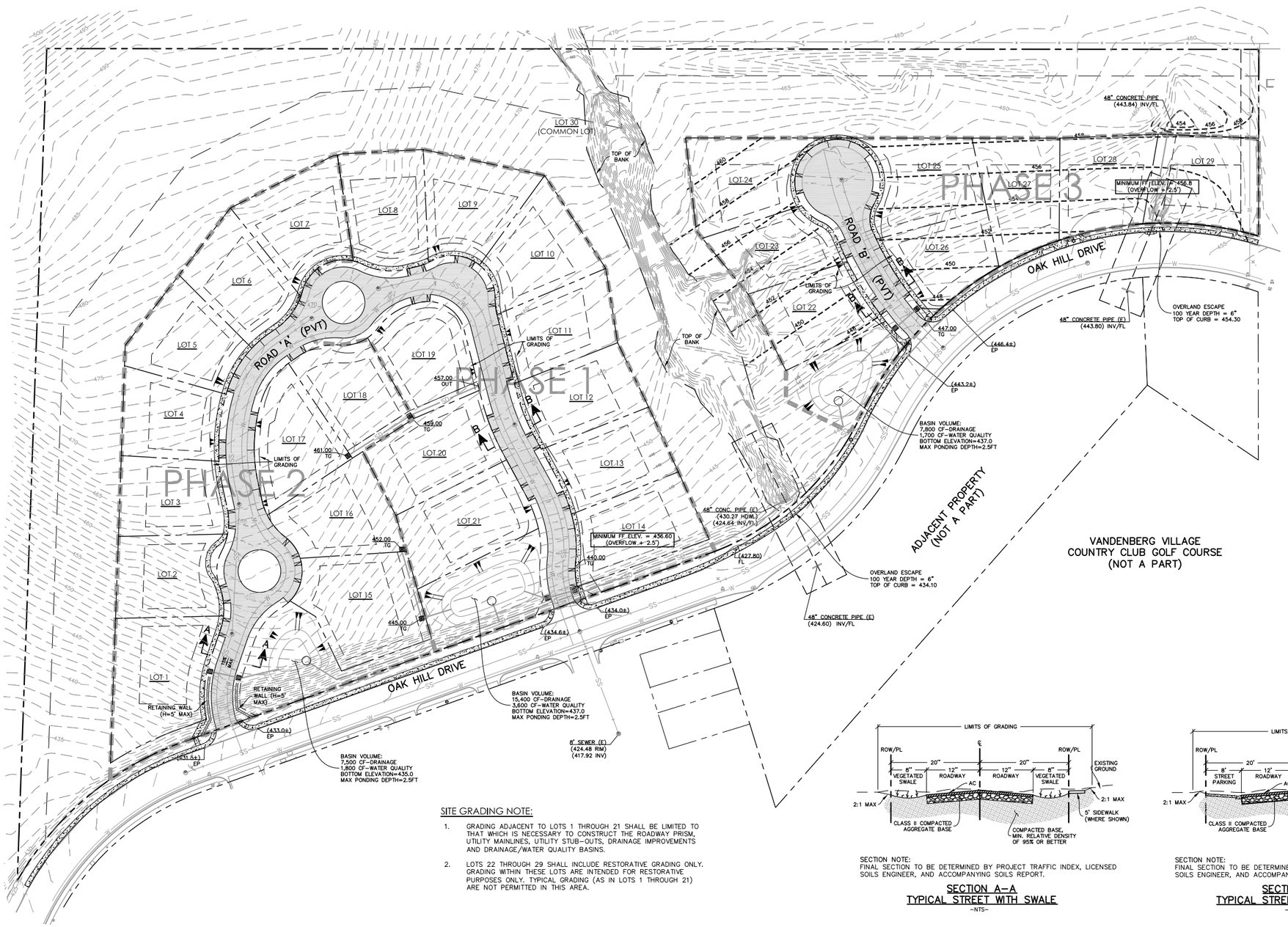
Table 2-4 Preliminary Grading Summary		
Lots/Phases	Cut (cubic yards)	Fill (cubic yards)
29 Residential Lots	17,400	17,400
Phases 1, 2, and 3 (Infrastructure)	5,700	2,700
Total	**23,100**	**20,100**
Source:RRM Design Group		

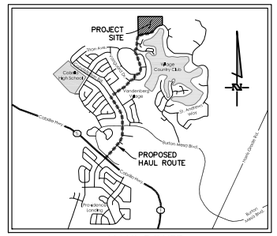
The exception to this will be grading existing disturbed areas located in the vicinity of and on Lots 23–29 on the tentative tract map (see Figure 2-5), which is proposed to be graded using restorative grading techniques defined as corrective contour grading eliminating areas of erosion and manmade features such as dirt roads and paths and restores the natural sheet flow drainage pattern (pers. comm. Walters, May 26, 2016). According to the project application, manufactured slopes would be established on both sides of the central ephemeral drainage with a slope gradient of 5:1.

Preliminary grading volume estimates for Phases 1, 2, and 3 (infrastructure and drainage) indicate that approximately 5,700 cubic yards of cut and 2,700 cubic yards of fill. Approximately 3,000 cubic yards of cut would be for roads and swales, and 800 cubic yards of cut would be completed for drainage basins (pers. comm. Walters, May 26, 2016). See Figure 2-10~~4~~ for details. The project grading adjacent to Lots 1 through 21 is proposed to be limited to what is necessary to construct the roadway, utility mainlines, utility stub-outs, drainage improvements, and drainage and water quality basins.

- *Drainage Infrastructure.* Three (0.72 acre) on-site detention basins and bio-swale areas are proposed. On the western portion of the site, the collected storm water would be conveyed via a system of drains and pipe to Detention Basins A and B, located north of and adjacent to Oak Hill Drive. For the eastern portion of the site, storm water would be conveyed to Detention Basin C, also located north of and adjacent to Oak Rill Road (see Figure 2-10~~4~~). Each proposed detention basin would have a maximum ponding depth of 2.5 feet. A proposed 10-foot-wide privately maintained drainage easement would be located along Lots 15, 18, and 19. To further reduce water quality impacts, the project would include the following low impact development measures, to the extent feasible, including vegetated swales and buffers, channeling runoff into roadside swales paralleling the road, permeable pavement where appropriate, and impervious surface reduction.

Map Source: RRM Design Group





HAUL ROUTE
NTS

EARTHWORK QUANTITIES:

AREA OF DISTURBANCE (SF)	
ROADS:	48,904
VEGETATED SWALES:	16,388
DRAINAGE BASINS:	31,203
RESTORATIVE GRADING:	92,400
RAW CUT (CU YD)	
ROADS/SWALES:	3,000
DRAINAGE BASINS:	800
RESTORATIVE GRADING:	1,900
RAW FILL (CU YD)	
ROADS/SWALES:	900
DRAINAGE BASINS:	–
RESTORATIVE GRADING:	1,700

EARTHWORK QUANTITIES:

EARTHWORK SHALL CONSIST OF RESTORATIVE GRADING ONLY. THE RAW EARTHWORK QUANTITIES SHOWN HEREON REPRESENT THE ESTIMATED VOLUMETRIC DIFFERENCE BETWEEN THE PROPOSED FINISHED GRADES AND THE (LIMITED) TOPOGRAPHIC EXISTING GRADES. THESE QUANTITIES EXCLUDE THE VOLUME OF STRUCTURAL MATERIALS NEEDED FOR BACKFILL, ROADWAY, AND OTHER HARD-SCAPE IMPROVEMENTS. FURTHERMORE, THESE ESTIMATES DO NOT CONSIDER LOSSES OR BULKING DUE TO: SHRINKAGE, SOIL AMENDMENTS, STABILIZATION, CONSTRUCTION TECHNIQUE, FOOTING & TRENCHING SPOILS, ETC. THESE, IN ADDITION TO ACTUAL FIELD CONDITIONS, CONSTRUCTION TECHNIQUE AND THE FINAL RECOMMENDATIONS OF THE SOILS ENGINEER MAY SIGNIFICANTLY EFFECT THE FINAL IMPORT/EXPORT QUANTITIES.

EXISTING SLOPES WITHIN THE PROJECT SITE DO NOT EXCEED 30%. MAXIMUM VERTICAL HEIGHT OF CUT AND FILL SLOPES SHALL NOT EXCEED 30%.

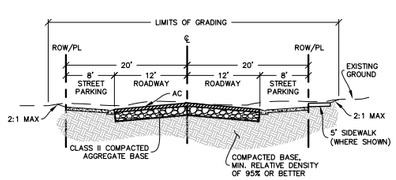
DATE: JANUARY 2015 (JULY 2015 – RESTORATIVE GRADING)

SITE GRADING NOTE:

1. GRADING ADJACENT TO LOTS 1 THROUGH 21 SHALL BE LIMITED TO THAT WHICH IS NECESSARY TO CONSTRUCT THE ROADWAY PRISM, UTILITY MAINLINES, UTILITY STUB-OUTS, DRAINAGE IMPROVEMENTS AND DRAINAGE/WATER QUALITY BASINS.
2. LOTS 22 THROUGH 29 SHALL INCLUDE RESTORATIVE GRADING ONLY. GRADING WITHIN THESE LOTS ARE INTENDED FOR RESTORATIVE PURPOSES ONLY. TYPICAL GRADING (AS IN LOTS 1 THROUGH 21) ARE NOT PERMITTED IN THIS AREA.

SECTION NOTE:
FINAL SECTION TO BE DETERMINED BY PROJECT TRAFFIC INDEX, LICENSED SOILS ENGINEER, AND ACCOMPANYING SOILS REPORT.

SECTION A-A
TYPICAL STREET WITH SWALE
-NTS-



SECTION NOTE:
FINAL SECTION TO BE DETERMINED BY PROJECT TRAFFIC INDEX, LICENSED SOILS ENGINEER, AND ACCOMPANYING SOILS REPORT.

SECTION B-B
TYPICAL STREET WITH PARKING
-NTS-

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FIGURE 2-10
Project Grading and Drainage Plan Details

- *Proposed Easements.* As shown in Figure 2-4, a portion of the existing 50-foot-wide Santa Barbara County drainage easement located to the east between Lots 28 and 29 would be abandoned and replaced by a proposed 20-foot-wide drainage easement running between the south property line and the proposed on-site open space lot. An existing concrete culvert and headwall located along the north property line between the two lots would be removed, and a new headwall would be constructed within the drainage approximately 10 feet north~~above~~ of the proposed southern lot line and within the open space lot. The existing headwall located adjacent to the opposite end of Oak Hill Road would remain, and a 7-foot-wide drainage inlet and junction structure is proposed to be constructed at the edge of the newly constructed sidewalk between Lots 28 and 29. Additional proposed easements include a 10-foot-wide private drainage easement on Lots 15, 18, and 19; variable width roadway, drainage, water, and sewer easements along Lots 1–26; and a 6-foot-wide public utility and sidewalk easement from Lots 1–26 and Lot 30.

- *Existing Easements.* The existing 50-foot-wide Santa Barbara County drainage easement located along the natural ephemeral drainage by the center of the project site, which extends approximately 70 feet to the north and south of Oak Hill Drive would remain as a result from the proposed project. Two additional existing easements located along the center of the natural ephemeral drainage that will remain include a Union Oil Company road, pipeline, and utility easement, and a Vandenberg Disposal Company pipeline, ingress and egress easement. On the project site's eastern boundary, an existing 20-foot-wide Vandenberg Utility Company water line easement located along Lot 29 will remain.

c. Oak and Chaparral Mitigation. The project proposes to conduct mitigation for impacts to oak trees and maritime chaparral habitat both on the project site and at an off-site location. On-site mitigation would generally include the creation of maritime chaparral and planting oak trees on project site areas that are to be preserved as open space. Off-site mitigation would generally consist of planting oak trees and the creation/restoration of maritime chaparral habitat on ~~an approximately 28-acre portion of~~ a 123-acre property (APN 097-371-067) owned by the Vandenberg Village Community Services District (VVCSD). This parcel is located along the east side of Club House Road approximately 1 mile southeast of the project site (Figure 2-11~~2~~).

The availability of ~~a 28-acre area of~~ open space on APN 097-371-067 has been verified by the VVCSD, who has indicated ~~that~~ that planting of oak trees and maritime chaparral habitat would require the development of a final restoration plan as part of the map recordation process, subject to approval by the County and VVCSD (VVCSD 2016).

Map Source: Rincon Consultants

FIGURE 2-11

Oak and Chaparral Mitigation Site on APN 097-371-067

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d. Project Phasing. Development on the project site is to be constructed in three phases, which may be developed independently or concurrently, depending on market conditions and economic feasibility. The anticipated phasing would be:

- Phase 1 – All necessary infrastructure buildout of the project including access drives and utilities along with buildout of Lots 1–6 and 14–18.
- Phase 2 – All necessary improvements to develop Lots 7–13 and 19–21.
- Phase 3 – All necessary improvements to develop Lots 22–29.

Frontage improvements along Oak Hill Drive would be constructed to the limits of each of the three phases detailed above and shown in the development plan.

2.7 Project Objectives

The objectives of the Oak Hills Estate project are as follows:

1. To develop the site in a manner that is consistent with the County's General Plan, environmental requirements, and that complements the physical characteristics of the site.
2. To provide desirable housing types and densities consistent with surrounding neighborhoods.
3. To develop the site in a manner that preserves a significant component of the site as permanent open space designed and managed to protect the natural habitat.
4. To ensure that the site is compatible with the Burton Mesa Ecological Reserve and surrounding area through sensitive site design and residential architectural design standards.
5. To develop design criteria that encourage connectivity inside and adjacent to the project, that link the community with walking trails, and provide access to the adjacent Country Club property.

2.8 Required Approvals

Implementation of the proposed project would require the following discretionary approvals from the County of Santa Barbara:

1. Certify the Final Environmental Impact Report for the Oak Hills Estate Project;
2. Approve Rezone (Case No. 15RZN-0002) changing the zoning of the ~~16.82~~16.88 acres APN 097-371-010 from RR-10 (Residential Ranchette, 1 unit per 10 acres), to Design Residential (DR-1.8, 1.8 units per acre);

3. Approve the Vesting Tentative Tract Map (Case No. 15TRM-00001) (TM 14,180) to subdivide APN 097-371-010 into 30 lots;

4. Approve the Development Plan (Case No. 15DVP-00001) to allow for development of 29 single-family residences, one common open space lot, and associated improvements;

~~5. Approve the Oak Hills Estate Residential Design Guidelines.~~

In addition, the RWQCB will be a responsible agency for review of the National Pollutant Discharge Elimination System permit requests. The SBAPCD will be a responsible agency for review of the project's emissions, construction, and greenhouse gas impacts. The CDFW will be a responsible agency for review of the policies under the California Endangered Species Act and wetlands resources, and VVCSD will be a responsible agency for review of the project's design and capacity for water supply and wastewater collection services.

Chapter 3.0
Environmental Setting

This chapter provides a brief overview of the existing physical characteristics of the Oak Hills Estate project site and surrounding area. Cumulative development projects in the project region are also identified. A detailed description of the proposed project can be found in Chapter 2.0, Project Description. Additional background, detailed setting information, and project-related and cumulative impact assessments specific to each of the issue areas evaluated by this EIR can be found within the individual sections of Chapter 4.0, Environmental Impact Analysis.

3.1 Project Setting

The project is located within the northern portion of the unincorporated community of Vandenberg Village and approximately 2.5 miles north of the City of Lompoc in northwestern Santa Barbara County. Vandenberg Village is located along Highway 1, approximately 13 miles west of Highway 101 and 9 miles east of the Pacific Ocean. Vandenberg Air Force Base (VAFB) is located approximately 4 miles northwest of Vandenberg Village. The Vandenberg Village area is approximately 2 miles in length and 1.5 miles in width. The County contains approximately 423,895 residents, of which 6,497 live in Vandenberg Village (U.S. Census Bureau 2015).

The project site is located along the southern slopes of the Purisima Hills, which rise above the project site and provide distinctive, steeper topography than the surrounding area. Vandenberg Village is located north of the Santa Ynez River and on the Burton Mesa. The Burton Mesa rises above the Lompoc Valley by 200 to 400 feet and contains gentle to moderate topography except along the flanks of locally incised canyons.

The Purisima Hills are a part of the Santa Ynez Mountains, which run transversely, east to west. This transverse range creates valleys open to the Pacific Ocean, allowing the inland flow of fog and ocean breezes to keep the climate temperate. Daytime summer temperatures in the area average from the low to upper 70 degrees Fahrenheit. Nighttime low temperatures during the summer are typically in the low 50s, while the winter high temperature tends to be in the 60s. Winter low temperatures are generally in the low 40s.

The project site is located north of and adjacent to Oak Hills Drive. The project site is bounded by residential development to the south and east and by the Burton Mesa Ecological Reserve (Reserve) to the north and west. The Village Country Club Golf Course is also located to the south of the project site (see Figure 2-3).

The project site is generally a triangular parcel located in a gently to moderately sloped area of the Burton Mesa that slopes approximately south–southeast toward Oak Hills Drive. Elevations range from approximately 425 feet above mean sea level (MSL) in the southwest corner to 490 feet above MSL in the northern portion of the site. The project site is currently undeveloped; however, the site shows evidence of previous disturbance in the northern portion of the parcel where linear drainage swales and berms are present (Rincon 2017~~5~~a).

The project proposes to conduct mitigation for impacts to sensitive biological resources on ~~a 28-acre portion of~~ a 123-acre open space parcel owned by the Vandenberg Village Community Services District (APN 097-371-067) located approximately 1 mile southeast of the project site. The off-site mitigation parcel is bounded by Clubhouse Road to the west, Burton Mesa Boulevard and open space to the south, Burnham Drive to the north, and open space to the east (see Figure 2-11~~2-12~~). The off-site mitigation parcel is located in a gently to moderately sloped area of the Burton Mesa that slopes approximately south-southwest toward Burton Mesa Boulevard (Rincon 2016a). Elevations range from approximately 370 feet above MSL in the northeast corner to 255 feet above MSL to the south (Rincon 2016a). Vegetation in the off-site mitigation parcel and surrounding open space consists of sensitive plant species, black sage scrub with chamise, chamise chaparral, coast live oak woodland, non-native annual grassland, and located adjacent to residential development.~~developed communities~~.

3.2 Environmental Characteristics

3.2.1 Aesthetics/Visual Resources

The project site contains a variety of important scenic resources that include rolling topography, contiguous habitats of maritime chaparral, coast live oaks, coyote brush scrub, spikerush emergent wetland, and ruderal vegetation. The open space on the project site contributes to a semi-rural atmosphere in the designated urban area at the urban fringe and adjacent to the existing residences along the Village Country Club Golf Course.

Views of the project site are available from Oak Hills Drive, the golf course, condominiums, and single-family residences to the south and east. The Burton Mesa Ecological Reserve dominates views to the north and west. Background views from the project site include residential developments to the south and hillsides to the north, east, and west. Views from the project site include the golf course to the south and southwest, single-family residences to the east, and the Burton Mesa Ecological Reserve to the north and west. Oil well production facilities on the Purisima Hills slopes approximately ¼ mile northeast of the project site are visible from the surrounding area and the project site.

Highway 1, a designated state and County of Santa Barbara scenic highway, is located approximately 2 miles south of the project site. This scenic highway is not visible from the project site or its immediate surroundings due to screening by local topography, distance, residential development, golf course landscaping, and large groves of trees adjacent to the highway.

3.2.2 Biological and Wetland Resources

The environmental setting for biological and wetlands resources is based on information in the Biological Resources Assessment for the Oak Hills Estate Project (Rincon 2017a ~~2015a~~).

Vegetation within the 16.88-acre project site consists of maritime chaparral, coyote brush scrub, ruderal vegetation, and spikerush emergent wetland. Mature coast live oak trees are also abundant on the site. Figure 4.3-1 shows the extent of the vegetation communities on-site.

Suitable habitat exists for 32 special status plant species. Nine of these species were documented within the project site during focused botanical surveys conducted in spring of 2014. ~~Eight~~Fifteen special status wildlife species have the potential to occur within the project site; including one federally endangered species, the El Segundo blue butterfly (*Euphilotes battoides allyni*) and two~~the~~ federally threatened species, the California red-legged frog (*Rana aurora draytonii*) and vernal pool fairy shrimp (*Branchinecta lynchi*). In addition, vegetation on the project site offers potential nesting habitat for bird species that are protected under the federal Migratory Bird Treaty Act and California Fish and Game Code. The project site also contains native trees, including bishop pine (*Pinus muricata*) and coast live oak (*Quercus agrifolia*).

Two ephemeral stream channels are located on project site, one at the center of the site and a second near the eastern boundary. A seasonal wetland depression is present near the north edge of the project site, east of the western drainage feature. The project site is located within a regional Essential Connectivity Area wildlife movement corridor (CDFW 2010). California Department of Fish and Wildlife (CDFW) defines Essential Connectivity Areas as large remaining blocks of intact habitat or natural landscape and modeled linkages between them that need to be maintained, particularly as corridors for wildlife (CDFW 2010).

The Burton Mesa Ecological Reserve is located adjacent to the project site to the north and west. The Reserve consists of 5,368 acres between the Purisima Hills and Santa Ynez Mountains and encompasses one of the last significant stands of maritime chaparral in California. The Reserve is owned by the State Lands Commission and leased to the CDFW for management, operation, and maintenance. In 2004, the Fish and Game Commission approved the formal designation of "ecological reserve" for this area to grant special protection to the rare, threatened, and endangered plant species (CDFW 2016).

3.2.3 Climate/Air Quality

Vandenberg Village is located within the South Central Coast Air Basin (SCCAB), which includes all of San Luis Obispo, Santa Barbara, and Ventura counties. The climate of Santa Barbara County and all of the SCCAB is strongly influenced by its proximity to the Pacific Ocean and the location of the semi-permanent high-pressure cell in the northeastern Pacific Ocean.

Vandenberg Village has a Mediterranean climate characterized by warm, dry summers and cool winters with occasional rainy periods. The Mediterranean climate and coastal influence of the region produce moderate temperatures year round, with rainfall concentrated in the winter months. Annual average rainfall in the Vandenberg Village area is approximately 14 inches, which mostly occurs between October and April.

In this region, cool and humid marine air causes frequent fog and low clouds along the coast, generally during the night and morning hours in the late spring and early summer months. The region is subject to a diurnal cycle in which daily onshore winds from the west and northwest are replaced by mild offshore breezes flowing from warm inland valleys during night and early morning hours. This alternating cycle can create a situation where suspended pollutants are swept offshore at night and then carried back onshore the following day. Dispersion of pollutants is further degraded when the wind velocity for both day and nighttime breezes is low.

The region is also subject to seasonal Santa Ana winds. Santa Ana winds are strong northerly to northeasterly winds that originate from high-pressure areas centered over the desert of the Great Basin. These winds are usually warm, very dry, and often full of dust. They are particularly strong in the mountain passes and at the mouths of canyons.

Santa Barbara County is in non-attainment for the state eight-hour ozone standard and the state standard for particulate matter less than 10 microns in diameter (PM_{10}). The County is unclassifiable/attainment for the federal particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) standard and unclassified for the state $PM_{2.5}$ standard. The County is in attainment for all other air quality standards.

3.2.4 Geographic and Hydrologic Features

The environmental setting for geologic features is based on the Geotechnical Investigation for Oak Hills Estate (GSI Soils, Inc. 2015).

The project site soils consist of very loose to loose sands to a depth up to a depth of 20 feet below grade. The project site is located in an area identified as having a low potential for landslides, and a moderate potential for high groundwater.

The Santa Ynez Valley is traversed by east–west trending faults. These faults include the active Los Alamos-Baseline fault and the potentially active Santa Ynez fault. The Los Alamos-Baseline fault is located approximately 4 miles north of the project site and is

assigned a maximum earthquake magnitude of 7.2. The Santa Ynez fault is approximately 5.0 miles south of the project site and is assigned a maximum earthquake magnitude of 7.0.

Other active and potentially active faults in the project area include the Big Pine-Rinconda fault, Casmalia (Orcutt Frontal) fault, the Lions Head fault, and the San Andreas Fault. Fault rupture is the displacement of the ground surface created by movement along a fault plane during an earthquake. The project site is not located within a State of California Alquist-Priolo Earthquake Fault Zone.

The environmental setting for water and hydrology resources is based on the Oak Hills Estate Project Drainage Report (RRM Design Group 2015).

The project site is in the San Miguelito Creek-Santa Ynez River watershed and does not contain any named streams. The project site is also located within the boundaries of the Lompoc Groundwater Basin. There are no water bodies located on the project site. The nearest major drainage to the project site is the Santa Ynez River approximately 3.5 miles south.

3.2.5 Public Services and Utilities

The project site is under the jurisdiction of the Santa Barbara County Fire Department and is serviced by Station 51 at 3510 Harris Grade Road in Lompoc, located approximately 2 miles southeast of the project site. The Lompoc Fire Department has a mutual aid agreement with the Santa Barbara County and VAFB Fire Departments and participates in the Statewide Mutual Aid agreement. Law enforcement services for the project site would be provided by the Santa Barbara County Sheriff's Department.

The project area is served by the Lompoc Unified School District. The nearest public schools serving the project site are: Cabrillo High School, Buena Vista Elementary School, Vandenberg Middle School, and Maple High School (see Figure 4.10-1).

The project site is served by the Santa Barbara County Community Services Department Parks Division. The Parks Division is responsible for planning, improving, and maintaining parks, recreation facilities, trails, and open space in the unincorporated County. Other parks near the project site include Providence Landing Park, Ken Adman Park, La Purisima Mission State Historic Park, River Park, Ocean Beach Park, and Santa Rosa Park. The Burton Mesa Ecological Reserve offers hiking trails and wildlife viewing.

Library services in the project area are provided by the City of Lompoc. The Village Library, located on Constellation Road, is the nearest branch to the project site. The closest emergency healthcare facility to the project site is the Lompoc Valley Medical Center located on Ocean Avenue in the City of Lompoc. This facility is located approximately 5.5 miles south of the project site.

The project site is located in the Vandenberg Village Community Services District (VVCSD), which provides water and wastewater service. Existing water and wastewater pipes are located along the southern project boundary in Oak Hills Road. Waste

Management Inc. provides solid waste removal and recycling services. Solid waste disposal service for the project site would be at the City of Lompoc Landfill.

The Southern California Gas Company (SCGC) provides natural gas service and Pacific Gas and Electric (PG&E) provides electrical service to the project site. Telephone service is provided by numerous providers, including AT&T and Comcast. As public utilities, SCGC, PG&E, and telecommunications providers are under the jurisdiction of the California Public Utilities Commission.

3.2.6 Transportation and Circulation

The environmental setting for transportation and circulation is based on the Oak Hills Estates Traffic and Circulation Study (Penfield & Smith 2015).

Vehicle access to the project site is directly from Oak Hills Drive. The primary roadways used for access to Oak Hills Drive are Galaxy Road, Aldebaran Avenue, Titan Avenue via Burton Mesa Road and Constellation Road, which connect the project site to State Route 1 (also known as the Cabrillo Highway), located approximately 1.5 miles south of the project site (see Figure 4.11-1). The Vandenberg Village community is served by a network of highway, arterial, collector, and local roadways.

State Route 1 is a four-lane freeway and highway that provides Vandenberg Village with its primary regional access and serves as the principal north–south route through the Lompoc Valley. It provides a connection from the project site to Vandenberg Air Force Base, Orcutt, and Santa Maria to the north and to Lompoc and State Route 246 to the south.

Burton Mesa Boulevard is a two-lane major road that extends east–west from Constellation Road to Rucker Road to the east. This roadway connects Vandenberg Village with the Mission Hills area.

Constellation Road is a four-lane major road that extends north–south through Vandenberg Village. Its interchange with State Route 1 is signalized, and the Constellation Road/Burton Mesa Boulevard intersection is controlled by an all-way stop.

City of Lompoc Transit (COLT) provides public transit service within Lompoc, Mission Hills, and Vandenberg Village. There are five local bus routes serving these areas. Service is available from 6:30 A.M. to 7:00 P.M. on weekdays, and 9:00 A.M. to 5:00 P.M. on Saturday. Curb-to-curb service is also available for persons with disabilities. The project site is located along Route 4. Residents and visitors to the project site would have alternative transportation access to commercial areas via Route 4.

3.3 Cumulative Projects Setting

California Environmental Quality Act (CEQA) defines cumulative impacts as two or more individual effects that, when considered together, are considerable or that will compound or increase other environmental impacts. Cumulative impacts are the changes in the

environment that result from the incremental impact of development of the proposed project and other nearby projects. For example, traffic impacts of two nearby projects may be insignificant when analyzed separately but could have a significant impact when analyzed together. The cumulative impacts analysis allows this environmental impact report (EIR) to provide a reasonable forecast of future environmental conditions and more accurately gauge the effects of a series and aggregate of projects, including the project that is the subject of this analysis.

Section 15130 of the CEQA Guidelines prescribes two methods for analyzing cumulative impacts: (1) use of a list of past, present, and reasonably anticipated future projects producing related or cumulative impacts; or (2) use of a summary of projections contained in an adopted general plan or related planning document. The cumulative impacts analysis for this EIR is based on the most recent list of approved and pending projects within the Vandenberg Village and Lompoc Valley area provided online at the Santa Barbara County's website as of July 31, 2015. Table 3-1 lists residential, commercial, and industrial projects that have been approved or are pending approval in the Vandenberg Village area. As shown therein, cumulative development includes 87,012 square feet of commercial space in Vandenberg Village and 150 residential units, 17,300 square feet commercial, 4,500 square feet industrial, and 20,000 square feet of agricultural development in Lompoc Valley. In addition, the Burton Ranch Specific Plan in the City of Lompoc is considered in the cumulative impacts analysis for this EIR. The Burton Ranch Specific Plan project is an approved but not yet constructed project, located approximately 2 miles southeast of the project in the intersection of Harris Grade Road and State Route 1. Table 3-2 lists the project details for the Burton Ranch Specific Plan.

Table 3-1
County of Santa Barbara – Cumulative Projects List

	Use Type	Project Name	APN	Status	Addition	Misc.
Vandenberg Village						
1	Commercial	Ocean Beach Park Boardwalk	095-040-001	Approved	87,012 commercial square feet	Construction of a boardwalk along the northern and eastern perimeter of the existing parking lot with an interpretive/education kiosk to provide information relating to environmental concerns, seabirds, identification, and natural habitats.
2	Oil and Gas	PXP Pre-Application Fire Fighter Road	095-030-006	Proposed		1 Well

Table 3-1 County of Santa Barbara – Cumulative Projects List						
	Use Type	Project Name	APN	Status	Addition	Misc.
Lompoc Valley						
1	Residential	~~Stoker Residential Project~~ Village Country Club Residential	097-730-021	Approved	~~10~~ 14 two-story residential units and park	Approved in 2008, not built yet
2	Residential	Clubhouse Estates Tract Map (TM 14,629)	097-371-008	Under construction	52 units	
3	Industrial	Lompoc Wind Energy Project	083-080-004 083-090-001 083-090-002 083-090-003 083-090-004 083-100-004 083-100-007 083-100-008 083-250-011 083-250-016 083-250-019	Approved	4,500 industrial square feet	Wind energy project permitted up to 97.5 MW on approximately 3,000 acres.
4	Wineries	Scoggin/ Sundheim Winery Tier II	083-160-014	Approved	20,000 ag. development square feet	
5	Mines	Sepulveda Building Materials Mining	083-060-009 083-060-015 083-070-010 083-070-018	In process		2,000 tons/year
6	Oil and Gas	PXP Pre-Application for New Oil Wells	097-350-018	Proposed		2 wells
7	Residential	Archdiocese Queen of Angles Pre-Application	097-380-025 097-380-026 097-380-035 097-380-036	Proposed	4 units	
8	Residential	Heritage II Senior Apartments	097-371-045	Under construction	80 units	Senior Housing
9	Wineries	Pence Ranch Winery (Tier II)	099-220-013	In process		
10	Wineries	Santa Rosa Road Tier II Winery	083-170-015	Approved	17,300 commercial square feet	
SOURCE: County of Santa Barbara, Cumulative Projects List. March 2016. ~~http://sbcountyplanning.org/pdf/projects/Cumulative/CumulativeProjectsList_July2015.pdf.~~						

Table 3-2 City of Lompoc – Nearby Cumulative Projects List						
	Use Type	Project Name	APN	Status	Addition	Misc.
1	Residential	Burton Ranch Specific Plan	097-250-051 097-250-005 097-250-013 097-250-069 097-250-002 097-250-062 097-250-006 097-250-070 097-250-040	Approved	476 residential units, 8 acres open space, 3.3-acre passive park, 12-acre school site	149-acre site
2	Residential	Summit View Homes	097-250-034	Approved	44 residential units, and three open space lots	10.05-acre site

The proposed project is located geographically on the northern edge of the Lompoc Valley and Vandenberg unincorporated area of Santa Barbara County. Cumulative development in the project area is spread geographically throughout different regions of the County and the City of Lompoc. Some impacts are not necessarily cumulatively considerable in relation to development that occurs further from the proposed project.

For example, aesthetic and noise impacts associated with this project are not likely to be detected in the southern area of Vandenberg Village, whereas their relevance may be more profound closer to the project site. Therefore, some individual cumulative impact discussions in their respective issue area sections of the EIR rely on a smaller geographic area and cumulative project assumption based on the issue area. Of these aforementioned projects, the Village Country Club~~Stoker~~ Development Plan is the closest in proximity to the proposed project, located across the street from the project on the south side of Oak Hill Drive, southeast from the project site. The Village Country Club~~Stoker~~ Development Plan was approved in 2008 as a 14-unit, two-story detached single-family residential project and has not been constructed yet. The Village Country Club~~Stoker~~ Development Plan, Burton Ranch Specific Plan, and other projects in the surrounding area are noted in the cumulative impact discussions as appropriate.

Chapter 4.0
Environmental Impact Analysis

The following sections in Chapter 4.0 analyze the potential environmental impacts that may occur as a result of implementation of the proposed Oak Hills Estate project and associated discretionary actions. The environmental issues addressed in this chapter include the following:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas
- Hydrology and Water Quality
- Land Use
- Noise
- Public Services and Utilities
- Transportation and Circulation
- Fire Protection

Each issue analysis section is formatted to include a description of existing conditions (or a reference to Chapter 3.0 for existing conditions and cumulative projects considered), the criteria for the determination of impact significance, evaluation of potential project impacts including cumulative impacts, mitigation measures if applicable, and conclusion of significance after mitigation for impacts identified as requiring mitigation.

4.1 Aesthetics

This section analyzes the project's potential impacts with respect to aesthetic values and community design within the unique rural and semi-rural urban fringe setting of the Vandenberg Village community and the Burton Mesa Ecological Reserve (Reserve). Specifically, it addresses changes in visual character that would result in impacts to public views, including those related to light and glare.

4.1.1 Setting

4.1.1.1 Regional Landscape Setting

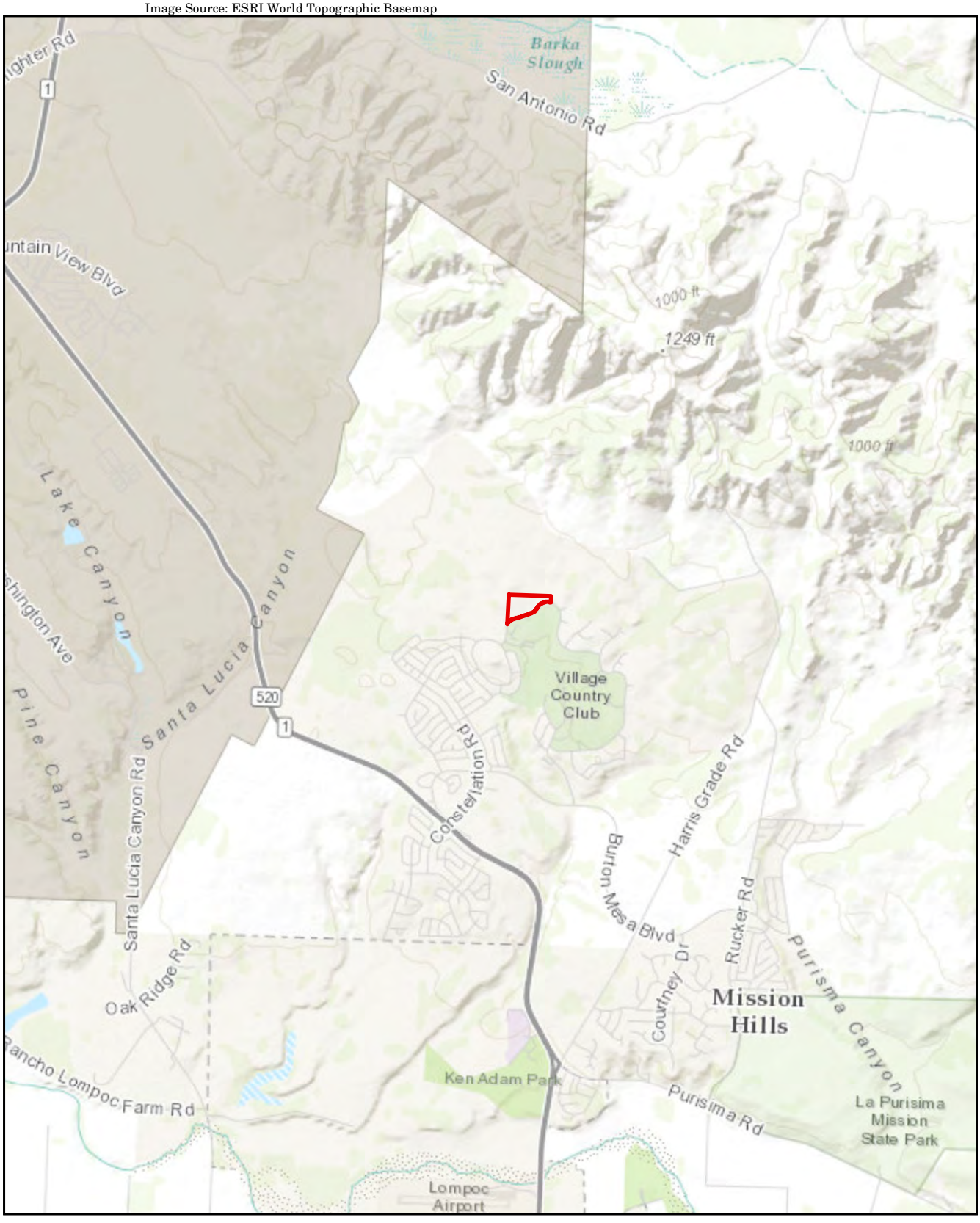
The project site is located in the central coast region of California, approximately 9 miles east of the Pacific Ocean, in the Lompoc Valley of northwestern Santa Barbara County (see Figure 2-1). Santa Barbara County has 110 miles of coastline and is bordered on the west and south by the Pacific Ocean. The coastal topography and Mediterranean climate result in a highly scenic and visually diverse landscape, characterized by coastline beaches and steep hillslopes, inland valleys and gently rolling terrain. Moderate temperatures and winter rains support intact areas of oak woodlands, maritime chaparral, as well as a wide array of ornamental vegetation. The fertile soils of inland agricultural lands support orchards and vineyards. In the Purisima Hills near the project, hiking trails afford sweeping views of the Santa Ynez Mountains and the Lompoc Valley; and occasional glimpses of the Pacific Ocean.

The topography of the nearby Lompoc Valley is varied. Relatively flat or gently sloping terrain constitutes the majority of the valley area, while the southern hillsides – the Santa Rita Hills and the Purisima Hills – provide distinctive, steeper topography. The Lompoc Valley is located at the downstream end of the Santa Ynez River and San Miguelito Creek, watersheds that cover over 900 square miles. The Burton Mesa, in the northern area of Lompoc valley and north of the Santa Ynez River, rises above the Lompoc Valley by 200 to 400 feet and contains gentle to moderate topography, except along the side slopes of steep, locally incised canyons (Figure 4.1-1).

The project site is located in Vandenberg Village, in the northern portion of Lompoc Valley that also includes neighboring communities of Mesa Oaks and Mission Hills.

The visual character of the area surrounding the project site is defined by a combination of natural and built environments. The natural environment predominantly consists of rural County areas, which are primarily intact visually as natural habitat or agricultural countryside to the south of Vandenberg Village itself.

Image Source: ESRI World Topographic Basemap



Project Boundary

FIGURE 4.1-1

Topography of the Lompoc Valley

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The built environment in the area was largely influenced by expansion at Vandenberg Air Force Base in the 1950s and the region's oil industry. The need for off-base housing led to the construction of Vandenberg Village. The project site is located adjacent the Village Country Club golf course that opened in 1962 and the surrounding single-family homes and condominiums. The single-family homes near the project site are mostly rural-style single-story ranch-style homes with earth tone stucco siding and a mix of composite and tile roofing. These homes are constructed on the rolling hills of the Burton Mesa and are surrounded by a mix of mature oaks, maritime chaparral, and pines.

4.1.1.2 Visual Character of the Project Site

The project site is located approximately 6 miles north of the City of Lompoc on an undeveloped property just north of the unincorporated community of Vandenberg Village in Santa Barbara County. The project site is located adjacent to Oak Hill Drive between Stanford Circle and Doral Drive. The approximately 16.88-acre project site is bounded by condominiums to the southwest and the privately owned Village Country Club golf course to the south across Oak Hill Drive, and is adjacent to the Reserve to the north and west (see Figure 2-3). Single-family residences are located east of the project site. An ephemeral north/south drainage bisects the central portion of the parcel and a smaller drainage is located in the eastern portion of the project site (Figures 4.1.2 and 4.1-3).

The project site contains a variety of important scenic resources characteristic of the Lompoc Valley, including rolling hills with a mix of mature oak woodlands. The project site also provides views of the Reserve, which consists of 5,368 acres between the Purisima Hills and the Santa Ynez Mountains, and encompasses one of the last stands of maritime chaparral plant communities in the state (California Department of Fish and Wildlife [CDFW] 2015). The project site's location contiguous to the Reserve contributes to a semi-rural atmosphere adjacent to the existing unincorporated residential areas surrounding the golf course.

a. Views from the Site

Views from the project site include condominiums and the Village Country Club golf course to the south and southwest, single-family residences to the east, and the Reserve to the north and west. The gently sloping terrain affords distance views to the surrounding Vandenberg Village community and the Lompoc Valley and Santa Ynez Mountains to the south and west. The Purisima Hills are visible beyond the Reserve to the north and east with the Lompoc Oil Field facilities dispersed along the hillsides.

b. Views of the Site (from off-site)

Views are discussed in terms of foreground, middle ground, and background views. Foreground views are those immediately presented to the viewer and include objects at close range. Middle-ground views occupy the center distances of the viewshed. Background views include distant objects and other objects that make up the horizon.

Image Source: USDA FSA NAIP (flown June 2014)

FIGURE 4.1-2

Topographic Features of the Project Site

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Image Source: USDA FSA NAIP (flown June 2014)

FIGURE 4.1-3

Oak Hills Estate: Slopes 20% and Over

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The project site is within foreground views from Oak Hill Drive, portions of the golf course, the condominiums to the southeast, and front yards of single-family residences to the south and east. The project site is within middle-ground and background views from existing residential developments to the south, more distant portions of the Village Country Club golf course and hillsides to the north, east, and west, including areas within the Reserve (Figure 4.1-4). The project site and proposed development would be visible to hikers using nearby trails in the Reserve, depending on the extent of intervening screening by topography and vegetation.

Highway 1, a designated scenic highway, is located approximately 2 miles south of the project site (see Figure 4.1-4). This scenic highway has little or no visibility of the project site due to distance and intervening commercial and residential development, golf course vegetation, and groves of large trees adjacent to the highway. There are no designated scenic ridgelines in the vicinity of the project site (see Figure 4.1-4).

Representative photographs of the site were taken at various locations within and adjacent to the project site (Figures 4.1-5 to 4.1-9).

Light and Glare. The project site is currently undeveloped and contains no existing sources of light other than a street light located on Oak Hill Drive on the project site side of the road. The existing residential development and Village Country Club golf course to the east and south, respectively, and facilities at the Lompoc Oil Field to the northeast are existing sources of light and some glare depending on exterior materials, lighting, and nighttime activities.

4.1.1.3 Regulatory Setting

The project's visual and built character is regulated by the County of Santa Barbara Comprehensive Plan and the inland zoning regulations in Chapter 35, Land Use and Development Code (LUDC). Policies pertaining to design of development and preservation of scenic resources are set forth in the Land Use Element and the Open Space Element. New residential development proposed by the project must be consistent with following policies and development standards:

a. Comprehensive Plan

Land Use Element: Visual Resource Policies

- All commercial, industrial, and planned developments shall be required to submit a landscaping plan to the County for approval.

- In rural areas, the height, scale and design of structures shall be compatible with the character of the surrounding natural environment, except where technical requirements dictate otherwise. Structures shall be subordinate in appearance to natural landforms, shall be designed to follow the natural contours of the landscape, and shall be sited so as not to intrude into the skyline as seen from public viewing places.

Image Source: USDA FSA NAIP (flown June 2014)

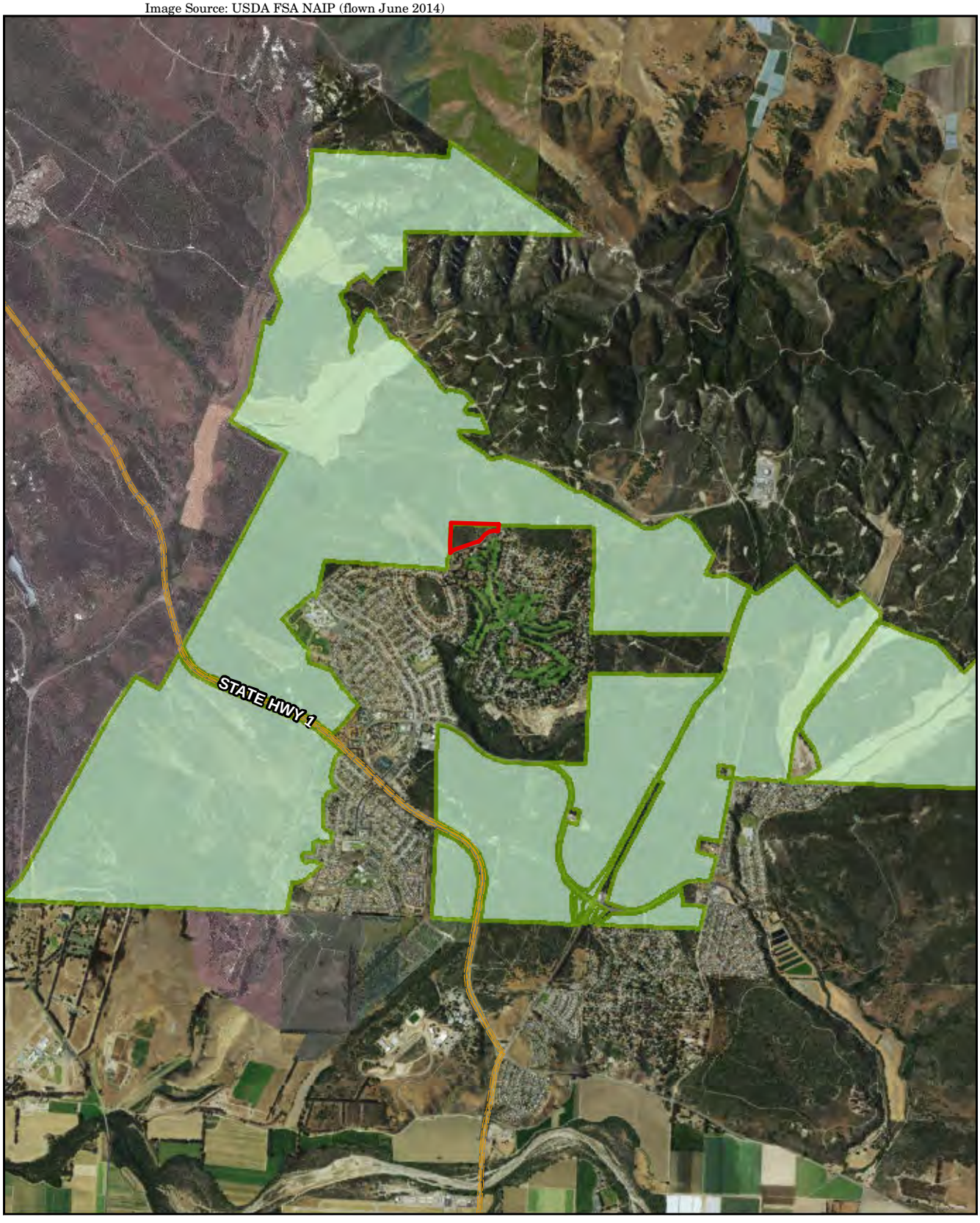

FIGURE 4.1-4
Scenic Highway, Scenic Ridgelines, and
Burton Mesa Ecological Reserve near the Project Site

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Image Source: USDA FSA NAIP (flown June 2014)

0 Feet 250

Project Boundary

Photo Point

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FIGURE 4.1-5

Project Site Photo Point Locations

PHOTOGRAPH 1
View from Oak Hill Drive Towards
the Eastern Portion of the Project Site

PHOTOGRAPH 2
View from Oak Hill Drive Towards
the Western Portion of the Project Site

FIGURE 4.1-6
Site Views

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PHOTOGRAPH 3
View of the Burton Mesa Ecological Reserve Trailhead at
Oak Hill Drive Towards the Western Portion of the Project Site

PHOTOGRAPH 4
View from the Central Portion of the Project Site Towards
Oak Hill Drive, Golf Course, and Single-family Homes to the Southeast

FIGURE 4.1-7
Site Views

RECON

PHOTOGRAPH 5
View from Oak Hill Drive Towards the Southwest Portion of
the Project Site and the Burton Mesa Ecological Reserve Trailhead

PHOTOGRAPH 6
Views from the Central Portion of
the Project Site Towards the Southwest

FIGURE 4.1-8
Site Views

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PHOTOGRAPH 7
View from Oak Hill Drive Towards
the Central Ephemeral Drainage

PHOTOGRAPH 8
View from the Northeastern Portion of
the Project Site Towards the Southwest

FIGURE 4.1-9
Site Views

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- In areas designated as urban on the land use plan maps and in designated rural neighborhoods, new structures shall be in conformance with the scale and character of the existing community. Clustered development, varied circulation patterns, and diverse housing types shall be encouraged.

- Signs shall be of size, location and appearance so as not to detract from scenic areas or views from public roads and other viewing points.

- Utilities, including television, shall be placed underground in new developments in accordance with the rules and regulations of the California Public Utilities Commission, except where cost of undergrounding would be so high as to deny service.

***Lompoc Area Goals Interpretive Guidelines*[1]**

- The natural backdrop of the area should be preserved through strict controls on hillside development. Hillside grading over 30 percent on residential and commercial land should be severely restricted.

- Development, construction, and roads cut in steep areas should be limited to ensure safety and protection of the terrain, as well as environmental and scenic values.

  A-11. New homes on lots on the edge of bluff tops and in other locations that are highly visible to the public should be of single story or partial second story design to minimize impacts to public view corridors. Where such sites are also constrained by unique biological resources, two-story homes may be allowed where public views are protected by extensive landscaping.

  A-12. All development, including buildings, understories, fences, water tanks and retaining walls adjacent to designated natural open space areas should be sited and designed to protect the visual character of these areas and blend in with natural landforms through the use of such methods as setbacks, building orientation, materials and colors (earth tones and non-reflective paints), landscape buffers, shielded exterior lighting, screening of parking areas and inclusion of perimeter roads to allow maintenance of open space corridors.

  A-13. Sound wall construction should be minimized through the alternative use of landscape berms for noise reduction.

[1]The purpose of the [Lompoc Area Goals Interpretive] guidelines is to further implementation of the Santa Barbara County Comprehensive Plan's Lompoc Area Goals of the Land Use Element (pp. 119-123), by providing clear and consistent interpretation of the Comprehensive Plan. These Guidelines pertain to proposals for development in the Urban Area of the Vandenberg Village-Mesa Oaks Lompoc Wye area as shown as the Northern Lompoc Unincorporated Urban Area in [Comprehensive Plan] Figure 1.

Hillside and Watershed Protection Policies Related to Visual Resources

- Plans for development shall minimize cut and fill operations. Plans requiring excessive cutting and filling may be denied if it is determined that the development could be carried out with less alteration of the natural terrain; and

- All developments shall be designed to fit the site topography, soils, geology, hydrology, and any other existing conditions and be oriented so that grading and other site preparation is kept to an absolute minimum. Natural features, landforms, and native vegetation, such as trees, shall be preserved to the maximum extent feasible.

Environmental Resource Management Element (ERME)

The Santa Barbara County Environmental Resources Management Element (ERME) summarizes the various environmental factors analyzed in the Seismic Safety and Safety, Conservation, and Open Space Elements and relates these factors to proposals on County open space preservation. All lands within the Urban, Inner-Rural, and Rural areas that are identified as affected by one or more environmental constraints are classified in one of three categories on the ERME maps. The ERME maps propose the following policies on development of lands subject to environmental constraints unless these constraints are disapproved by site-specific information (e.g., site conditions do not reflect the ERME map classifications).

Category A: Urbanization should be prohibited.

Category B: Urbanization should be prohibited except in a relatively few special instances.

Category C: Urbanization could be permitted only in appropriate instances, subject to project plan review and imposition of specific conditions to protect against hazards and to preserve the integrity of the land and environment. Related to visual resources, these include areas of significant biological value, areas of high scenic value, and scenic corridors.

Lands not subject to identified environmental constraints are classified in a fourth category:

Category D: Urbanization should be permitted unless necessary public services could not readily be provided, or development would result in undesirable social consequences and where conditions to protect against hazards are imposed.

In the above classifications, Category A is subject to the greatest and/or most numerous environmental constraints, resulting in the policy prohibiting urban development. Category B lands, though subject to lesser environmental constraints, are not suitable for any urban development except in a relatively few special instances. The remaining lands classified as Category C and D within the urban area are the candidates for urban development.

The following Category B site conditions occur on the project site along the ephemeral drainages and along the project frontage to Oak Hill Drive (see Figure 4.1-3):

- Slopes 20 to 30 percent. Although not as hazardous or unsightly as development on steeper slopes, development on lands this steep should be minimized because they often are subject to geologic problems, comprise portions of important watersheds, or form the scenic backdrop of urban communities):

The following Category C conditions occur contiguous with the project site on the Reserve:

- Areas of significant biological value
- Areas of high scenic value

Open Space Element

The Comprehensive Plan Open Space Element directs that travel corridors and urban perimeter areas determined to be of the highest scenic value should be designated open space if possible. Other scenic areas should be subjected to design review before development permission is granted. Preservation of the integrity of the site and minimum visual disturbance or change from existing conditions should be the principal criteria used in the review process. Other peripheral areas may not need special protection unless there are reasons other than scenic quality that call for their preservation. Such open spaces may be needed to shape or to limit urban expansion, even if other development constraints are not present.

b. Land Use and Development Code

The LUDC Chapter 35 (Zoning) includes development standards protecting the visual resources of the project area. The Hillside and Ridgeline Protection Ordinance (Section 35.62.040) regulates development on slopes to minimize grading, disruption of natural vegetation, and erosion. Landscaping and limitations on signs, which disrupt public views, are also regulated by the LUDC. The Zoning Ordinance also contains height and size limits and requires architectural review for projects of specific types and in specific areas of the County (see below).

c. Design Review (Section 35.82.070)

The LUDC contains building height and size limits, and includes guidelines for hillside development. In some cases, these requirements are implemented by the review of project plans by the regional (North County) Board of Architectural Review (NBAR). The NBAR has review authority over the northern portion of Santa Barbara County, including the project site, and the project would be subject to review by the NBAR. The purpose of the NBAR is to "encourage development that exemplifies the best professional design practices so as to enhance the visual quality of the environment, benefit surrounding property values, and prevent poor quality of design." The NBAR reviews project plans and NBAR applications, and evaluates the project design against the following conditions:

- Overall building shapes, as well as parts of any structure (buildings, walls, fences, screens, towers, or signs) shall be in proportion to and in scale with other existing or permitted structures on the same site and in the surrounding property;

- Mechanical and electrical equipment shall be well integrated in the total design concept;

- There shall be harmony of material, color, and composition of all sides of a structure or building;

- A limited number of materials will be on the exterior face of the building or structure;

- There shall be a harmonious relationship with existing and proposed adjoining developments, avoiding excessive variety and monotonous repetition, but allowing similarity of style, if warranted;

- Site layout, orientation, and location of structures, buildings, and signs shall be in an appropriate and well-designed relationship to one another, and to the environmental qualities, open space, and topography of the property;

- Adequate landscaping shall be provided in proportion to the project and the site with due regard to preservation of specimen and landmark trees, exiting vegetation, selection of planting which will be appropriate to the project, and adequate provision for maintenance of all planting;

- Signs including their lighting, shall be well designed and shall be appropriate in size and location; and

- The proposed development is consistent with any additional design standards applicable to the project site.

Alternatively, a given tract, such as the proposed project, may have design guidelines that are reviewed and approved by the NBAR such that the development of individual residences is subject to design guidelines. The project includes the proposed Oak Hills Estate Design Guidelines (Guidelines). Under the proposed Guidelines, all future residences in the subdivision would be reviewed individually for their compliance with the Guidelines by the County prior to permit approval.

4.1.2 Impact Analysis

4.1.2.1 Methodology and Significance Thresholds

The assessment of aesthetic impacts involves qualitative analysis that is inherently subjective in nature. Different individuals react to viewsheds and aesthetic conditions differently. This evaluation assesses proposed changes to existing visual resources resulting

from the proposed development, and analyzes the extent of the anticipated change in visual conditions and the compatibility with the visual character of the area.

a. CEQA Guidelines Appendix G

Pursuant to the California Environmental Quality Act (CEQA) Guidelines, potentially significant impacts would occur if development of the project site would:

- Substantially degrade the existing visual character or quality of the site and its surroundings;
- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway; and/or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

b. County of Santa Barbara Environmental Thresholds and Guidelines

The Visual Aesthetic Impact Guidelines of the County of Santa Barbara Environmental Thresholds and Guidelines Manual (2015) provides guidance on assessing the visual impacts of a project in two major steps. First, the visual resources of the project site must be evaluated. Important factors in the evaluation include the physical attributes of the site, its relative visibility, and its relative uniqueness. In terms of visibility, four types of areas are especially important: coastal and mountainous areas, the urban fringe, and travel corridors.

Next, the potential impact of the project on visual resources located on-site and on views in the project vicinity that may be partially or fully obstructed by the project must be determined. To some extent, the former step is more important in rural settings and the latter in urban areas. Determining compliance with local and state policies regarding visual resources is also an important part of visual impact assessment.

Significant visual resources as noted in the Comprehensive Plan Open Space Element that have aesthetic value include:

- Scenic highway corridors
- Parks and recreational areas
- Views of coastal bluffs, streams, lakes, estuaries, rivers, water sheds, mountains, and cultural resource sites
- Scenic areas

In addition, the following questions contained in the Environmental Thresholds and Guidelines Manual are intended to provide information to address the criteria in Appendix G of the CEQA Guidelines:

1a. Does the project site have significant visual resources by virtue of surface waters, vegetation, elevation, slope, or other natural or man-made features which are publicly visible?

1b. If so, does the proposed project have the potential to degrade or significantly interfere with the public's enjoyment of the site's existing visual resources?

2a. Does the project have the potential to impact visual resources of the Coastal Zone or other visually important area (i.e., mountainous area, public park, urban fringe, or scenic travel corridor)?

2b. If so, does the project have the potential to conflict with the policies set forth in the Local Coastal Plan, the Comprehensive Plan or any applicable community plan to protect identified views?

3. Does the project have the potential to create a significantly adverse aesthetic impact through obstruction of public views, incompatibility with surrounding uses, structures, or intensity of development, removal of significant amounts of vegetation, loss of important open space, substantial alteration of natural character, lack of adequate landscaping, or extensive grading visible from public areas?

Affirmative answers to the above questions indicate potentially significant impacts to visual resources.

4.1.2.2 Project Impacts and Mitigation Measures

Impact AES-1: Visual Aesthetic Character

This analysis addresses the effects of the proposed project on the existing visual character and quality of the site and its surroundings. Components of the existing visual character that are evaluated include surface waters, vegetation, elevation, slope, and other natural or built features that are generally visible to the public. Project-related changes to the visual character of the site are considered in the context of the proposed residential subdivision and the proposed Oak Hills Estate Design Guidelines.

The project site is visible from Oak Hill Drive, nearby multi-family residences to the southwest, the front yards of single-family homes to the southeast, the Village Country Club golf course to the south, and from public trails traversing the open natural areas of the Reserve to the west and north. The project site contains and is adjacent to areas of dense oak woodlands and mixed mature maritime chaparral. The site is contiguous with the Reserve, which contributes to the scenic nature and unique visual character of this urban fringe area. The site provides views to surrounding areas consisting of gently rolling topography and native vegetation. Other views in the project area include open space along

the Purisima Hills and the Lompoc Valley that are visible from the adjacent residences and Oak Hill Drive, the Village Country Club golf course, and the Reserve. These views are generally considered to be desirable and to have scenic value.

The existing visual character of the project site is undeveloped and partially disturbed with informal trails and remnants of construction and landscaping debris of unknown origin on-site. The immediate project site surroundings are characterized by maritime chaparral and oak woodlands to the north and west in the Reserve, and urban fringe single-family residential development to the east and residential and Village Country Club golf course development to the south. The site is not located in a mountainous area or along a scenic travel corridor.

Surface Waters

Surface waters on-site consist of a seasonal spikerush wetland located near the northeast project boundary (see Figure 4.3-1), and two ephemeral streams (see Figure 4.1-2) that traverse the project site: one near its center and the other near the east project boundary. The central drainage has remnants of broken concrete strewn within its banks from an unknown and apparently non-functioning drainage improvement. A majority of the site slopes from north to south with areas of steep slopes greater than 20–30 percent limited to locations found along the central drainage and the Oak Hill Drive frontage. The spikerush wetland and two ephemeral streams have low visibility from off-site due to the steep terrain along the central drainage and the south project boundary. The project would maintain a minimum of a 50-foot setback from drainages, consistent with the ERME.

Proposed new property lines for lots 25 and 27, and new Road B would be located 50 feet (minimum)~~approximately 50–65 feet away~~ from the spikerush wetland. Therefore, the project would not result in significant visual impacts to views of this surface water feature. The project proposes to conduct a limited amount of grading (approximately 1,900 cubic yards) along the eastern bank of the stream on the central portion of the site, primarily on proposed lot 23 (see Figure 2-10~~2-11~~), to correct an area of active bank erosion. Due to degraded visual conditions and limited visibility from off-site locations, proposed modifications to the central drainage channel to correct ongoing erosion would not result in significant visual impact.

Native trees growing along and within the banks of two ephemeral streams contribute to the open space character of the site. Ground surface alterations from proposed grading and construction within the central drainage would have the potential to result in significant impacts to the native trees, which would result in significant impacts to the site's visual character. In addition, the project proposes to construct a culvert to channel the easternmost drainage under proposed lot 29 and Oak Hills Road. During construction of the culvert the critical root zones of the existing ~~trees (red willow and pine~~native trees shown as #76 in the proposed tree removal and protection plan in Figure 2-7~~2-8~~) could be impacted. Substantial impacts to these trees could require their removal, which would be visible from off-site locations and contribute to a significant visual impact. The tree protection plan in **MM BIO-3.2** requires that the root zones of the trees within and adjacent to the ephemeral drainages be protected during construction. **MM BIO-3.2** also

requires that if the root zone is impacted, that the trees be replaced at a ratio of 10:1. Therefore, with the implementation of **MM BIO-3.2**, the proposed alterations to surface waters on the project site and resulting potential impacts to scenic trees would be a significant and mitigated impact (Class II impact).

No direct alteration of the spikerush wetland is proposed and it has limited visibility from off-site due to the intervening topography. Alterations to the ephemeral drainages would have limited direct off-site public visibility due to intervening site topography. Therefore, the proposed project alterations to on-site surface waters would result in a less than significant impact to the existing visual character of the site (Class III impact).

Grading, Vegetation Removal, and Construction

The proposed project would result in grading of approximately 57~~42~~ percent of the project site for installation of roads, infrastructure, drainage infrastructure, and construction of 29 single-family homes. Due to the project's location in a high fire hazard area, to protect proposed residences from the risk of wildfire, on-site vegetation management including vegetation removal and alteration is required by the Santa Barbara County Fire Department. The project includes proposed fuel management zones along the site's north and west boundaries, and along the central ephemeral drainage between proposed lots 10 through 14 and lots 22 through 24 (see Figures 2-9~~2-10~~, 4.3-2, and 4.12-2~~1~~).

Grading on the eastern side of the central ephemeral drainage on proposed lots 22 and 23 would be conducted to control and correct areas of active erosion. The proposed grading would result in the removal of native ~~chaparral~~ coyote brush scrub habitat. Vegetation removal and modification would also occur over a majority of the project site to implement fuel management, landscaping, and drainage enhancements as part of the homeowners association (HOA) Managed Landscape/Habitat Plan (Figure 2-8~~2-9~~). Proposed fuel management zones are shown in Figures 2-9~~2-10~~ and 4.12-2. Construction of single-family homes and roads along with landscaping would permanently change the site from an open space appearance to rural residential developed condition.

As discussed in Section 4.3, Biological Resources, a total of 360 oak trees exist on the project site. With proposed grading to create building envelopes (defined as the total area of a lot on which roads, structures and landscaping would occur), it is reasonable to expect that the majority of oak trees within the building envelope would be removed, be impacted by construction, or be adversely affected by long-term impacts after project occupancy. As stated in the Biological Resources Assessment (Rincon 2017a~~2015a~~), a total of 74 oak trees (21 percent of the site total) would be removed by proposed grading and construction activities. In addition, grading and construction activities would potentially damage individual oak trees on the residential lots, proposed roadways, and drainage swales where encroachment into the critical root zone may occur, or where trimming of oak trees is required for residence construction or fire protection purposes. An additional 53 ~~51~~oak trees could be impacted as a result of these types of encroachments. Thus, there is the potential for a loss of up to 127~~131~~ oak trees (35~~36~~ percent of the site total), as well as other native vegetation on the project site, which would significantly change the visual character of the site.

The project includes the proposed HOA Managed Landscape/Habitat Plan shown in Figure 2-8 ~~2-9~~, an Open Space Management Plan (Rincon 2017a~~2015b~~), Offsite Mitigation Area Baseline Biological Report and Conceptual Mitigation Plan (Rincon 2016a), and Oak Hills Estate Design Guidelines (see Appendix C-1). These documents identify proposed strategies to address native vegetation and tree removal impacts due to grading, construction, fuel management, landscaping and the occupancy of the proposed homes on the project site. Proposed strategies include tree protection, and replanting with native species and maritime chaparral species at both on- and off-site locations.

The removal of native trees and vegetation from the project site would result in significant changes to the visual character of the site, and areas where vegetation would be removed would be most visible from homes near the project site; the Vandenberg Country Club golf course; and from areas on the Reserve, depending on the location of the viewer. Topography of the site, particularly adjacent to Oak Hill Drive, would partially screen views from the roadway of areas where vegetation is to be removed or modified.

Previously proposed vegetation management procedures to reduce wildfire hazards are depicted in the Design Guidelines located in Appendix C-1. The project has been revised so that the proposed Fuel Management Zone 1 (FMZ-1) would result in vegetation management in areas on proposed residential lots that are within 30 feet of proposed new residences. Project revisions to the fuel management zones would not result in an increase in the amount of vegetation management that would be conducted on the project site. However, the proposed Design Guidelines do not depict the location of the revised fuel management zones.

Mitigation measure **MM AES-1** requires revisions to the project's proposed Ok Hills Estate Design Guidelines and Open Space Management Plan, as identified in the Oak Hills Estate Project – Peer Review of Open Space Management Plan (RECON 2016a~~April 15, 2016~~, Appendix D-2) and Oak Hills Estate Project – Peer Review of Design Guidelines (RECON 2016b~~, June 1, 2016~~, Appendix C-2). The proposed revisions identify measures that specifically address requirements for tree protection during grading; the preparation of separate on-site and off-site restoration and management plans for habitat restoration and financing; landscape design; providing a native habitat-friendly plant palette; invasive species control; the location and design of proposed fuel management zones; and overall site design. The revised Open Space Management Plan and the Oak Hills Estate Design Guidelines, as approved by the County, would require the implementation of specified requirements prior to the commencement of grading, vegetation removal, fuel management, and landscaping activities. The revised Plan and Guidelines would reduce the impacts of proposed construction activities on native vegetation to the extent feasible. However, even with mitigation implemented, the project would result in grading, vegetation removal, fuel management activities (e.g., vegetation trimming and thinning), and construction of residences and paved streets. As such, the project would permanently change the project site's visual character from native vegetation and open space to residential urban development. Therefore, grading, construction, and vegetation removal by the proposed project would result in a permanent change to the project site's visual character and a significant and unavoidable impact with mitigation implemented (Class I impact).

The off-site area identified by the Offsite Mitigation Area Baseline Biological Report and Conceptual Mitigation Plan (Rincon 2016a) would be used to mitigate impacts to central maritime chaparral habitat and oak trees (see Section 4.3, Biological Resources, and **MM BIO-2.2**). The implementation of native plant and habitat restoration activities in the off-site mitigation areas would include planting and establishing new habitat in areas that are currently disturbed and do not have a high level of visual quality. As a result, the proposed off-site mitigation program and the establishment of native plants and habitats in currently disturbed areas would have a beneficial effect to the visual character of the restoration site.

~~*Trail and*~~ *Detention Basins*

A natural/chaparral vegetation buffer area is proposed to be retained between the outer edge of the proposed on-site fuel management zones along the west and north project boundaries and the off-site Reserve. The vegetation buffer area would range in size from approximately 30~~15~~ feet wide along the west and north boundary to approximately 165~~150~~ feet wide at the northwest property corner and adjacent to proposed lots 5, 6, and 7. The visual character of the native habitat and trees in this area would be retained on the project site in the buffer area ~~except for areas disturbed by installation and use of the proposed perimeter trail. The trail is shown in Figures 2-4 and 2-7~~.

~~The proposed trail would meander through the open space area and follow the contours of the existing terrain. The Oak Hills Estate Design Guidelines currently do not include the proposed trail design. Without design specifications for the trail (e.g., wayfinding sign designs, materials, trash receptacles, planting, and plans for maintenance of the trail) and the detention basins (e.g., road entries next to the basins, basin designs, landscaping and planting plans), the appearance of the trail may be inconsistent with the overall project and neighborhood, and may have the potential to result in significant visual character impacts.~~

The project includes the installation and operation of three drainage detention basins located adjacent to Oak Hill Drive (see Figure 2-10~~2-11~~). Due to their location near Oak Hill Drive, the basins could potentially be visible from residences to the east and southeast of the project site, to persons traveling along Oak Hill Drive, and would be visible to future residents of the proposed project. While vegetation screening around the basins could screen or partially screen views of the basins, the proposed Oak Hills Estate Design Guidelines do not address the design or landscaping of the basins. The HOA Managed Landscape/Habitat Plan shown in Figure 2-8~~2-9~~ includes a conceptual cross-section drawing that addresses general basin design, but no detailed design or landscaping plans have been prepared for the drainage basins. Due to their location at the project entry and adjacent to Oak Hill Drive, the proposed drainage basins could have a significant effect on the visual character of the project site.

Mitigation measure **MM AES-2** would ensure that specific ~~trail design, signs,~~ and fencing; and detention basin designs, elevations, and landscaping plans undergo County review and obtain NBAR approval. Implementation of **MM AES-2** would ensure installation of the ~~proposed trail and~~ detention basins would not result in a significant permanent change to the project site's visual character (Class II impact).

Oak Hills Estate Design Guidelines

The stated intent of the proposed Oak Hills Estate Design Guidelines (see Appendix C-1) is to include architectural and landscape design recommendations to direct and enhance the visual aesthetics of the neighborhood, create a distinct rural estate character, and allow for diversity in individual homes. The guidelines address the following construction design areas:

- **Site Design** deals with the location and position of homes on a particular site and identifies design principles useful to affect a beneficial relationship between neighboring residences and the site itself. These guidelines include grading and siting, building setbacks, building orientation, driveway layout, and garages and accessory structures. The goal of the site design guidelines is to initiate site designs that exhibit sound relationships between structures and landscape elements while responding sensitively to the natural features of the site.

- **Building Design** outlines the specific architectural character desired for the Oak Hills Estate neighborhood. Mediterranean architectural style is the only permitted style for this project. Included are descriptions of allowable floor area, building form and massing, height limits, detached structures and garages, materials and finishes, exterior lighting, mechanical equipment and utilities, energy conservation, and noise levels. All future residences developed on the project site would be one-story structures with a maximum height of 22 feet.

- **Landscape Design s**ets forth the design parameters for the landscape treatment. Included are guidelines for acceptable fencing and walls, driveways and landscaping, fire safety, conservation, planting principles, planting zones, irrigation, landscape structures, lighting, and maintenance. The goal is to aid in establishing and maintaining standards of sound ecological preservation and appropriate fire safe development within the diverse maritime chaparral to preserve this innate beauty, to develop continuity, and to blend structures with this environment.

A common interest HOA would be established to operate and maintain all common areas. In addition, the Oak Hills Estate Design Review Board (OHEDRB) would be established as a function of the HOA to review future residential construction projects. The OHEDRB would utilize the design guidelines when meeting with the property owners and design professionals to review and provide direction for the design of architectural changes, landscaping, remodels, or stylistic revisions to existing homes. The OHEDRB does not have permitting authority but may provide input and recommendations to the NBAR.

The Design Guidelines specify the following design review process:

1. The OHEDRB must review, provide comments, and make recommendations on the preliminary design package prior to County submittal. Design and character will be focused on during this review. Plans submitted by the project developer prior to formation of the OHEDRB will be reviewed by the NBAR and approved directly by County Planning and Development.

2. All home designs must be reviewed and approved by the NBAR prior to submittal of Construction Documents to the County Building and Safety Division.

3. If any substantial changes occur to the building or landscape design due to Building Department review, Planning Staff will be notified and provide a second review for consistency with the guidelines.

Designers of home remodels, architectural, or structural changes within the OHE neighborhood will be required to participate in the following design review process:

1. Homeowners and/or their respective design representatives must first submit a preliminary design package to the OHEDRB. Once reviewed and commented on by the OHEDRB, the design package must be submitted with two applications: zoning clearance application to the County of Santa Barbara's Planning and Development Department and a building permit to the County of Santa Barbara's Building and Safety Division. Should there be a difference of opinion between County Staff and the applicant in the course of Staff design review, the preliminary design package may be forwarded to the NBAR for more in-depth review and remedial action (refer to the Plan Submittal Requirements section in Appendix C-1 for specific procedure and requirements).

2. Following review and approval by County Staff of the preliminary design package, the applicant will be directed to make any necessary modifications and submit working drawings to the County Building and Safety Division.

The design of individual homes on the project site would be one-story, which would minimize the potential for incompatibility with existing residences near the project site. However, individual homes could have a significant impact on the visual character of the existing neighborhood if they were inconsistent with the proposed design guidelines, inconsistent with the existing semi-rural character of the surrounding neighborhood, the Reserve, or Vandenberg Country Club. For example, if the homes were of inconsistent design, of out of scale, character, or their designs or colors were not visually compatible with surrounding homes, they could have a significant impact on the visual character of the neighborhood. Potential home design incompatibility impacts would be reduced to a less than significant level with the implementation of ~~mitigation measure~~ **MM AES-2**, which requires that future home developers obtain NBAR approval of the home design (Class II impact).

Project Site Lighting

The project would result in an addition of lighting in the project vicinity due to outdoor street lights and residential lighting. All outdoor lighting would be necessary for security and wayfinding purposes and would be installed in accordance with County regulations, which require exterior lighting to be hooded and designed such that no unobstructed beam of exterior light shall be directed toward residences. Additionally, outdoor lighting shall be designed so as not to interfere with vehicular traffic on any portion of a street. In addition

to County standards, the Oak Hills Estate Design Guidelines provide standards for exterior lighting within the project site, including the following:

1. Provide subtle, soft lighting for safety and security of each home, while enhancing desirable design elements.

2. Exterior lighting shall be designed and placed to minimize impacts on neighboring properties and adjacent habitat areas. All exterior lighting incorporated into the design of the building shall be Dark Sky compliant as required by the County of Santa Barbara Light fixture selection should be compatible with the architectural character of the building. The color, size, and number of fixtures should be carefully considered to enhance rather than be overpowering. Fixtures should be selected and arranged so that they direct illumination downward and not into the sky.

3. Security lighting, where necessary, shall be hooded, recessed, or located in such a manner that lighting illuminates only the intended area.

4. Night lighting fixtures adjacent to residential areas shall be of minimum height and intensity required for public safety.

5. No lights will be allowed on the top of any structure. The use of low-voltage lighting is encouraged wherever possible.

6. Light "spill over" from any lighting shall be minimized by directing lighting away from open space areas, through the use of hoods, and landscape screening (with appropriate native species) along roads.

7. All exterior lighting features within 100 feet of an open space and drainage areas shall be directed away from adjacent habitat areas and shall use hoods/shields and low-intensity lighting.

Implementation of the above requirements would ensure that adverse lighting impacts to the visual character of the site and surroundings would not occur. Window glass on individual homes would also result in additional source of glare compared to existing conditions; however, it would not result in substantially more sources of glare (e.g., windows) than exists in the surrounding neighborhoods, and the increase in glare would not be substantial. The small additional source of lighting and glare that would result from future residences on the project site would be consistent with the existing surrounding residential development. Therefore, less than significant impacts would be associated with lighting and glare (Class III impact).

The Oak Hills Estate Design Guidelines and Open Space Management Plan revisions required by **MM AES-1** and County design review required by **MM AES-2** would ensure that project site residences, infrastructure, and open space areas are visually compatible with surrounding development and open space. With implementation of the Design Guidelines, the individual homes would be constructed consistent with visual character of the surrounding homes as they would be similar in size, limited to a single-story, have

architectural styles and colors that blend into the existing landscape, and have an adverse and mitigated visual character impact on the surrounding neighborhood, the Reserve, and Vandenberg Country Club (Class II impact).

Mitigation Measures

MM AES-1: Design Guidelines and Open Space Management Plan Revisions

The proposed Oak Hills Estate Design Guidelines and Open Space Management Plan shall be revised to address the review comments provided in the Oak Hills Estate Project – Peer Review of Open Space Management Plan (RECON 2016a~~April 15, 2016~~, Appendix D-2) and Oak Hills Estate Project – Peer Review of Design Guidelines (RECON 2016b~~, June 1, 2016~~, Appendix C-2). These revisions address tree protection during grading; the preparation of separate on-site and off-site restoration and management plans for habitat restoration; ~~habitat restoration financing;~~ landscape design; a native habitat planting list; invasive species control; the location and design of proposed fuel management zones; and overall site design. The Guidelines and Plan shall also incorporate review comments that may be provided by the NBAR. The purpose of the required revisions is to ensure that the design, scale, character, heights, colors, and materials used in residential lots and drainage swales, trails, project entries, and landscaping of common open space areas are compatible with existing surrounding development.

Plan Requirements and Timing: The amended Oak Hills Estate Design Guidelines and Open Space Management Plan shall be reviewed and approved by the County prior to final map recordation ~~of the tract map~~ and will be included in the Covenants, Conditions, and Restrictions.

Monitoring: The Owner/Applicant shall demonstrate to Planning & Development compliance monitoring staff that the project has been built consistent with the County-approved amended Oak Hills Estate Design Guidelines and Open Space Management Plan.

MM AES-2: NBAR Design Review

The Owner/Applicant shall demonstrate that future development on the project site is consistent with the Amended Oak Hills Estate Design Guidelines and obtain NBAR approval of the development on the project site. All project elements (e.g., future residence design, scale, character, colors, materials and landscaping of common open areas, ~~the proposed trail~~ and storm water detention basins) shall be compatible with vicinity development.

Timing: The Owner/Applicant shall submit architectural drawings of the project for review and shall obtain final NBAR approval prior to zone clearance for each proposed residence~~approval of rezone and Vesting Tentative Tract Map. issuance of a land use permit~~. Grading plans shall be submitted to P&D concurrent with or prior to NBAR plan filing.

Monitoring: The Owner/Applicant shall demonstrate to P&D compliance monitoring staff that the project has been built consistent with approved NBAR design and landscape plans prior to Final Building Inspection Clearance.

Significance after Mitigation

Implementation of mitigation measures **MM AES-1** and **MM AES-2** would ensure that project site residences, infrastructure, and open space areas are visually compatible with surrounding development and open space, and that potential project-related visual impacts are reduced to a less than significant level.

Impact AES-2: Important Scenic Areas

Important scenic areas could include the designated scenic ridgelines, designated scenic highways, and other areas of scenic importance. There are no designated scenic ridgelines in the vicinity of the project site (see Figure 4.1-4). One designated state scenic highway—Highway 1—is located approximately 2 miles south of the project site. This scenic highway has little to no visibility of the project site due to its distance from the site, and intervening topography, development, and vegetation. Scenic resources associated with Highway 1 would not be affected by development of the project site. Oak Hill Drive is not a designated scenic roadway in the Santa Barbara County Comprehensive Plan.

The Burton Mesa Ecological Reserve (Reserve), located immediately north and west of the project site boundary and along the Purisima Hills, is considered an important scenic area. The Reserve's trails are open daily, from sunrise to sunset, to public pedestrians for hiking and wildlife viewing. The Reserve and Purisima Hills form a visual backdrop to the project site and can be seen from developed public areas and roads within Vandenberg Village. The entrance to a designated trail that provides public access to the Reserve is located adjacent to the western project boundary. The Reserve and the project site are located at the urban fringe, or the boundary between a designated rural area and the Vandenberg Village Urban Area. Because the project site is located at the urban fringe, it provides views of high scenic value to surrounding areas of gently rolling topography, wildlife habitat, and native vegetation. These views of open space along the Purisima Hills and the Lompoc Valley are visible from the adjacent residences and Oak Hill Drive, and the Village Country Club golf course. Potential visual impacts to the Burton Mesa Ecological Reserve are discussed under **Impact AES-3**.

The project would have a visual impact if it would conflict with the policies of the County Comprehensive Plan related to scenic value, such as those of the ERME. The ERME states that urbanization may be permitted only in appropriate instances, subject to project plan review and imposition of specific conditions to preserve the integrity of the land and environment including areas of scenic value.

The project would locate residential development adjacent to areas with scenic value (e.g., the Reserve), which could be inconsistent with the ERME. However, the project includes a buffer between the residential building envelopes and the Reserve as well as a designated

open space, which would retain approximately 43~~2~~53 percent of the site's existing natural lands~~open space~~.

The proposed Open Space Management Plan (Appendix B) Tree Removal and Protection Plan and HOA Managed Landscape/Habitat Plan (see Figures 2-7~~2-8~~ and 2-8~~2-10~~) address the project's visual quality and impact on surrounding scenic value through appropriate landscaping and protection of natural vegetation where feasible.

Even with the preservation of open space, the project would result in urban development on a vacant site, altering the existing aesthetic character of the site. While this would result in potentially significant visual impacts, revisions to the design guidelines required by mitigation measure **MM AES-1** would ensure that grading- and construction-related visual character impacts associated with the development are reduced to less than significant. Implementation of **MM AES-2** requires NBAR review is completed prior to the development, which would ensure that future development on the project site is visually compatible with surrounding development and open space. Therefore, the project would have a significant but mitigated impact on important scenic areas (Class II impact).

Mitigation Measures

MM AES-1 and **MM AES-2** would apply to **Impact AES-2** to reduce impacts on important scenic areas.

Significance after Mitigation

Impacts would be less than significant following mitigation (Class II impact).

Impact AES-3: Scenic Quality Impacts to the Burton Mesa Ecological Reserve and Other Off-Site Locations

Alteration of Natural Open Space and Views

The project site is currently undeveloped and shares the scenic qualities of the adjacent natural open space of the Reserve. As discussed previously under Impact AES-2, important vistas from the Reserve, particularly of maritime chaparral and oak woodland communities, are experienced from publicly accessible trails in the Reserve. Development of the project infrastructure, roads, and homes would result in the removal of or impacts to between 74 and 127~~131~~ native coast live oaks trees (*Quercus agrifolia*) of varying maturity, and 9.10~~11.11~~ acres of native habitat. This would result in a reduction of between 21 percent and 35~~37~~ percent of the existing tree cover at the project site. As such, the project would cause a significant change to the existing on-site visual resources and alter the overall visual character of the site when viewed from the Reserve.

On and ~~O~~off-site mitigation required by **MM BIO-~~1.5~~2.1 and MM BIO-2.2** (see Section ~~1~~4.3, Biological Resources) would include the restoration of habitat and planting of replacement trees at a 10:1 ratio~~ at an off-site area~~. This EIR also includes proposed mitigation measures (**MM BIO-3.1**, **MM BIO-3.2**, and **MM BIO-3.3**) that call for the

preparation of a tree protection plan for the remaining on-site trees and for off-site planting of trees at a ratio of 10:1 for each tree that is removed or impacted. However, the off-site mitigation area is located approximately one mile from the project site and would not compensate for the visual impacts to public views from the Reserve as scenic quality is a site-specific resource. On-site mitigation would partially compensate for the loss of trees by ensuring that the potential for additional tree loss is minimized during construction and occupancy of the homes. On-site planting of oak trees could partially offset visual impacts from tree canopy reduction in the long term, but this effect would not occur for decades and the change to the visual character would persist.

Construction of the proposed project would result in grading and clearing of ~~58~~57 percent of the site ~~and~~ with the construction of 29 homes, two roads, drainage swales, infrastructure, and ~~fire clearing~~extensive vegetation management in the fuel management area that extends outward 30 feet from proposed residences ~~for~~(FMZ-1).~~an on-site trail the creation of fire management zones within a large portion of the remaining open space area.~~ These changes would affect the visual quality of the existing semi-disturbed, yet undeveloped, project site. The project site is adjacent to public access areas on the Reserve and thus is visible from public viewpoints at the Reserve. Views of the project site from the Reserve would be permanently altered, and following project construction, would include views of low-density, landscaped, urban residential development. However, the project would be in character with surrounding residential development that may be visible from the same view points on the Reserve that offer views of the project site. Additionally, approximately 7.25~~7.15~~7.31 acres of the project site would remain in a~~as~~ natural open space, covering 43 percent of the site. Approximately 0.72 acre would be in managed open space, covering 4.3 percent of the site. The open space would help to retain some of the existing natural views that are currently available from the Reserve, though views would also include the adjacent residential development proposed by the project.

Mitigation measures **MM BIO-~~1.5~~2.1, 2.2**, **MM BIO-3.1**, **MM BIO-3.2**, and **MM BIO-3.3** require protection of native plants and trees, establishment of landscaping on-site that would be visually compatible with existing native vegetation during construction, and compensating for the loss of native habitat through on- ~~site through provision~~and of off-site mitigation. Nonetheless, visual impacts to the Reserve would occur due to project development as the project site is currently open and, though semi-disturbed, characterized by natural vegetation. The project would convert the majority of the site from semi-disturbed open space and native habitat to rural residential and developed urban fringe. No feasible mitigation would fully address these impacts to the existing visual character and public views of the site from the Reserve; therefore, impacts are significant and unavoidable (Class I impact).

Mitigation Measures

Mitigation measures **MM BIO-~~1.5~~2.1, MM BIO-2.2, MM BIO-3.1**, **MM BIO-3.2**, and **MM BIO-3.3** in Section 4.3, Biological Resources, identify available and feasibly implementable actions to mitigate and compensate for the visual character impact of construction of the proposed project and conversion of existing open space to urban residential uses.

Significance after Mitigation

Loss of vegetation would reduce the visual screening of the proposed development as it would be seen from the trails on the Reserve. Although the proposed design guidelines and mitigation measures (**MM BIO-3.1**, **MM BIO-3.2**, and **MM BIO-3.3**) require protections for individual trees, additional trees within individual building envelopes could be damaged or die from construction-related impacts to them or their root systems during or subsequent to grading or from over-watering during project occupancy. Development of the project with feasibly implementable mitigation incorporated would still result in substantial changes in the natural open space character of the project site due to the development of roads, infrastructure, and homes~~, and an on-site trail~~, especially as viewed from public access areas on the Reserve and Oak Hills Road. Therefore, a significant and unavoidable project impact would result to the scenic quality of the site (Class I impact).

4.1.2.3 Cumulative Impacts

Cumulative development in the Vandenberg Village area would gradually alter existing visual conditions from semi-rural or suburban to a more suburban condition. Cumulative development in the area of the Oak Hills Estate project include the Village Country Club Development Plan, which is located across the street from the project site on the south side of Oak Hill Drive, southeast from the project site. The Village Country Club Residential Development Plan was approved in 2008 as a 14-unit, two-story detached single-family residential project and a park ~~and~~which has not been constructed yet. Other development in the vicinity, but not likely visible from the project site, includes over 87,000 square feet of commercial development, three oil and gas wells, 80 units of residential development, three wineries, a building materials mine, and a 3,000-acre wind energy project. Although much of the new development would generally be of a type and intensity similar to the existing suburban uses, the incremental transformation of the community through increased urbanization would be perceptible and apparent.

The proposed project, the future development of the 14-unit Village Country Club Residential Development Plan across Oak Hill Drive from the project, the nearby Clubhouse Estate project, Providence Landing subdivision, the Burton Ranch and Summit View Homes projects in the City of Lompoc, and other projects in the area would have the effect of changing the area's visual character from undeveloped and semi-rural to urban residential. **MM AES-2** would ensure that the proposed project is visually compatible with surrounding developed and open space areas, and though the project would contribute to a visual change from rural and semi-rural to urban residential, its land use designations and residential density would be similar to the existing adjacent residential neighborhood. With mitigation incorporated, the project would have a less than significant contribution to cumulative aesthetic and visual impacts associated with urban development.

The proposed project would result in impacts to/the removal of between 74 and 127~~131~~ coast live oak trees on the project site (between 21 percent and 35~~37~~ percent of the existing 360 on-site oaks) and the removal of 9.10~~11.11~~ acres of native habitat (including 6.92~~7.38~~ acres of maritime chaparral and 2.18~~3.73~~ acres of coyote brush scrub). The removal of oaks

and maritime chaparral in an urban fringe area would partially be mitigated by the project applicant's proposal to restore off-site coast live oaks at a 10:1 ratio and to restore maritime chaparral on a portion of APN 097-371-067, and mitigation measure **MM BIO-2.3~~2.5~~** would require a landscape plan for the project site that would partially replace removed vegetation. Mitigation measures **MM BIO-3.1**, **MM BIO-3.2**, and **MM BIO-3.3** require native tree protection, and the implementation of a tree protection plan and a tree replacement plan, which ~~call for the preparation of an off-site native habitat restoration plan including the planting of additional oak trees at the off-site mitigation property, and an on-site tree protection plan~~ would further mitigate project impacts to visually important resources. Additionally, **MM AES-1** requires revisions to the Oak Hills Estates Design Guidelines and Open Space Management Plan to reduce impacts to visual resources. However, changes to the existing visual conditions at the site, including the loss of native vegetation, ongoing fuel management of native vegetation for wildfire risk reduction, and future construction of residences and roads and drainage infrastructure, would result in the project contributing to a cumulatively considerable impact to the area's visual character by conversion of habitat to urban residential use. Impacts would be significant and unavoidable (Class I impact).

4.2 Air Quality

This section evaluates the potential for the proposed project to result in adverse impacts to regional or local air quality. It is based on the air quality modeling and analysis completed specifically for the project. The air quality modeling results are included in Appendix E-1.

4.2.1 Setting

4.2.1.1 Regional Air Quality

Air quality at a particular location is a function of the types, volumes, and dispersal rates of pollutants being emitted into the air locally and regionally. The major factors affecting pollutant dispersion are wind speed and direction, the vertical dispersion of pollutants (which is affected by inversions), and the local topography.

a. Air Basin/Geographic Setting

The state of California is divided geographically into 15 air basins for managing the air resources of the state on a regional basis (California Code of Regulations Sections 60100-114). Areas within each air basin are considered to share the same air masses and, therefore, are expected to have similar ambient air quality. The project site is located in the South Central Coast Air Basin (SCCAB). The SCCAB is comprised of San Luis Obispo, Santa Barbara, and Ventura counties. San Luis Obispo County and the portion of Santa Barbara County to the north of the Santa Ynez Mountains (includes project site) are referred to as the northern zone of the SCCAB.

b. Climate and Air Flow

The SCCAB has a maritime climate characterized by relatively warm days, cool nights, and moderate humidity. The project site is located in the foothills of Purisma Hills, and is adjacent to the low-lying coastal plains. These areas experience a mild climate with high temperatures normally within 10 degrees of 70 degrees Fahrenheit (°F) year-round; low temperatures rarely fall below 40°F. The meteorology of the basin is strongly influenced by the existence of a persistent high pressure area residing over the Pacific Ocean, which drives the prevailing westerly-northwesterly winds through the spring, summer, and fall.

During winter periods, the prevailing winds may yield to easterly “Santa Ana” winds. These are warm, dry winds blown from the high inland desert that descend the slopes of the mountain range. During Santa Ana conditions, pollutants emitted in the SCCAB may be moved out to sea. When the prevailing winds reestablish, pollutants may then return in

what is called a "post-Santa Ana condition." In some scenarios, post-Santa Ana conditions may lead to elevated pollutant concentrations throughout the SCCAB.

c. Ambient Pollutant Concentrations

Federal (National) and state (California) Ambient Air Quality Standards (NAAQS and CAAQS) identify the maximum levels of several pollutants of primary concern, referred to as criteria pollutants, which in the judgment of the U.S. Environmental Protection Agency (U.S. EPA) and California Air Resources Board (CARB) are considered safe, with an adequate margin of safety, to protect the public health and welfare. Criteria pollutants include ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead[1], and particulate matter (PM_{10} and $PM_{2.5}$). Air quality is commonly expressed as the number of days in which air pollution levels exceed NAAQS or CAAQS.

There are 32 active air monitoring stations located in the SCCAB (CARB 2016a). Air pollutant concentrations and meteorological information are continuously recorded at these 32 stations. Measurements are then used by scientists to help forecast daily air pollution levels. Recently measurements in the SCCAB have not indicated exceedances of NAAQS or CAAQS except ozone and PM_{10}. Table 4.2-1 summarizes the data recorded throughout the SCCAB during the years 2010 to 2014.

[1]When NAAQS and CAAQS were established tetraethyl lead was a common additive in automotive fuels to prevent knocking. The U.S. EPA began implementing programs to facilitate the phase out of leaded fuels for on-road vehicle in the 1970s. Remaining sources of lead include metals processing plants (lead smelters) and aircraft fuels. With the exception of areas in the vicinity of metals processing plant, lead is no longer is common pollutant of concern.

Table 4.2-1
Ambient Air Quality Summary—South Central Coast Air Basin

Pollutant/Standard	2010	2011	2012	2013	2014
Ozone					
Days State 1-hour Standard Exceeded (0.09 ppm)	6	4	4	3	3
Days State 8-hour Standard Exceeded (0.07 ppm)	44	30	52	23	29
Days Federal 8-hour Standard Exceeded (0.075 ppm)	23	11	22	7	9
State Maximum Hourly (ppm)	0.104	0.110	0.106	0.104	0.112
National Maximum Hourly (ppm)	0.111	0.108	0.100	0.103	0.100
State Maximum 8-hr (ppm)	0.091	0.091	0.088	0.089	0.089
National Maximum 8-hr (ppm)	0.090	0.090	0.087	0.089	0.089
PM_{10}					
Estimated Days State 24-hour Standard Exceeded (50 µg/m³)	45.6	69.6	71.3	98.1	88.3
Estimated Days Federal 24-hour Standard Exceeded (150 µg/m³)	1.0	0.0	2.8	2.9	1.9
State Maximum Daily (µg/m³)	144.3	14.04	186.4	169.0	166.3
Federal Maximum Daily (µg/m³)	167.8	134.2	18.09	218.1	165.3
State Annual Average (µg/m³)	25.3	35.9	35.1	42.0	39.6
Federal Annual Average (µg/m³)	37.5	34.5	34.7	39.6	38.4
$PM_{2.5}$					
Estimated Days Federal 24-hour Standard Exceeded (35 µg/m³)	0	0	3.1	2.1	2.1
State Maximum Daily (µg/m³)	42.4	34.6	41.9	39.6	43.0
Federal Maximum Daily (µg/m³)	32.6	34.6	41.9	39.6	43.0
State Annual Average (µg/m³)	10.0	12.0	10.4	12.5	12.8
Federal Annual Average (µg/m³)	8.9	12.0	9.6	12.5	12.8

SOURCE: CARB 2016b.
NOTES: Na = Not available; ppm = parts per million; µg/m³ = micrograms per cubic meter
Averages and maximums over a given period may differ due to Federal and State to measurement and/or statistical aggregation procedures.
The 2015 trend summaries have not been released.

There are several air monitoring stations in the vicinity of the project site. The U.S. EPA's Prevention of Significant Deterioration (PSD) Program requires major industrial pollution sources such as the Lompoc Oil and Gas Processing Facility to monitor air quality. The air monitoring site for the Lompoc Oil and Gas Processing Facility, Lompoc HS&P, is the nearest air monitoring station to the project site and is approximately 1.5 miles east of the project site. Criteria pollutants measured at the Lompoc HS&P station measures ozone, NO_2, and SO_2.

The second nearest air monitoring station is the Lompoc – South H Street station, which is located approximately 5.5 miles south of the project site in downtown Lompoc. The Lompoc – South H Street station measures all criteria pollutant except lead, which is no longer a pollutant of concern. Table 4.2-2 provides a summary of relevant measurements of criteria pollutants collected for the years 2012 through March 23, 2016.

Table 4.2-2
Ambient Air Quality Summary—
Lompoc HS&P Station and Lompoc – South H Street Station

Pollutant/Standard	2012	2013	2014	2015	2016
Lompoc HS&P Station					
Ozone					
Days State 1-hour Standard Exceeded (0.090 ppm)	0	0	0	0	0
Days State 8-hour Standard Exceeded (0.070 ppm)	0	1	1	0	0
Days Federal 8-hour Standard Exceeded (0.075 ppm)	0	1	0	0	0
Maximum Hourly Average (ppm)	0.067	0.081	0.087	0.067	0.060
Maximum 8-hour Average (ppm)	0.063	0.077	0.074	0.064	0.053
Nitrogen Dioxide					
Days State 1-hour Standard Exceeded (0.18 ppm)	0	0	0	0	0
Days Federal Hourly Standard Exceeded (0.10 ppm)	0	0	0	0	0
Maximum Hourly Average (ppm)	0.015	0.011	0.008	0.007	0.006
Maximum Daily Average (ppm)	0.007	0.006	0.003	0.003	0.002
Sulfur Dioxide					
Days State 1-hour Standard Exceeded (0.25 ppm)	0	0	0	0	0
Days State 24-hour Standard Exceeded (0.04 ppm)	0	0	0	0	0
Days Federal 1-hour Standard Exceeded (0.75 ppm)	0	0	0	0	0
Days Federal 24-hour Standard Exceeded (0.14 ppm)	0	0	0	0	0
Maximum Hourly Average (ppm)	0.003	0.004	0.001	0.001	0.000
Maximum Daily Average (ppm)	0.002	0.002	0.000	0.000	0.000
Lompoc – South H Street Station					
Carbon Monoxide					
Days State 1-hour Standard Exceeded (20 ppm)	0	0	0	0	0
Days State 8-hour Standard Exceeded (9 ppm)	0	0	0	0	0
Days Federal 1-hour Standard Exceeded (35 ppm)	0	0	0	0	0
Days Federal 8-hour Standard Exceeded (9 ppm)	0	0	0	0	0
Maximum Hourly Average (ppm)	1.5	1.6	2.1	1.6	1.0
Maximum Daily Average (ppm)	0.5	0.5	0.5	0.6	0.5
PM_{10}					
Days State 24-hour Standard Exceeded (50 µg/m^3)	3	2	2	1	Na
Days Federal 24-hour Standard Exceeded (150 µg/m^3)	0	0	0	0	Na
Maximum Hourly Average (µg/m^3)	283.0	138.0	448.0	108.0	Na
Maximum Daily Average (µg/m^3)	54.5	51.3	61.3	52.9	Na
$PM_{2.5}$					
Days Federal 24-hour Standard Exceeded (35 µg/m^3)	0	0	0	0	0
Maximum Hourly Average (µg/m^3)	52.0	56.6	69.0	52.0	25.0
Maximum Daily Average (µg/m^3)	18.1	15.9	16.7	21.4	11.6

SOURCE: CARB 2016b

NOTES: Na = Not available; ppm = parts per million; µg/m^3 = micrograms per cubic meter

Averages and maximums over a given period may differ due to federal and state to measurement and/or statistical aggregation procedures.

Data for Table 4.2-2 is from CARB's Air Quality and Meteorological Information System (AQMIS). AQMIS contains the most recently reported air monitoring data, however has not been processed (and potentially refined) by CARB.

4.2.1.2 Regulatory Setting

a. Federal

The federal Clean Air Act was enacted in 1970 and amended in 1977 and 1990 [42 United States Code (USC) 7401] for the purposes of protecting and enhancing the quality of the nation's air resources to benefit public health, welfare, and productivity. In 1971, in order to achieve the purposes of Section 109 of the Clean Air Act [42 USC 7409], the U.S. EPA developed primary and secondary NAAQS. As discussed previously, NAAQS represent the maximum levels of background pollution considered safe, with an adequate margin of safety, to protect the public health and welfare. The primary NAAQS were established, with a margin of safety, considering long-term exposure for the most sensitive groups in the

general population (i.e., children, senior citizens, and people with breathing difficulties). The NAAQS are presented in Table 4.2-3 (CARB 2015a).

Six criteria pollutants have been designated: ozone, CO, SO_2, NO_2, lead, and particulate matter (PM_{10}, and $PM_{2.5}$). The U.S. EPA issues area designations for each criteria pollutant based on local monitoring data. In California, federal area designations typically apply to the state's 15 geographic air basins. Areas that meet NAAQS are designated as attainment areas. Similarly, areas that are expected to be meeting the standard despite a lack of monitoring data are designated as "unclassifiable." Areas that do not meet NAAQS may be designated as non-attainment areas. Following designation as a non-attainment area, state and local governments must develop implementation plans outlining how the area will attain and maintain NAAQS. Once a non-attainment area has achieved the NAAQS, it may be redesignated to an attainment area for that pollutant. To be redesignated, the area must meet air quality standards for a specified period and have a 10-year plan for continuing to meet and maintain air quality standards, as well as satisfy other requirements of the Clean Air Act. Areas that have been redesignated to attainment are called maintenance areas.

The SCCAB is an attainment or unclassifiable attainment area for all NAAQS.

Table 4.2-3
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone[8]	1 Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	–	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.07 ppm (137 µg/m³)		0.070 ppm (137 µg/m³)		
Respirable Particulate Matter (PM_{10})[9]	24 Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³		–		
Fine Particulate Matter ($PM_{2.5}$)[9]	24 Hour	No Separate State Standard		35 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	12 µg/m³	15 µg/m³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m³)	Non-dispersive Infrared Photometry	35 ppm (40 mg/m³)	–	Non-dispersive Infrared Photometry
	8 Hour	9.0 ppm (10 mg/m³)		9 ppm (10 mg/m³)	–	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)		–	–	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m³)	Gas Phase Chemi-luminescence	100 ppb (188 µg/m³)	–	Gas Phase Chemi-luminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)		0.053 ppm (100 µg/m³)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m³)	Ultraviolet Fluorescence	75 ppb (196 µg/m³)	–	Ultraviolet Fluorescence; Spectro-photometry (Pararosaniline Method)
	3 Hour	–		–	0.5 ppm (1,300 µg/m³)	
	24 Hour	0.04 ppm (105 µg/m³)		0.14 ppm (for certain areas)[10]	–	
	Annual Arithmetic Mean	–		0.030 ppm (for certain areas)[10]	–	
Lead[12,13]	30 Day Average	1.5 µg/m³	Atomic Absorption	–	–	High Volume Sampler and Atomic Absorption
	Calendar Quarter	–		1.5 µg/m³ (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	–		0.15 µg/m³		
Visibility Reducing Particles[14]	8 Hour	See footnote 13	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m³	Ion Chroma-tography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m³)	Gas Chroma-tography			

Table 4.2-3
Ambient Air Quality Standards

SOURCE: CARB 2015a

NOTE: ppm = parts per million; ppb = parts per billion; µg/m^3 = micrograms per cubic meter; – = not applicable.

[1] California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[2] National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

[3] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[4] Any equivalent measurement method which can be shown to the satisfaction of the Air Resources Board (ARB) to give equivalent results at or near the level of the air quality standard may be used.

[5] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

[6] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[7] Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.

[8] On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

[9] On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m^3 to 12.0 µg/m^3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standards of 15 µg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[10] To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national standards are in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

[11] On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved. Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

[12] The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[13] The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

[14] In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

b. State

Criteria Pollutants

The U.S. EPA has allowed California the option to develop different (stricter) air quality standards. CAAQS generally has set more stringent limits on the criteria pollutants than the NAAQS (see Table 4.2-3). In addition to criteria pollutants, the CAAQS also specify standards for other pollutants including visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride (see Table 4.2-3). Parallel to the federal area designations, CARB issues state area designations for each criteria pollutant.

The California Clean Air Act requires that districts assess their progress triennially and report to CARB as part of the triennial plan revisions. The California Clean Air Act additionally requires that air quality management districts implement regulations to reduce emissions from mobile sources through the adoption and enforcement of transportation control measures and:

- Demonstrate the overall effectiveness of the air quality program;
- Reduce nonattainment pollutants at a rate of 5 percent per year, or include all feasible measures and expeditious adoption schedule;
- Reduce population exposure to severe nonattainment pollutants according to a prescribed schedule; and
- Rank control measures by cost-effectiveness and implementation priority.

The SCCAB is a non-attainment area for the state ozone and PM_{10} standards. The SCCAB is an attainment area for all other CAAQS.

Toxic Air Contaminants

The public's exposure to toxic air contaminants (TACs) is a significant public health issue in California. In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health (Assembly Bill [AB] 1807: Health and Safety Code Sections 39650–39674). The Legislature established a two-step process to address the potential health effects from TACs. The first step is the risk assessment (or identification) phase. The second step is the risk management (or control) phase of the process.

The California Air Toxics Program establishes the process for the identification and control of TACs and includes provisions to make the public aware of significant toxic exposures and for reducing risk. Additionally, the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, 1987, Connelly Bill) was enacted in 1987 and requires stationary sources to report the types and quantities of certain substances routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, to identify facilities having localized impacts, to ascertain health risks, to notify nearby residents of significant

risks, and to reduce those significant risks to acceptable levels. The Children's Environmental Health Protection Act, California Senate Bill (SB) 25 (Chapter 731, Escutia, Statutes of 1999), focuses on children's exposure to air pollutants. The act requires CARB to review its air quality standards from a children's health perspective, evaluate the statewide air monitoring network, and develop any additional air toxic control measures needed to protect children's health. Locally, toxic air pollutants are regulated through the Santa Barbara County Air Pollution Control District (SBCAPCD) Rules 316, 335,336, and 340. Of particular concern statewide are diesel-exhaust particulate matter emissions. Diesel-exhaust particulate matter was established as a TAC in 1998 and is estimated to represent a majority of the cancer risk from TACs statewide (based on the statewide average). Diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB and are listed as carcinogens either under the state's Proposition 65 or under the federal Hazardous Air Pollutants program. Diesel emissions generated within the plan area and the surrounding areas pose a potential hazard to residents and visitors.

Following the identification of diesel particulate matter as a TAC in 1998, CARB has worked on developing strategies and regulations aimed at reducing the risk from diesel particulate matter. The overall strategy for achieving these reductions is found in the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (CARB 2000). A stated goal of the plan is to reduce the cancer risk statewide arising from exposure to diesel particulate matter 85 percent by 2020.

In April 2005, CARB published the Air Quality and Land Use Handbook: A Community Health Perspective (CARB 2005). The handbook makes recommendations directed at protecting sensitive land uses from air pollutant emissions while balancing a myriad of other land use issues (e.g., housing, transportation, economics). It notes that the handbook is not regulatory or binding on local agencies and recognizes that implementation requires a qualitative approach. As reflected in the CARB Handbook, there is currently no adopted standard for the significance of health effects from mobile sources. Therefore, the CARB has provided guidelines for the siting of land uses near heavily traveled roadways. Of pertinence to this study, the CARB guidelines indicate that siting new sensitive land uses within 500 feet of a freeway or urban roads with 100,000 or more vehicles/day should be avoided when possible.

As an ongoing process, CARB will continue to establish new programs and regulations for the control of diesel-particulate and other air-toxics emissions as appropriate. The continued development and implementation of these programs and policies will ensure that the public's exposure to diesel particulate matter will continue to decline.

State Implementation Plan

The State Implementation Plan (SIP) is a collection of documents that set forth the state's strategies for achieving the NAAQS. In California, the SIP is a compilation of new and previously submitted plans, programs (such as monitoring, modeling, permitting, etc.),

district rules, state regulations, and federal controls. The CARB is the lead agency for all purposes related to the SIP under state law. Local air districts and other agencies, such as the Department of Pesticide Regulation and the Bureau of Automotive Repair, prepare SIP elements and submit them to CARB for review and approval. The CARB then forwards SIP revisions to the U.S. EPA for approval and publication in the Federal Register. All of the items included in the California SIP are listed in 40 Code of Federal Regulations 52.220.

The South Central Coast Basinwide Air Pollution Control Council is responsible for preparing and implementing the portion of the SIP applicable to the SCCAB. Members of the Council, Ventura, Santa Barbara, and San Luis Obispo County air pollution control districts, prepare portions applicable to each county.

c. Local

Santa Barbara County Air Pollution Control District

The role of the local SBCAPCD is to protect the people and the environment of Santa Barbara County from the effects of air pollution. The SBCAPCD jurisdiction covers the entire County including unincorporated areas and the incorporated cities such as Buellton, Carpinteria, Goleta, Guadalupe, Lompoc, Santa Barbara, Santa Maria, and Solvang. The SBCAPCD prepares Clean Air Plans (CAPs) to provide an overview of air quality and sources of air pollution and to identify the pollution-control measures needed to meet clean air standards. The CAP is updated every three years. The 2013 CAP is the sixth triennial update to the initial state CAP adopted by the SBCAPCD in 1991. The goal of the 2013 Clean Air Plan is to reduce ozone precursor emissions from a wide variety of stationary and mobile sources. Each of the CAPs has implemented "an all feasible measures" strategy to ensure continued progress towards attainment of the state ozone standards.

Santa Barbara County Air Pollution Control District Recommendations

The SBCAPCD has reviewed the project and provided a list of recommended measures for incorporation into project design on March 9, 2015. These measures include standard dust and NO_X reduction measures (Appendix E-2). The project would be required to implement the standard measures per the SBCAPCD.

4.2.2 Impact Analysis

4.2.2.1 Thresholds of Significance

a. CEQA Guidelines Appendix G

CEQA Guidelines Appendix G provides sample criteria for environmental review of projects. As stated in the Guidelines, these questions are "intended to encourage thoughtful assessment of impacts and do not necessarily represent thresholds of significance" (Title 14, Division 6, Chapter 3 Guidelines for Implementation of the CEQA, Appendix G, Environmental Checklist Form). Lead agencies may tailor the criteria to address individual

agency needs or project circumstances. Appendix G criteria indicate projects may result in significant air quality impacts if it would:

- Conflict with or obstruct the implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is [in] non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations; and/or
- Create objectionable odors affecting a substantial number of people.

b. County Significance Thresholds

The County's Environmental Thresholds and Guidelines Manual states that a project may result in significant air quality impacts if the project (County of Santa Barbara 2015a):

- Interferes with progress toward the attainment of the ozone standard by releasing emissions which equal or exceed the established long-term quantitative thresholds for NOx and reactive organic compounds[2,3] (ROC); or
- Equals or exceeds the state or federal ambient air quality standards for any criteria pollutant (as determined by modeling).

Short-term/Construction Emissions Thresholds

Although the County of Santa Barbara (County) has not adopted quantitative thresholds of significance for temporary construction emissions, the County's Environmental Thresholds and Guidelines Manual recommends discussion of construction-related emissions for all projects involving ground disturbance. In addition, since the County is a nonattainment area for the state PM_{10} standard, construction mitigation measures are required for all projects involving earthmoving activities regardless of size or duration. Dust control measures are required under the County of Santa Barbara's Grading Ordinance. The

2 In the presence of ultraviolet radiation (a component of sunlight), NO_X and VOC react; this results in the formation of ozone.

3 The terms ROC, volatile organic compounds (VOC), and reactive organic gases (ROG) each originate from air pollution regulations and have distinct legal definitions. In practice, each term encompasses the same set of gases/compounds and therefore the terms are often used interchangeably.

standard dust mitigation measures are based on policies in the 1979 Air Quality Attainment Plan. Appendix E-2 contains the required dust mitigation measures.

Long-term/Operational Emissions Thresholds

The County's Environmental Thresholds and Guidelines Manual states that for operational emissions, a proposed project would have a significant air quality effect on the environment if total project emissions exceed the daily trigger for offsets established in the SBCAPCD New Source Review Rule, 55 pounds per day of NO_X and ROC and 80 pounds per day of PM_{10}. Alternately, the County also considers project emissions to be significant if NO_X or ROC emissions from motor vehicles exceed 25 pounds per days.

Additionally, a proposed project would have a significant air quality effect on the environment if operation of the project caused, by adding to the existing background CO levels, a carbon monoxide hotspot where the California one-hour standard of 20 parts per million of carbon monoxide is exceeded. This typically occurs at severely congested intersections. According to the County guidelines, projects contributing more than 800 peak hour trips to an existing congested intersection at level of service (LOS) D or below, or causing an intersection to reach LOS D or below may be required to model for CO impacts. However, projects that incorporate intersection modifications to ease traffic congestion are not required to perform modeling to determine potential CO impacts.

Odors

While offensive odors rarely cause any physical harm, they can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and the District. The general nuisance rule (Health & Safety Code Section 41700 and District Rule 2.5) is the basis for this threshold. A project may reasonably be expected to have a significant adverse odor impact where it "generates odorous emissions in such quantities as to cause detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which may endanger the comfort, repose, health, or safety of any such person or the public, or which may cause, or have a natural tendency to cause, injury or damage to business or property."

Other Potential Air Quality Issues

According to the County's Environmental Thresholds and Guidelines Manual, other issues including siting criteria for schools or toxic of hazardous air pollutants should be discussed if they are applicable to the project.

4.2.2.2 Methodology

Below is a brief discussion of modeling methods and assumptions. Construction emissions were calculated using the California Emissions Estimator Model (CalEEMod) 2013.2.2 (California Air Pollution Control Officers Association [CAPCOA] 2013). The CalEEMod program is a tool used to estimate air emissions resulting from land development projects in the state of California.

a. Construction Emissions

Construction-related activities are temporary, short-term sources of air emissions. Sources of construction-related emissions include:

- Equipment exhaust;
- Vehicle trips by workers, delivery trucks, and material-hauling trucks; and
- Fugitive dust from grading activities.

Project construction is anticipated to commence in 2017 and would last approximately 17 months. Construction phases would include site preparation, grading, building construction, and paving. Site preparation would include limited clearing of vegetation and removal of stones prior to grading and is anticipated to take approximately 2 weeks. Grading is anticipated to take approximately 6 weeks and would include roughly 23,100 cubic yards of cut soil and 20,000 cubic yards of fill soil, necessitating net export of 3,100 cubic yards of soil. Building construction is anticipated to take approximately 14 months. Paving interior roads would take approximately 4 weeks. Application of architectural coatings, which is often considered a separate construction phase, was conservatively modeled as occurring concurrently with the final 4 weeks of building construction. Construction phasing, equipment use, and construction-related vehicle trips were estimated based on surveys performed by the South Coast Air Quality Management District (SCAQMD) and the Sacramento Metropolitan Air Quality Management District (SMAQMD) and take into account both the proposed land use (single-family residential) and the size of the project.

Fugitive dust emissions vary greatly during construction and are dependent on the amount and type of activity, silt content of the soil, and the weather. Vehicles moving over paved and unpaved surfaces, demolition, excavation, earth movement, grading, and wind erosion from exposed surfaces are all sources of fugitive dust. The Santa Barbara County Municipal Code Section 14-23 and the SBCAPCD Fugitive Dust Control Measures require that all areas of vehicle movement be damp enough to prevent dust from leaving the site. To meet this requirement, the SBCAPCD standards included in Appendix E-2 will require the general contractor to ensure all active construction areas would be watered at least three times a day. Additional required best management practices identified in the SBCAPCD Fugitive Dust Control Measures include vehicle speed constraints, soil transportation/stockpiling storage treatment requirements, requirements for vehicle access point gravel pads, and separate watering requirements for when high-wind speeds occur.

b. Operational Emissions

Operation of the project would result in emissions from mobile and area sources. Mobile emissions sources (also known as project-generated traffic) were calculated based on the project's anticipated vehicle type and the trip rate for the proposed residential land use. Project trip generation obtained from the project Traffic and Circulation Study (Penfield & Smith 2015) would be 276 trips per day. Vehicle emission factors and fleet mix were based

on regional averages from the CARB's Emission Factors 2011 (EMFAC2011) model. Trip lengths were based on the reported average trip length in Santa Barbara County of 12.3 miles (CAPCOA 2013). Area emissions include emissions from the use of fireplaces, landscaping equipment, consumer products (e.g., aerosols, cleansers, etc.), and architectural coatings (e.g., paints, primers, sealants). Area sources were calculated based on regional use factors.

c. Off-site Oak and Chaparral Restoration Plan

Off-site mitigation on APN 097-371-067 would include temporary sources of air emissions including commute and hauling trips; the off-site mitigation would not require the use of heavy-duty construction equipment. Based on similar scale oak tree and chaparral restorations, it is expected that the initial restoration effort would last approximately one year and would employ a crew of 6 to 8 persons per day. Worker commute was modeled assuming a maximum of sixteen roundtrips per day and hauling was modeled assuming two hauling roundtrip per day. Depending on the success of the initial restoration effort, subsequent monitoring and routine maintenance are expected to last another two to five years and would employ a crew of up to three persons. Although monitoring and maintenance would employ a crew of one to three persons, trips often occur as infrequently as once a week or once a month. Worker commute was modeled assuming a maximum of six roundtrips per day.

4.2.2.3 Project Impacts and Mitigation Measures

Impact AQ-1: Plan Consistency

Air districts are tasked with regulating emissions such that air quality in the basin does not exceed NAAQS or CAAQS. The California Clean Air Act requires areas that are designated nonattainment of CAAQS for ozone, CO, SO_2, and NO_2 to prepare and implement plans to attain the standards by the earliest practicable date.

The project site is located within the SCCAB. The SCCAB is an attainment or unclassifiable attainment area for all NAAQS and is an attainment area for all CAAQS except ozone and PM_{10}. Accordingly, the SBCAPCD prepares Clean Air Plans to provide an overview of air quality and sources of air pollution and to identify the pollution-control measures needed to meet clean air standards. The goal of the most recent plan, the 2013 Clean Air Plan, is to reduce ozone precursor emissions (ROC and NO_X) from a wide variety of stationary and mobile sources (SBCAPCD 2015). The Clean Air Plan has implemented "an all feasible measures" strategy to ensure continued progress towards attainment of the state ozone standards.

According to the County Environmental Thresholds and Guidelines Manual, to be consistent with the SBCAPCD's Clean Air Plan, project stationary and vehicle emissions must be accounted for in the growth assumptions of the Clean Air Plan. The Clean Air Plan's growth projections are based on population projections and land use designations developed in local general plans (Santa Barbara County Comprehensive Plan). As such,

projects that are consistent with the land use designations from the County's Comprehensive Plan are accounted for in growth projections and are consistent with the Clean Air Plan. In the event that a project would propose a land use that is less intensive than the land use designations from the general plan, the project would likewise be accounted for growth projections and would be consistent with the Clean Air Plan. In the event that a project proposes a land use that is more intensive than land use designations, the project may potentially conflict with regional growth projections. Further analysis would be warranted to determine if the project would exceed the growth projections used in the Clean Air Plan for the specific subregional area.

The project site is within the northern extent of the "Unincorporated Urban Area" of Vandenberg Village. The General Plan land use designation for the project site is Residential (RES 12.3), which allows 12.3 units per acre. The project proposes to amend the zoning to Design Residential (DR-1.8), which permits one-, two-, or multiple-family dwellings, with a maximum density of 1.8 dwelling units per acre and to develop 29 single-family residential units as estate lots (1.7 dwelling units per acre).

The project proposes a residential unit development density of 1.7 dwelling units per acre, which is less than the General Plan land use designation of 12.3 dwelling units per acre. Therefore, the project would be consistent with the growth projections of the Clean Air Plan and would not interfere with implementation of the Clean Air Plan. Impacts would be less than significant (Class III impact).

Mitigation Measures

Impacts would be less than significant and no mitigation is required.

Impact AQ-2: Criteria Pollutant Emissions

Construction

According to the County Environmental Thresholds and Guidelines Manual, the short-term construction-related air quality impacts of a project are considered less than significant; however, they should be disclosed in all environmental documents for projects involving ground disturbance. Construction-related air emissions were calculated as described in Section 4.2.2.2 – Construction Emissions. Table 4.2-4 below displays the maximum daily emission levels throughout construction for each criteria pollutant. The CalEEMod output files for construction emissions are contained in Appendix E-1.

Table 4.2-4
Construction Emissions
(pounds per day)

Pollutant	Maximum Daily Emissions
ROG	85
NO_x	73
PM_{10}	7
SOURCE: Appendix E-1.	

Operations

As discussed in Section 4.2.2.1, Long-term/Operational Emissions Thresholds, the project would have a significant air quality impact related to operation if total project emissions of NO_X and ROG exceeded 55 pounds per day or if emissions of PM_{10} exceeded 80 pounds per day. Additionally, the County also considers emission of NO_X or ROG equaling or exceeding 25 pounds from motor vehicles associated with a project to represent an adverse impact on air quality.

Operation-related air emissions were calculated as described in Section 4.2.2.2. Table 4.2-5 below displays the maximum daily emission levels for each criteria pollutant. The CalEEMod output files for construction emissions are contained in Appendix E-1.

Table 4.2-5
Daily Operations Emissions
(pounds/day)

Pollutant	Area Emission	Mobile Emission	Total Emission	Significance Thresholds	
				Total Project	Mobile Sources
ROG	1.7	1.0	2.7	55	25
NOx	0.3	2.5	2.8	55	25
PM_{10}	>0.1	1.6	1.7	80	NA

SOURCE: County of Santa Barbara 2015a.

NOTES: Totals may vary due to rounding; ">0.1" denotes non-zero values that round to less than a tenth of a pound.

As shown in Table 4.2-5, operations emissions do not exceed significance thresholds. The total anticipated daily operational emissions, ranging from 1.7 to 2.8 pounds per day, are well below the County thresholds for area and mobile emissions.

Off-Site Restoration

As discussed in Section 4.2.2.1, Long-term/Operational Emissions Thresholds, the project would have a significant air quality impact related to operation if total project emissions of NO_X and ROG exceeded 55 pounds per day or if emissions of PM_{10} exceeded 80 pounds per day. Additionally, the County also considers emission of NO_X or ROG equaling or exceeding 25 pounds from motor vehicles associated with a project to represent an adverse impact on air quality.

Air emissions associated with the off-site restoration were calculated as described in Section 4.2.2.2. Table 4.2-6 displays the maximum daily emission levels for each criteria pollutant during the off-site restoration activities. The CalEEMod output files for restoration emissions are contained in Appendix E-1.

Table 4.2-6
Daily Emissions During Off-Site Restoration Activities
(pounds/day)

Pollutant	Initial Restoration Effort	Monitoring and Maintenance Effort	Significance Thresholds	
			Total Project	Mobile Sources
ROG	0.07	0.02	55	25
NOx	0.06	0.02	55	25
PM_{10}	0.41	0.04	80	NA

SOURCE: County of Santa Barbara 2015a.

As shown in Tables 4.2-5 and 4.2-6, operations and restoration emissions would not exceed significance thresholds. The total anticipated daily operational and restoration activity emissions are well below the County thresholds for area and mobile emissions. Impacts would be less than significant (Class III impact).

Mitigation Measures

Impacts would be less than significant and no mitigation is required.

Impact AQ-3: Cumulative Criteria Pollutant Emissions

The SCCAB is a non-attainment area for state ozone and PM_{10} standards. As discussed under Impact AQ-2, the project would not result in significant project-specific and off-site mitigation ozone precursor or PM_{10} emissions. The County's Environmental Thresholds and Guidelines Manual indicates that the study area for cumulative air quality impacts from criteria pollutants is Santa Barbara County; thus, analysis of potential regional impacts is based on consistency with existing air quality attainment plan (AQAP) for Santa Barbara County, the 2013 Clean Air Plan. As discussed under Impact AQ-1, the project would not conflict with the 2013 Clean Air Plan. Therefore, it would not contribute to a cumulatively considerable net increase in criteria pollutant emissions. Impacts would be less than significant (Class III impact).

Mitigation Measures

Impacts would be less than significant and no mitigation is required.

Impact AQ-4: Sensitive Receptors

A sensitive receptor is a person in the population who is more susceptible to health effects due to exposure to an air contaminant than is the population at large. Examples of sensitive receptor locations in the community include residences, schools, playgrounds, childcare centers, churches, athletic facilities, retirement homes, and long-term health care facilities.

Residential land uses in the vicinity of the project are considered to be sensitive receptors. The project does not propose any substantial on-site source of pollutants that would affect these sensitive receptors.

Project construction would include the use of construction equipment that would emit diesel particulate matter (diesel PM). The SBCAPCD has reviewed the project and provided a list of recommended measures for incorporation into project design (see Appendix E-2). These measures include diesel PM reduction measures. The project would be required to implement the standard measures per the SBCAPCD; these measures would reduce potential exposure of sensitive receptors to diesel PM exposure. Impacts would be less than significant.

Projects that do not include substantial on-site sources of pollutants may still result in off-site impacts associated with project-generated traffic; specifically, projects may contribute to localized exceedances of ambient air quality standards for CO, commonly referred to as CO "hot spots". The County Environmental Thresholds and Guidelines Manual defines screening criteria to determine whether a project requires CO analysis. If a project contributes less than 800 peak hour trips to an intersection, then CO modeling is not required. Based on the project Traffic and Circulation Study, the project would generate up to 29 peak hour trips (Penfield & Smith 2015). Thus, the project would not substantially contribute to a CO hot spot.

The project would not generate substantial pollutant concentrations on-site or contribute to the generation of substantial pollutant concentrations off-site. Thus, the project would not expose sensitive receptors to substantial pollutant concentrations. Impacts would be less than significant (Class III impact).

Mitigation Measures

Impacts would be less than significant and no mitigation is required.

Impact AQ-5: Odors

Odors in the living environment, at home, at work, or during recreational activities may be perceived as a nuisance if:

- The appraisal of the odor is negative;
- The perception occurs repeatedly;
- It is difficult to avoid perception of the odor; and

People believe that the odor has a negative effect on their well-being.

During construction, diesel exhaust from construction equipment may be a perceptible odor. As constrained by Santa Barbara County Municipal Code Section 9.16.015, construction equipment would only be operated between 7:00 a.m. and 8:00 p.m. As discussed previously, construction is anticipated to last for approximately 17 months. Due to the limited duration of construction operations requiring the use of heavy construction equipment and

separation distance between construction activities and nearby sensitive receptors, proposed construction operations are not anticipated to result in objectionable odors that would affect a substantial number of people.

The project proposes residential land use. Residential land uses do not typically generate substantial odors. Therefore, the project is not anticipated to result in objectionable odors that affect a substantial number of people.

The project is not anticipated to generate objectionable odors affecting a substantial number of people during construction or operation. Impacts would be less than significant (Class III impact).

Mitigation Measures

Impacts would be less than significant and no mitigation is required.

4.3 Biological Resources

This section assesses potential impacts to biological resources that would result from the implementation of the Oak Hills Estate project. This discussion is based on the Biological Resources Assessment for the Oak Hills Estate Project Biological Resources Assessment (Rincon 2017a ~~2015a~~; Appendix D-1), which incorporates database queries from the U. S. Fish and Wildlife Service (USFWS) Information, Planning, and Conservation System; California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB); and California Native Plant Society (CNPS) Online Inventory of Rare, Threatened and Endangered Plants of California. Other sources of information were acquired from the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey; U. S. Geologic Survey (USGS) topographic maps; a field reconnaissance; focused biological resources surveys. Additional information presented in this section is based on the Open Space Management Plan (Rincon 2017b~~2015~~b; Appendix B), the Jurisdictional Waters and Wetlands Delineation (Rincon 2014 as cited in Rincon 2017a; Appendix D-1), and a preliminary assessment of a proposed off-site mitigation parcel based on the Offsite Mitigation Area Baseline Biological Report and Conceptual Mitigation Plan (Rincon 2016a; (Appendix D-3). This section also incorporates the conclusions of a Biological Resources Assessment peer review (Appendix D-2). Changes within this chapter are based on new information identified in letters from the USFWS and the CDFW regarding "take" of the endangered El Segundo blue butterfly and address other species.

4.3.1 Setting

4.3.1.1 Regional Setting

The project site is located in northwestern Santa Barbara County within the Lompoc Valley approximately 9 miles east of the Pacific Ocean (see Figure 2-1). The lower reach of the Santa Ynez River is located approximately 3.5 miles to the south. The project site is part of the Burton Mesa and is located along the southern slopes of the Purisima Hills. Burton Mesa rises above the Lompoc Valley by 200 to 16 feet and contains gentle to moderate topography, except along the flanks of locally incised canyons. A variety of sensitive ecological areas exist along the Santa Ynez River corridor, in drainages, hillsides, canyons, and on the valley floor in the surrounding area.

Biological resources in the Lompoc Valley and surrounding area consist of oak woodlands, riparian woodlands along stream courses, chaparral, coyote brush scrub, and grassland habitats that occur in a mosaic pattern across the landscape. Perennial and intermittent streams, which support protected riparian habitat for resident and migratory wildlife species, occur throughout the region, with the most significant drainage feature being the

Santa Ynez River. The City of Lompoc is located approximately 3 miles to the south of the project site. The city is urbanized and is generally surrounded by agricultural areas to the west, east, and south.

4.3.1.2 Project Site Setting

The project site is located north of the City of Lompoc within the community of Vandenberg Village, an unincorporated area of Santa Barbara County. The Vandenberg Village area consists of high- and low-density urban development with surrounding agricultural and open space. The project site is bounded by residential development (condominiums) to the southwest, the privately owned Village Country Club golf course to the south across Oak Hills Drive, and is adjacent to the Burton Mesa Ecological Reserve (Reserve) to the north and west (see Figure 2-3). Single-family residences are located east of the project site. An ephemeral drainage bisects the central portion of the parcel from the north to south, and a second shorter ephemeral drainage occurs on the eastern portion of the site (see Figure 4.1-2~~4.1-1~~).

The 16.88-acre project site is generally a triangular parcel located in a gently to moderately sloped area of the Burton Mesa that slopes approximately south–southeast toward Oak Hills Drive. Elevations range from approximately 425 feet above mean sea level (MSL) in the southwest corner to 490 feet above MSL in the northern portion of the site. The project site is currently undeveloped; however, the site shows evidence of previous disturbance in the northern portion of the parcel where linear swales and berms are present (Rincon 2017a ~~2015a~~).

The Burton Mesa Ecological Reserve is located adjacent to the project site to the north and west. The Reserve consists of 5,368 acres between the Purisima Hills and Santa Ynez Mountains and encompasses one of the last significant stands of maritime chaparral in California. The Reserve is owned by the State Lands Commission and leased to the CDFW for management, operation, and maintenance.

Off-Site Mitigation Parcel: The project includes proposals to conduct mitigation for impacts to oak trees and maritime chaparral habitat both on the project site and at an off-site location. Off-site mitigation would generally consist of planting oak trees and the creation/restoration of maritime chaparral habitat in areas of an approximately 28-acre portion of a 123-acre property (APN 097-371-067) owned by the Vandenberg Village Community Services District (VVCSD). The VVCSD has verified the availability of the site for restoration pending approval of an approved final restoration plan. This parcel is located along the east side of Club House Road approximately 1 mile southeast of the project site (see Figure 2-11~~12~~). This vacant parcel is also located immediately south of the Club House Estates residential subdivision and north of Burton Mesa Road.

4.3.1.3 Habitat Types

Four habitat types (vegetation communities) were identified within the 16.88-acre Oak Hills Estate project site: maritime chaparral; coyote brush scrub; ruderal vegetation

dominated by ice plant (*Carpobrotus edulis)*, poison hemlock (*Conium maculatum*), and non-native grasses; and spikerush emergent wetland (Figure 4.3-1). The acreages for each vegetation community and percentage of the project site are provided in Table 4.3-1.

Table 4.3-1
Vegetation Communities within the Oak Hills Estate Project Site

Habitat Type	Approximate Acreage	Approximate Percent Area
Maritime chaparral	10.64	63.1
Coyote brush scrub	5.60	33.2
Ruderal	0.62	3.6
Spikerush emergent wetland	0.02	0.1
Total	**16.88**	**100**

SOURCE: Rincon 2017a~~2015a~~.

Maritime Chaparral: Maritime chaparral community is a sensitive natural community, as listed by the CNDDB. Maritime chaparral covers the western portion of the project site, occupying approximately 10.64 acres (63.1 percent). Coast live oak (*Quercus agrifolia*) is common, particularly on the western side. Vegetation coverage varies from dense, nearly impenetrable mature brush to areas with intermittent clearings. This chaparral community most closely corresponds to element #37C20, central maritime chaparral, in the Holland system (Holland 1986, as referenced in Rincon 2017a~~2015a~~) and to the *Adenostoma fasciculatum* and *Adenostoma fasciculatum – Ceanothus cuneatus* associations of the *Adenostoma fasciculatum* shrubland alliance in the Manual of California Vegetation (Sawyer et al. 2009, as referenced in Rincon 2017a~~2015a~~). This vegetation type is locally known as Burton Mesa chaparral and is associated with upland habitats.

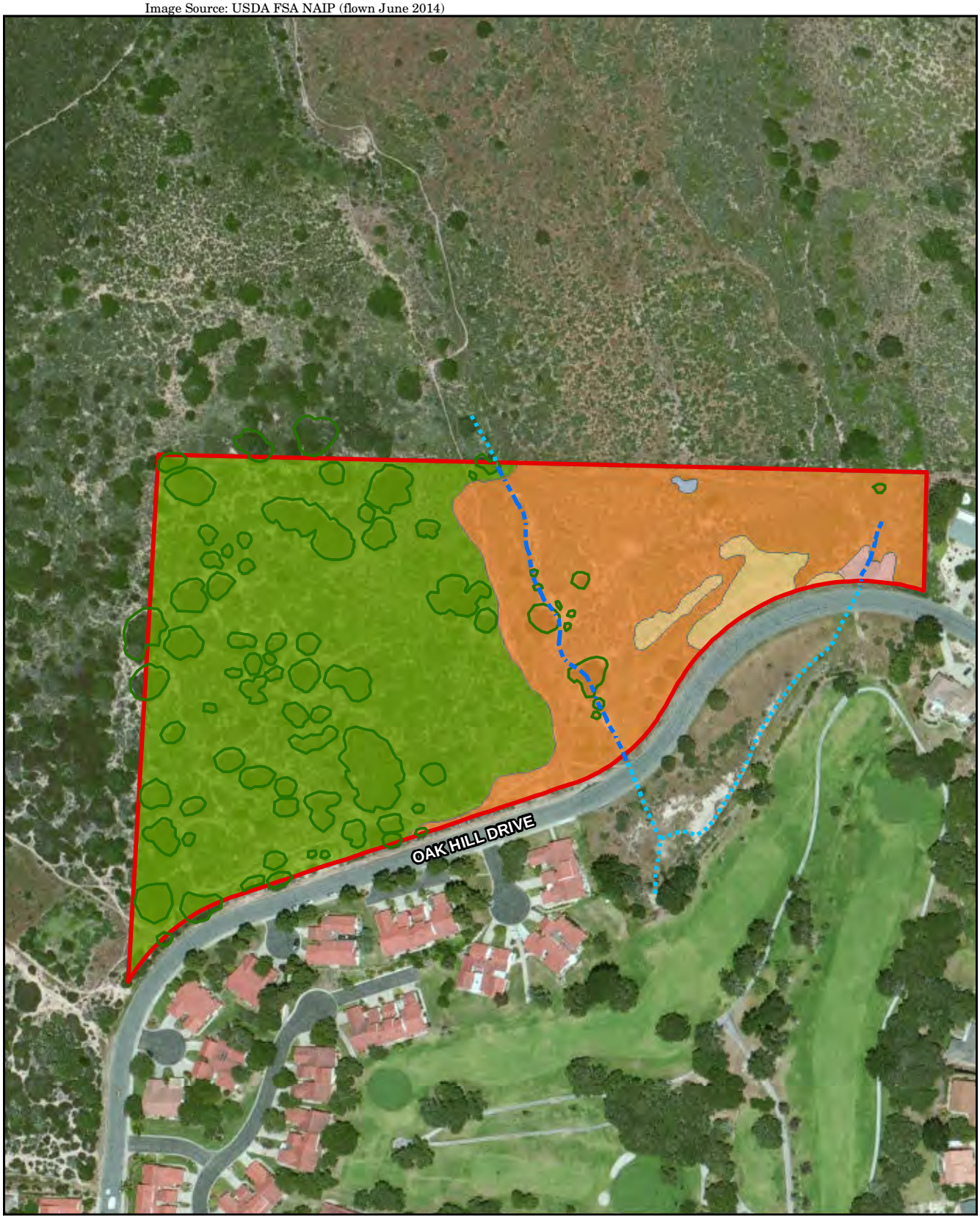
Coyote Brush Scrub: Coyote brush scrub is dominant in the eastern portion of the project site, covering approximately 5.6 acres (33.2 percent). A few coast live oaks are present, particularly along and within the central ephemeral drainage.

This coyote brush scrub community within the project site most closely corresponds to element #32200, central (Lucian) coyote brush scrub, in the Holland system (Holland 1986, as referenced in Rincon 2017a~~2015a~~) and to the *Baccharis pilularis – Artemisia californica* and *Baccharis pilularis – Lotus scoparius* associations of the *Baccharis pilularis* shrubland alliance in the Manual of California Vegetation (Sawyer et al. 2009 as referenced in Rincon 2017a~~2015a~~). This vegetation type is associated with upland habitats.

The two drainages are within coyote brush scrub vegetation. Vegetation within the drainages is not distinctly different from vegetation on banks and adjacent terraces. Both drainages feature mature perennial species growing within bed and banks, indicating that flows are infrequent and low volume. The eastern drainage supports one large willow (*Salix laevigata*) immediately above the existing culvert inlet.

Ruderal: Ruderal vegetation types cover approximately 0.62 acre (3.61 percent) of the project site. This vegetation community includes patches of ice plant (*Carpobrotus edulis*) as well as areas dominated by non-native annual grasses and herbs in the southeastern portion of the project site. Ice plant is dominant in patches near the eastern boundary on

Image Source: USDA FSA NAIP (flown June 2014)



Project Boundary

Vegetation Communities

- Coyote Brush Scrub
- Spikerush Wetland
- Maritime Chaparral
- Ruderal/Iceplant
- Ruderal/Non-native Grassland

Oak Canopy

Ephemeral Stream

Off-site Ephemeral Stream

0 Feet 250

RECON

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FIGURE 4.3-1

Vegetation Communities

either side of the eastern ephemeral drainage. Non-native grasses and weedy herbs are dominant in swathes adjacent to Oak Hill Drive between the two drainages. Ruderal vegetation is typically associated with disturbed areas, such as roadsides and infill parcels.

Ice plant patches most closely correspond to the *Carpobrotus edulis* Semi-Natural Herbaceous Stands Alliance in the Manual of California Vegetation system (Sawyer et al. 2009, as referenced in Rincon 2017a~~2015a~~). Non-native grass/herb vegetation within the project site most closely corresponds to element #42200, non-native grassland, in the Holland system (Holland 1986, as referenced in Rincon 2017a~~2015a~~) and to the *Conium maculatum – Foeniculum vulgare* and *Brassica* (*nigra*) and other mustards semi-natural herbaceous stands alliances in the Manual of California Vegetation system (Sawyer et al. 2009, as referenced in Rincon 2017a~~2015a~~).

Spikerush Emergent Wetland: A small isolated depression of approximately 0.02 acre near the northern project site boundary, east of the central drainage, supports herbaceous wetland vegetation with spikerush-dominant vegetation. There is no indication that this feature is hydrologically connected during normal events to the central drainage.

This vegetation type most closely corresponds to element #52500, vernal marsh, in the Holland system (Holland 1986, as referenced in Rincon 2017a~~2015a~~) and to the *Eleocharis macrostachya* herbaceous alliance in the Manual of California Vegetation system (Sawyer et al. 2009, as referenced in Rincon 2017a~~2015a~~).

Off-site Mitigation ~~Parcel~~ Area Habitat

An area approximately 27.6 acres in size has been identified by the project applicant (Figure 2-11) as an off-site location to be used to conduct mitigation for impact to oak trees and maritime chaparral habitat. Four vegetation communities were identified at the off-site mitigation ~~parcel~~area: black sage scrub with chamise, chamise chaparral, coast live oak woodland, non-native grassland with some open sand areas, and developed/hardscape (Table 4.3-2). A few planted pines are present near developed areas. The majority of pines once present along Club House Drive (visible in many aerial photos) have died and were removed (Rincon 2016a). A map of the terrestrial vegetation communities identified during the preliminary reconnaissance of the proposed off-site mitigation area is presented as Figure 3 in Appendix D-3.

Table 4.3-2
Vegetation Communities within the Off-site Mitigation ~~Parcel~~ Area
Preliminary Reconnaissance

Common Name	Approximate Acreage	Approximate Percent Area
Black Sage Scrub with Chamise	17.1	62
Chamise chaparral	0.7	3
Coast live oak woodland	4.3	16
Non-native grassland/open sand areas	5.4	19
Developed	0.1	<1
Total	**27.6~~16.88~~**	**100**
SOURCE: Rincon 2016a.		

Black Sage Scrub with Chamise: Black sage scrub with chamise occupies approximately 17.1 acres, and covers the majority of the off-site mitigation ~~parcel~~ area at 62 percent of the overall acreage. This vegetation community consists of scattered and clumped shrub cover dominated by black sage (*Salvia mellifera*), deerweed (*Acmispon glaber*), and mock heather (*Ericameria ericoides*), with inclusions of chamise (*Adenostoma fasciculatum*). This community is most consistent with the Chamise - black sage chaparral Shrubland Alliance as noted in the *Manual of California Vegetation*, online edition (CNPS 2016). Its state rank, S5, reflects its widespread distribution throughout central and southern coastal California, and it is not considered a sensitive natural community. The CDFW considers communities with a state rank of S1 through S3 as highly imperiled, and those communities should be evaluated as potential sensitive natural communities under CEQA (CDFW 2016). Alliances that are ranked S4 or S5 are not considered to be rare.

The canopy consists of both dense and open areas with an average absolute vegetative cover of approximately 60 percent. Sandy openings between shrubs support special status plants mesa horkelia (*Horkelia cuneate* var. *puberula*), California spineflower (*Mucronea californica*), and Blochman's ragwort (*Senecio blochmaniae*) are scattered within sandy openings throughout this vegetation community. The stature and composition of the vegetation in this community is indicative of the early seral stage development into a climax community of maritime chaparral. Many of the shrubs currently present in this area are senescent, and weeds are present, including veldt grass, which can displace native shrubs when not controlled.

Chamise Chaparral: Chamise chaparral occupies approximately 0.7 acre located in the northwestern portion of the off-site mitigation ~~parcel~~ area and makes up approximately 3 percent of the area~~overall Off-site Mitigation Parcel acreage~~. This community is dominated by chamise with scattered Purisima manzanita (*Arctostaphylos purissima*) and black sage. This community is most consistent with the Chamise Chaparral Shrubland Alliance as noted in the *Manual of California Vegetation*, online edition (CNPS 2016), with a state rank of S5, though the presence of occasional Purisima manzanita indicate it may be a degraded remnant of former Burton Mesa Chaparral Shrubland Alliance. Low cover of manzanita, high cover of weeds, and dominance of chamise indicate a past history of disturbance, and indicate the potential for enhancement or restoration. A few oaks are also present. The canopy varies from moderately dense brush to somewhat open clearing.

Coast Live Oak Woodland: Coast live oak woodland occupies approximately 4.3 acres, distributed in patches across the southern and western portions of the off-site mitigation ~~parcel~~area. It comprises approximately 16 percent of the overall off-site mitigation ~~parcel acreage~~area. Vegetation within this community is dominated by a dense canopy of coast live oak (*Quercus agrifolia*). This community is most consistent with the Coast Live Oak Woodland Alliance in the *Manual of California Vegetation* (CNPS 2016), which has a state rank of S4.

Non-native Grassland with Open Sand Areas: Non-native grassland with open sand areas occupies approximately 5.4 acres, located primarily in western and southern portions of the off-site mitigation ~~parcel~~area. It comprises approximately 19 percent of the overall

off-site mitigation ~~parcel~~ area acreage. Vegetation in this community is dominated by non-native annual grasses such as ripgut brome (*Bromus diandrus*) and wild oats (*Avena fatua*) with scattered herbs such as clustered tarweed (*Deinandra fasciculata*). Additionally veldt grass (*Ehrharta calycina*) is also present. This vegetation type includes areas consistent with the Annual Brome Grasslands Herbaceous Semi-Natural Alliance. Semi natural stands are not assigned state ranks in the *Manual of California Vegetation* (CNPS 2016). In the southern part of the off-site mitigation parcel, this vegetation community supports special status species sea-side bird's-beak (*Cordylanthus rigidus* ssp. *littoralis*). Sandy openings not overrun with annual grasses support special status plants.

4.3.1.4 Wildlife Detected

Wildlife detected during site visits include western fence lizards (*Sceloperus occidentalis*) that were detected primarily associated with the drainage area along the center of the site; a gopher snake (*Pituophis catenifer*) was detected within the ruderal/non-native grassland area; red-tailed hawk (*Buteo jamaicensis*), turkey vulture (*Cathartes aura*), western scrub jay (*Aphelocoma californica*), California towhee (*Melozone crissalis*), and spotted towhee (*Pipilo maculatus*) were observed; and big-eared woodrat (*Neotoma macrotis macrotis* [=*Neotoma fuscipes macrotis*]) houses were observed in the project site. No wildlife was documented at the off-site mitigation parcel during preliminary reconnaissance surveys; however, the site is located adjacent to the Reserve with similar habitat and would be expected to have similar wildlife (Rincon 2016a).

4.3.1.5 Drainages

The project site is located within the San Miguelito Creek – Santa Ynez River watershed. The site does not contain any named streams. The nearest major drainage is the Santa Ynez River, located approximately 3.5 miles south. An intermittent drainage is shown by the National Hydrography Dataset to occur approximately 0.7 mile east of the project site. This drainage runs through the golf course located to the south.

Two ephemeral stream channels (drainages) are located within the project site, one at the center of the site and a second near the eastern boundary. Both drainages run approximately south toward existing culverts located under Oak Hill Drive. There is no indication that these two channels have surface connection to adjacent surface waters beyond storm drains. Direct hydrologic connection to waters of the U.S. could not be established. It was determined that the features are potentially isolated and, therefore, only potentially under state jurisdiction.

The central ephemeral drainage is naturally occurring and the eastern drainage is artificial in origin, beginning on-site approximately 112 feet above Oak Hill Drive (Rincon 2017~~5~~a). Both ephemeral drainages have been occasionally disturbed by human presence and drain to small watersheds and areas dominated by coarse-textured, rapidly drained soils, with neither drainage features having evidence of regular nor high volume flow. As described in the Jurisdictional Waters and Wetlands Delineation Study for the Oak Hills Estate Project (Rincon 2017a~~2015b~~), the presence of well-established upland trees and shrubs in the flood

control basin downstream indicates that the basin rarely fills. The drainages do not support sensitive habitat due to low-flow water and dry soil conditions. A seasonal spikerush emergent wetland depression (spikerush emergent wetland) is present near the north edge of the project site, east of the central drainage feature (see Figure 4.3-1). The spikerush emergent wetland may hold standing water in the spring. No visible surface connection was found that would carry water from the spikerush emergent wetland to the central drainage during a normal storm event.

Preliminary site reconnaissance of the off-site mitigation parcel areas determined the site was outside jurisdictional wetlands, waters, streambed and riparian habitats (Rincon 2016a).

4.3.1.6 Special Status Species and Plant Communities

For the purposes of this document, special status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the USFWS under the federal Endangered Species Act (FESA); those listed or petitioned for listing as rare, threatened, or endangered by the CDFW under the California Endangered Species Act; animals designated as "Fully Protected" or "Species of Special Concern" by the CDFW; and species on the *Special Vascular Plants, Bryophytes, and Lichens List* (CDFW 2011, as referenced in Rincon 2017a~~2015a~~). This latter document includes plant species presented in the *California Native Plant Society's Inventory of Rare and Endangered Plants of California,* Sixth Edition (Tibor 2001, as referenced in Rincon 2017a~~2015a~~), as updated online. Those plants contained on the California Rare Plant Rank (CRPR) Lists 1A, 1B, and 2, 3, and 4 are considered special status species in this report, as defined in the following CRPR code definitions:

- List 1A = Plants presumed extinct in California;
- List 1B.1 = Rare or endangered in California and elsewhere; seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat);
- List 1B.2 = Rare or endangered in California and elsewhere; fairly endangered in California (20–80% occurrences threatened);
- List 1B.3 = Rare or endangered in California and elsewhere, not very endangered in California (<20% of occurrences threatened or no current threats known);
- List 2 = Rare, threatened or endangered in California, but common elsewhere;
- List 3 = Plants needing more information (most are species that are taxonomically unresolved);
- List 4.2 = Plants of limited distribution (watch list), fairly endangered in California (20-80% occurrences threatened); and
- List 4.3 = Plants of limited distribution (watch list), not very endangered in California (<20% occurrences threatened or no current threats known).

In 1988, the County prepared a list of species considered to be of "local concern" because of local or regional scarcity (Wiskowski 1988, as referenced in Rincon 2017a~~2015a~~). Although this list is outdated, plants occurring on this list may also meet the definition of a special status species. An additional list was prepared in 2005 by the Santa Barbara Botanic Garden (Central Coast Center for Plant Conservation 2005, as referenced in Rincon 2017a~~2015a~~) and includes other species the County may consider as special status species. These lists were reviewed in conjunction with the CNDDB and CNPS to further identify special status plant species that are known to occur within the vicinity of the project.

Special Status Plants: Suitable habitat exists for 32 special status plant species. Nine of these species were documented within the project site during focused botanical surveys conducted in spring of 2014 and 2017, as listed in the following (Table 4.3-3):

Table 4.3-3
Special Status Plant Species Located within the Oak Hills Estate Project Site

Common Name	Scientific Name	Listing Status
La Purisima manzanita	*Arctostaphylos purissima*	CRPR 1B.1
Sand mesa manzanita	*Arctostaphylos rudis*	CRPR 1B.2
Lompoc ceanothus	*Ceanothus cuneatus* var. *fasciculatus*	CRPR 4.2
Paniculate tarplant	*Deinandra paniculata*	CRPR 4.2
Lompoc wallflower	*Erysimum capitatum* var. *lompocense*	CRPR 4.2
Mesa horkelia	*Horkelia cuneata* var. *puberula*	CRPR 1B.1
Southern curly-leaved dune mint	*Monardella sinuata* ssp. *sinuata*	CRPR 1B.2
California spineflower	*Mucronea californica*	CRPR 4.2
Blochman's ragwort	*Senecio blochmaniae*	CRPR 4.2

None of these special status plant species is listed under the federal or state Endangered Species Act.

The remaining species are known to occur in chaparral and/or coyote brush scrub habitats with sandy substrates near the project site and therefore have the potential to occur (Table 4.3-4). These species include:

Table 4.3-4
Special Status Plant Species Potentially Located within the Oak Hills Estate Project Site

Common Name	Scientific Name	Listing Status
Hoover's bent grass	*Agrostis hooveri*	CRPR 1B.2
Santa Ynez groundstar	*Ancistrocarphus keilii*	CRPR 1B.1
Aphanisma	*Aphanisma blitoides*	CRPR 1B.2
Eastwood's brittle-leaf manzanita	*Arctostaphylos crustaceae* spp. *eastwoodiana*	CRPR 1B.1
Surf thistle	*Cirsium rhothophilum*	state threatened; CRPR 1B.2
La Graciosa thistle	*Cirsium scariosum var. loncholepis*	federally endangered; state threatened; CRPR 1B.1
Seaside bird's-beak	*Cordylanthus rigidus spp. littoralis*	state endangered; CRPR 1B.1

Table 4.3-4
Special Status Plant Species Potentially Located within the Oak Hills Estate Project Site

Common Name	Scientific Name	Listing Status
Gaviota tarplant	*Deinandra increscens spp. villosa*	federally and state endangered; RPR 1B.1
Dune larkspur	*Delphinium parryi* spp. *blochmaniae*	CRPR 1B.2
Western dichondra	*Dichondra occidentalis*	CRPR 4.2
Saint's daisy	*Erigeron sanctarum*	CRPR 4.2
Lompoc yerba santa	*Eriodictyon capitatum*	federally endangered; state rare; CRPR 1B.2
Kellogg's horkelia	*Horkelia cuneate* var. *sericea*	CRPR 1B.1
Robinson's peppergrass	*Lepidium virginicum* var. *robinsonii*	CRPR 1B.2
Santa Barbara honeysuckle	*Lonicera subspicata* var. *subspicata*	CRPR 1B.2
Vandenberg monkeyflower	*Diplacus vandenbergensis* formerly *Mimulus fremontii* var. *vandenbergensis*	federally endangered; CRPR 1B.1
Crisp dune mint	*Monardella undulata* spp. *crispa*	CRPR 1B.2
San Luis Obispo monardella	*Monardella undulata* spp. *undulata*	CRPR 1B.2
California adder's tongue	*Ophioglossum californicum*	CRPR 4.2
Branching phacelia	*Phacelia ramosissima* var. *ramosissima*	CRPR 3.2
Sand almond	*Prunus fasciculate* var. *punctata*	CRPR 4.3
Black-flowered figwort	*Scrophularia atrata*	CRPR 1B.2
Chaparral ragwort	*Senecio aphanactis*	CRPR 2.2

Special Status Wildlife: No special status wildlife species were detected during reconnaissance field surveys or focused wildlife surveys. ~~Eight~~ However, fifteen special status wildlife species have the potential to occur within the project site (Table 4.3-5). These include American badger (*Taxidea taxus*), silvery legless lizard (*Anniella pulchra pulchra*), Blainville's horned lizard (*Phrynosoma blainvillii*), western red bat (*Lasiurus blossevillii*), western spadefoot toad (*Spea hammondii*), coast patch-nosed snake (*Salvadora hexalepis virgultea*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), vernal pool fairy shrimp (*Branchinecta lynchi*), El Segundo blue butterfly (*Euphilotes battoides allyni*), red-legged frog (*Rana aurora draytonii)*, white-tailed kite (*Elanus leucurus*), Cooper's hawk (*Accipiter cooperii*), burrowing owl (*Athene cunicularia hypugaea*), loggerhead shrike (*Lanius ludovicianus*), and American peregrine falcon (*Falco peregrinus anatum).* In addition, vegetation on the project site offers potential nesting habitat for bird species that are protected under the federal Migratory Bird Treaty Act and California Fish and Game Code. The preliminary reconnaissance field surveys on the off-site mitigation parcel detected no presence of special status wildlife (Rincon 2016a).

Table 4.3-5
Special Status Wildlife Species with Potential to Occur within the Oak Hills Estate Project Site

Species' Common Name/ Scientific Name	Listing Status
American badger *Taxidea taxus*	CSC,
Silvery legless lizard *Anniella pulchra pulchra*	CSC
Coast horned lizard *Phrynosoma blainvillii* [= *P. coronatum* coastal population]	CSC
Western red bat (*Lasiurus blossevillii*)	CSC
Western spadefoot toad (*Spea hammondii*)	CSC
Coast patch-nosed snake *Salvadora hexalepis virgultea*	CSC
Coastal whiptail (*Aspidoscelis tigris stejnegeri*)	CSC
Vernal pool fairy shrimp *Branchinecta lynchi*	FT
El Segundo blue butterfly *Euphilotes battoides allyni*	FE
California red-legged frog *Rana aurora draytonii*	FT, CSC
White-tailed kite (*Elanus leucurus*)	FT
Cooper's hawk (*Accipiter cooperii*)	WL
Burrowing owl (*Athene cunicularia hypugaea*)	CSC
Loggerhead shrike (*Lanius ludovicianus*)	CSC
Peregrine falcon *Falco peregrinus anatum*	(State Delisted), CFP

CDFW 2017
CFP = California Fully Protected
FT = Federally Threatened
FE = Federally Endangered
WL = California Department of Fish and Wildlife Watch List Species
CSC = California Department of Fish and Wildlife Species of Special Concern

Off-site Mitigation Parcel:

Based on the database and literature review of records from the Lompoc, California USGS 7.5-minute topographic quadrangle and the surrounding eight quadrangles as well as the USFWS Information, Planning, and Consultation System (IPaC) list of federally listed species, 66 special status plant species are known to or have the potential to occur within the vicinity of the off-site mitigation parcel and are listed in Appendix C of the Conceptual Mitigation Plan (see Appendix D-3). Of these, 23 special status plant species may occur on-site based on the presence of suitable habitat (Rincon 2016a). Six of these species were

documented either during the reconnaissance level survey, in previous reports that include the off-site mitigation parcel, or in the databases noted in the Conceptual Mitigation Plan (see Appendix D-3). Additionally, 17 special status species are known to occur in chaparral and/or coastal scrub habitats with sandy substrates in the vicinity of the off-site mitigation parcel and therefore have potential to occur and are identified in Appendix D-3. Two of the special status plant species reported at the off-site mitigation parcel are protected under the federal or state Endangered Species Acts, Vandenberg monkeyflower *(Diplacus vandenbergensis)* and seaside bird's-beak *(Cordylanthus rigidus* ssp. *littoralis).* There is some potential for the federal and state Endangered Species Acts listed Gaviota tarplant (*Deinandra increscens* ssp. *villosa)*, to be present. The remaining 16 species with potential to occur are not listed; however, they are included in the CNPS CRPR list of sensitive plant species (Rincon 2016a).

La Purisima manzanita (*Arctostaphylos purissima*) and Blochman's ragwort (*Senecio blochmaniae*) are present and intermixed occasionally in the black sage scrub (*Salvia mellifera*) habitat in the off-site mitigation area. Most Purisima manzanita individuals were relatively small and young indicating the early stages or transition to a maritime chaparral community. Mesa horkelia is abundant throughout the off-site mitigation parcel occurring commonly as an understory component of the black sage scrub and within sandy openings. California spineflower, Vandenberg monkeyflower, and seaside bird's-beak occur primarily in patches within sandy openings and canopy gaps in the sage scrub margins of the annual grassland and margins of the oak woodland communities (Rincon 2016a).

4.3.1.7 Wildlife Movement Corridors

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network.

The project site is located within a regional Essential Connectivity Area wildlife movement corridor (CDFW 2010). Essential Connectivity Areas represent principle connections between Natural Landscape Blocks, such as the Burton Mesa Ecological Reserve, which is located adjacent to the project site. Essential Connectivity Areas are regions in which land conservation and management actions should be prioritized to maintain and enhance ecological connectivity. Essential Connectivity Areas are mapped based on coarse ecological condition indicators rather than on the needs of particular species and thus serve the majority of species in each region.

Small-scale habitat corridors are also present on the project site and include drainages and other topographic features that facilitate movement. The drainage that traverses the approximate center of the project site may provide a means to facilitate regional

connectivity for a number of species including but not limited to the American badger, California mule deer (*Odocoileus hemeonus californicus*), and coyote (*Canis latrans*).

4.3.1.8 Regulatory Setting

The following is a brief summary of the regulatory context under which biological resources are managed at the federal, state, and local levels. A number of federal and state statutes provide a regulatory structure that guides the protection of biological resources. Agencies with the responsibility for protection of biological resources within the project site include:

- USFWS (federally listed species and migratory birds)
- California Department of Fish and Wildlife (state-listed species, nesting birds, and riparian areas and other waters of the state)
- State Water Resources Control Board and Central Coast Regional Water Quality Control Board (waters of the state)
- County of Santa Barbara (land use planning/permitting and locally sensitive species and habitats)

a. U.S. Fish and Wildlife Service

The USFWS generally implements the FESA for terrestrial and freshwater species (16 United States Code [USC] § 153 *et seq.)*. Projects that would result in "take" of any federally listed as threatened or endangered species are required to obtain permits from the USFWS through either Section 7 (interagency consultation with a federal nexus) or Section 10 (Habitat Conservation Plan) of the FESA, depending on the involvement by the federal government in permitting and/or funding of the project. The USFWS also implements the Migratory Bird Treaty Act (16 USC Section 703-711) and the Bald and Golden Eagle Protection Act (16 USC Section 668). The permitting process is used to determine if a project would jeopardize the continued existence of a listed species and the measures that would be required to avoid jeopardizing the species.

USFWS jurisdiction would apply to the project site if federally listed animal species may occur on-site and be impacted by the proposed project. Federally listed plant species are not protected on private lands.

"Take" under federal definition means to harass, harm (which includes habitat modification), pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Proposed or candidate species do not have the full protection of the FESA; however, the USFWS advises project applicants that they could be elevated to listed status at any time.

b. California Department of Fish and Wildlife

The CDFW derives its authority from the Fish and Game Code of California and is a Trustee Agency under CEQA (as defined in CEQA Statute Section 15386). The California

Endangered Species Act (CESA) (Fish and Game Code Section 2050 et seq.*)* prohibits take of state listed as threatened, endangered or fully protected species. Take under CESA is restricted to direct mortality of a listed species and does not prohibit indirect harm by way of habitat modification. The CDFW also prohibits take for species designated as Fully Protected under Fish and Game Code.

California Fish and Game Code (CFGC) sections 3503, 3503.5, and 3511 describe unlawful take, possession, or destruction of birds, nests, and eggs. Fully protected birds (Section 3511) may not be taken or possessed except under specific permit. Section 3503.5 of the Code protects all birds-of-prey and their eggs and nests against take, possession, or destruction of nests or eggs.

Species of Special Concern is a category used by the CDFW for those species that are considered to be indicators of regional habitat changes or are considered to be potential future protected species. These species do not have any special legal status except what may be afforded by the CFGC as noted above. The Species of Special Concern-category is intended by the CDFW for use as a management tool to include these species into special consideration when decisions are made concerning the development of natural lands.

The CDFW also has authority to administer the Native Plant Protection Act (NPPA) (CFGC Section 1900 et seq.). The NPPA requires the CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare. Under Section 1913(c) of the NPPA, the owner of land where a rare or endangered native plant is growing is required to notify the department at least 10 days in advance of changing the land use to allow for salvage of the plant.

Perennial, intermittent, and ephemeral streams and associated riparian vegetation, when present, also fall under the jurisdiction of the CDFW. Section 1600 et seq. of the CFGC (Lake and Streambed Alteration Agreements) gives the CDFW regulatory authority over work within the stream zone (which could extend to the 100-year flood plain) consisting of, but not limited to, the diversion or obstruction of the natural flow or changes in the channel, bed, or bank of any river, stream, or lake.

c. State Water Resources Control Board and Central Coast Regional Water Quality Control Board

These agencies have jurisdiction over "waters of the State," pursuant to the Porter-Cologne Water Quality Control Act, which are defined as any surface water or groundwater, including saline waters, within the boundaries of the state. The State Water Resources Control Board has issued general Waste Discharge Requirements (WDRs) regarding discharges to "isolated" waters of the state (Water Quality Order No. 2004-0004-DWQ, Statewide General Waste Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be Outside of Federal Jurisdiction).

The Central Coast Regional Water Quality Control Board (RWQCB) enforces actions under this general order for isolated waters not subject to federal jurisdiction and is also responsible for the issuance of water quality certifications pursuant to Section 401 of the

Clean Water Act for waters subject to federal jurisdiction. The drainages located in the central and eastern portions of the project site appear not to be connected to any other waters of the U.S. ~~or state~~ and, therefore, are likely not subject to Section 401 of the Clean Water Act. However, these drainages would be subject to the jurisdiction of the RWQCB as isolated waters of the state.

d. County of Santa Barbara

Vandenberg Village is an unincorporated community and, therefore, subject to regulations set forth by the County of Santa Barbara. The County prepared a list of locally important plant species in 1988 and attempts to minimize development impacts to these species as appropriate. The County also regulates impacts to wetlands through the discretionary permitting process. In addition, requirements for the protection of biological resources in the unincorporated areas of Santa Barbara County are provided by the Comprehensive Plan Conservation Element, Environmental Resource Management Element (ERME), Land Use Element, Community Plans, and the Coastal Land Use Plan. These documents identify sensitive habitats and species, and provide measures to direct project design and policies to protect biological resources.

In 1998, the County's Board of Supervisors initiated a collaborative public process to develop recommendations for oak protection. By July 2001, the County adopted the Oak Tree Protection and Regeneration Program. An outcome of this program was the Santa Barbara County Comprehensive Plan Conservation Element Oak Tree Protection in the Inland Rural Areas of Santa Barbara County as adopted in 2003 and republished in 2009. This document outlined protection goals, development standards, policies, and implementing actions to promote the conservation, protection, and regeneration of native oak populations and oak woodlands.

- Oak Tree Protection Policy 1 states, "native oak trees, native oak woodlands, and native oak savannas shall be protected to the maximum extent feasible in the County's rural and/or agricultural lands. Regeneration of oak trees shall be encouraged."
- Development Standard 1 (Protection of all species of mature oak trees) states that "development shall avoid removal of or damage to mature oak trees, to the maximum extent feasible." Mature oak trees are defined as live oak trees 6 inches or greater in diameter at breast height. "Native oak trees that cannot be avoided shall be replanted on site or on a receiver site known to be capable of supporting the particular oak tree species. Replanting shall conform to the County's Standard Conditions and Mitigation Measures."

Land Use Element

Hillside and Watershed Protection Policy 2

The Comprehensive Plan Land Use Element Hillside and Watershed Protection Policy 2 requires all developments to be designed to fit the site topography, soils, geology, hydrology,

and any other existing conditions and be oriented so that grading and other site preparation is kept to an absolute minimum. Natural features, landforms, and native vegetation, such as trees, shall be preserved to the maximum extent feasible. Areas of the site which are not suited to development because of known soil, geologic, flood, erosion or other hazards shall remain in open space.

The County's Environmental Thresholds and Guidelines Manual (July 2015) states that individual native specimen trees (mature trees that are healthy and structurally sound and have grown into the natural stature particular to the species) are potentially significant. In general, the loss of 10 percent or more of the trees (by number or by canopy cover) of biological value on a project site is considered potentially significant.

Lompoc Area Interpretive Guidelines

The County's Land Use Element Lompoc Area Interpretive Guidelines (1999) includes goals and policies to preserve, enhance, and identify unique ecological areas. Policies A-4 through A-8 promote siting development in a manner to avoid disruption and damage to biological resources, including the Burton Mesa Ecological Preserve and mitigation for oak trees and Burton Mesa Chaparral. The guidelines state that native trees must be replaced with natives of the Burton Mesa in a manner consistent with County standards. The guidelines also require the respective Burton Mesa Chaparral mitigation ratios of 3:1, 2:1, and 1.5:1 for high, moderate, and degraded quality chaparral either inside the state's Ecological Preserve or in a permanently protected area outside the Preserve, or through in-lieu fees that would fund habitat restoration and/or management in the Preserve. However, state and federal laws requiring the protection of Threatened and Endangered Species may preclude such mitigation strategies in some cases.

4.3.2 Impact Analysis

4.3.2.1 Methodology and Significance Thresholds

a. CEQA Guidelines Appendix G

According to the Appendix G of California CEQA Guidelines, it is assumed that the proposed project would result in a significant impact if it would:

- Have a substantial adverse impact, 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;
- Have a substantial adverse impact 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;
- 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;

- Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan.

b. County of Santa Barbara Environmental Thresholds and Guidelines

Guidelines for evaluation of biological impacts and significance thresholds are contained in the County of Santa Barbara Environmental Thresholds and Guidelines Manual (2015a) and the Santa Barbara County A Planner's Guide to Conditions of Approval and Mitigation Measures (2011a). Determination of significance for disturbance to habitats or species within the County is based on the following criteria:

a. Conflict with adopted environmental plans and goals of the community where it is located;

b. Substantially affect a rare or endangered species of animal, plant or the habitat of the species;

c. Interfere substantially with the movement of any resident or migratory fish or wildlife species; or

d. Substantially diminish habitat for fish, wildlife, or plants.

The manual states that environmental impact analysis and mitigation need to include federal and state biological resource regulations (e.g., the federal and state Endangered Species Acts, National Environmental Policy Act, Clean Water Act Sections 401 and 404, Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, Executive Order 11990 [wetlands protection], Rivers and Harbors Act Section 10, and California Fish and Game Code Section 1600 et seq.).

The evaluation of project impacts as detailed in the manual calls for an assessment of both short- and long-term impacts. Significant impacts to species or habitats are those that substantially impact significant resources in the following ways:

a. Substantially reduce or eliminate species diversity or abundance;

b. Substantially reduce or eliminate quantity or quality of nesting areas;

c. Substantially limit reproductive capacity through losses of individuals or habitat;

d. Substantially fragment, eliminate, or otherwise disrupt foraging areas and/or access to food sources;

e. Substantially limit or fragment range and movement (geographic distribution or animals and/or seed dispersal routes); or

f. Substantially interfere with natural processes, such as fire or flooding, upon which the habitat depends.

Instances in which project impacts would be less than significant include the following:

a. Small acreages of non-native grassland if wildlife values are low;

b. Individuals or stands of non-native trees if not used by important animal species such as raptors or monarch butterflies;

c. Areas of historical disturbance such as intensive agriculture;

d. Small pockets of habitats already significantly fragmented or isolated, and degraded or disturbed; or

e. Areas of primarily ruderal species resulting from pre-existing man-made disturbance.

4.3.2.2 Project Impacts and Mitigation Measures

The impact analysis for biological resources is largely based on information provided in the Biological Resources Assessment (Rincon 2017a~~2015a~~). This impact analysis was supplemented with additional analyses based on information lacking at the time the biology report was prepared ~~(i.e., details on the trail)~~ and to address impacts that were not adequately characterized (i.e., brush management, jurisdictional waters). A Peer Review of the Oak Hills Estate Project – Biological Resources Assessment was prepared by RECON (2016a) suggesting a number of revisions to the ~~project~~ original 2015 Biological Resources Assessment ~~(Rincon 2015a)~~ to support conclusions and comply with the County Environmental Thresholds and Guidelines Manual (July 2015). Thus, the data and tables presented below may differ from the data presented in the Biological Resource Assessment (Rincon 2017a~~2015a~~). The revised methodology used in this environmental impact report (EIR) was based upon the findings of the peer review letter, aerial imagery, and use of geographic information systems (GIS) technology.

For this EIR impact analysis, project impacts are calculated based on the project grading and drainage plans and building envelopes. The ”development area” or ”limits of disturbance” includes permanent impacts associated with the grading of all residential lots, street and drainage improvements, and the limits of Fuel Management Zone 1 (FMZ-1: 0 to 30 feet ~~Defensible Space 'Low Fuel Zone"~~). Additional permanent impacts outside of the immediate residential development area include ~~the proposed trail, 3~~three drainage ~~swale~~basins, and infrastructure/two private roads (private roads “A” and “B”), and drainage culvert improvements. Impacts associated with Fuel Management Zone 2 (FMZ-2: 30 to 100 feet ~~defensible space~~) are considered temporary impacts ~~neutral~~ due to only required thinning of existing vegetation. Project open space includes all areas within FMZ-2~~Fuel~~

~~Management Zone 2~~ and adjacent undisturbed areas that are outside of the limits of disturbance but within the property boundary. Edge effects associated with the project are based on the indirect and tangible effects of the change of use of the site to residential and resulting increased human use of the site. The impacts from edge effects are associated with intrusion into habitat by pets, increased human presence, water quality impacts to wetland, ~~off-trail~~ intrusion into habitat, lighting, noise, and materials accumulation or trash on and adjacent to property.

Impact BIO-1: Sensitive Special Status Plants and Wildlife Species

Special Status Plants

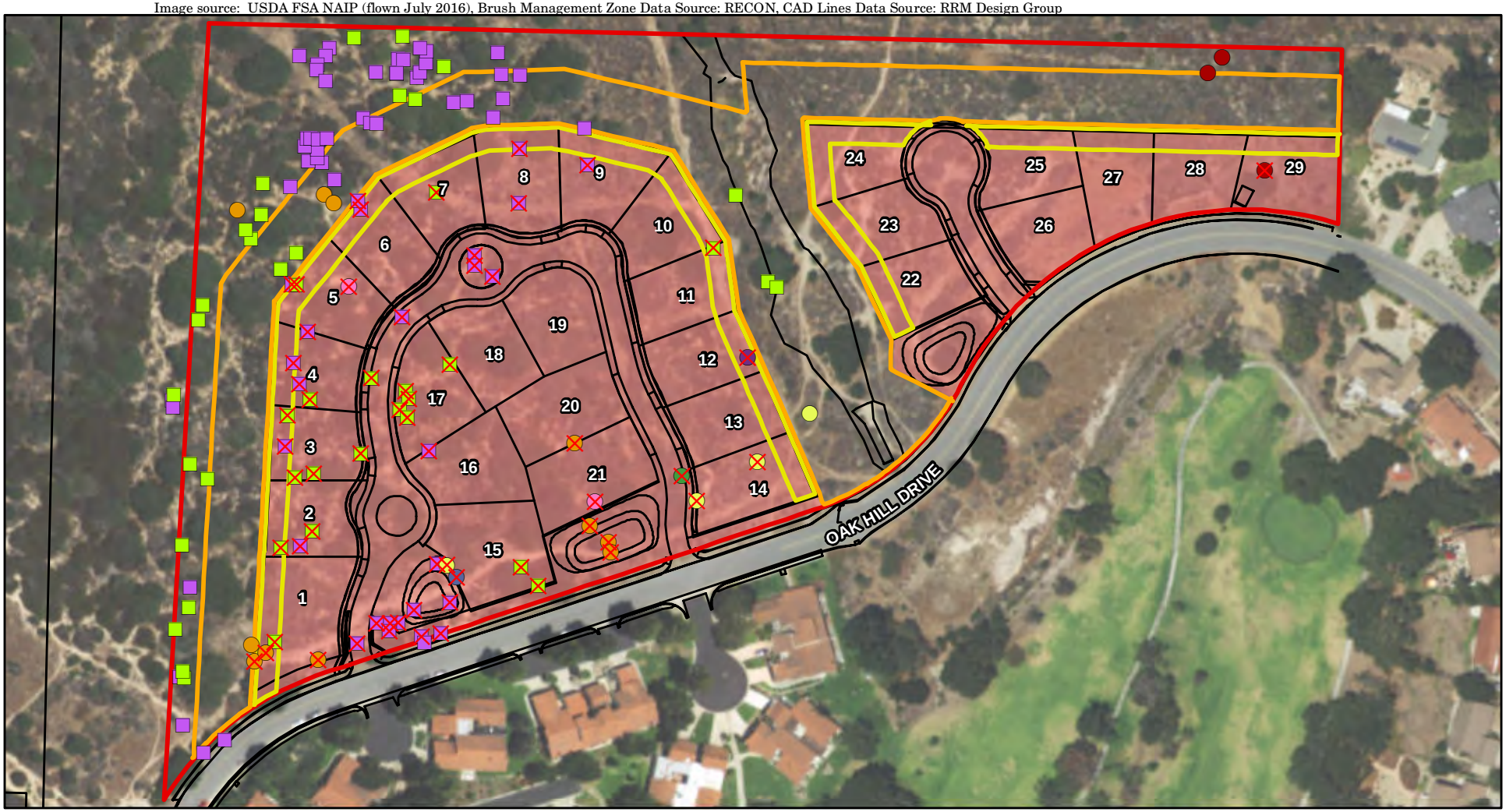
Proposed development of the project site has the potential to result in significant and permanent direct impacts to special status plants. Nine special status plant species were observed on-site during field surveys and include the La Purisima manzanita; sand mesa manzanita; Lompoc ceanothus, paniculate tarplant; Lompoc wallflower; mesa horkelia; southern curly-leaved dune mint; California spineflower; and Blochman's ragwort. Impacts to special status plant species from development of the 29 lots are summarized in Table 4.3-~~5~~6 and depicted on Figure 4.3-2. ~~The alignment of the proposed trail is intended to follow the natural grade of the site and avoid impacts to special status plant species.~~

Table 4.3-~~5~~6
Summary of Impacts to Special Status Plant Species

Species	Approximate Impacts (Acreage/Individuals)	Replacement Ratio	Acreage/Individuals Required for Restoration
La Purisima manzanita	19~~16~~ plants	2:1	38~~32~~ plants
Sand mesa manzanita	27~~11~~ plants	2:1	54~~22~~ plants
Mesa horkelia	6.92~~6.22~~ acres	2:1	13.84~~12.44~~ acres
Curly-leaved dune mint	1 location (50 plants)	2:1	100 plants
Lompoc ceanothus	74 plants	1:1	74 plants
Paniculate tarplant	3~~0~~	1:1	3~~0~~ plants
Lompoc wallflower	2 locations (35 plants)	1:1	35 plants
California spineflower	2 locations (25 plants)	1:1	25 plants
Blochman's ragwort	1 location (10 plants)	1:1	10 plants

As shown above in Table 4.3-~~5~~6, project construction and occupancy has the potential to significantly impact 19~~16~~ La Purisima manzanita, 27~~11~~ sand mesa manzanita, 74 Lompoc ceanothus, 3 paniculate tarplant, 35 Lompoc wallflower, 6.92~~6.22~~ acres of mesa horkelia, 50 southern curly-leaved dune mint, 25 California spineflower, and 10 Blochman's ragwort. Impacts to special status plant species listed in Table 4.3-6 differ from Table 6 in the Biological Resources Assessment, which assumes that species would be retained within permanent impact areas through avoidance and on-site restoration (see Appendix D-1 Figure 8) (Rincon 2017a). However, the EIR's analysis assumes impacts to all the species located in the proposed project's permanent impact area, defined as the residential lots, roads, drainage swale, retention basins, and FMZ-1 (vegetation management zone within

Image source: USDA FSA NAIP (flown July 2016), Brush Management Zone Data Source: RECON, CAD Lines Data Source: RRM Design Group



0 Feet 180

Project Boundary

Permanent Impact Area

Fire Management Zone 1 (FMZ-1): 0 to 30 feet

Fire Management Zone 2 (FMZ-2): 30 to 100 feet

Plant Species

- *Arctostaphylos purissima*
- *Arctostaphylos rudis*
- *Ceanothus cuneatus* var. *fasciculatus*
- *Deinandra paniculata*
- *Erysimum caitatum* var. *lompocense*
- *Horkelia cuneata* var. *puberula*
- *Monardella sinuata* ssp. *sinuata*
- *Mucronea californica*
- *Senecio blochmaniae*
- Plant to be Removed

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FIGURE 4.3-2

Special Status Plant Species Impacts

30 feet of proposed structures) (see Figure 4.3-2). Due to the extent of permanent construction disturbance areas, there are potential edge effects attributed to locating new residents onto the site and the uncertainty associated with permanent biological monitoring and restoration in these areas. Impacts to these nine special status plants are closely correlated with impacts to the sensitive maritime chaparral habitat (Rincon 2017a~~2015a~~). The distribution and abundance of 6.92~~6.22~~ acres of mesa horkelia in particular is directly tied to impacts for maritime chaparral. Thus, mitigation for special status plant impacts shall be conducted in tandem with measures to create, restore, and enhance maritime chaparral off-site and management of open spaces in the project site (also see Impact **BIO-2**, impacts on sensitive natural communities). Contiguous chaparral habitat on the Burton Mesa is necessary for population growth of Vandenberg monkeyflower and support of its pollinators as described in the proposed listing notice.

The project site has loose sandy soils and supports native maritime chaparral. However, chaparral on-site is currently mature with few canopy gaps except along existing trails, and thus limited appropriate habitat for the Vandenberg monkeyflower is present in the current state of the project site. The proposed project would be close to existing development and would preserve open space in proximity to Burton Mesa chaparral and, thus, would have minimal effect on contiguous chaparral. To address USFWS comments on the potential for Vandenberg monkeyflower take, focused plant surveys were conducted in the spring of 2014 and 2017. As noted in Rincon's Biological Resource Assessment (2017a), focused surveys determined that this species was not observed on the project site when this species was confirmed in flower at reference sites in the region. Despite the potentially suitable habitat on-site, focused plant surveys during a particularly wet year in 2017 confirmed that the project has a low potential for impact.

However, to address the USFWS's comments regarding potential take of Vandenberg monkeyflower, the impact assessment has been revised to disclose potential impacts to this federally endangered species. The applicant must obtain USFWS approval, of an Incidental Take permit and ~~including a~~ Habitat Conservation Plan pursuant to Section 10(a)(1)(B) of the FESA. ~~Through USFWS consultation, the Habitat Conservation Plan and/or any conditions on the Incidental Take Permit are anticipated to mitigate impacts to the highest extent feasible.~~ To ensure the appropriate regulatory processes are followed, **MM BIO-1.15** requires that the applicant obtain these necessary permits/approvals from USFWS prior to the County's issuance of any grading permit. With the implementation of **MM BIO-1.15**, Impact BIO-1 would be mitigated to less than significant levels for the Vandenberg monkeyflower (Class II impact).

~~Nevertheless, n~~Nine special status plant species located within undeveloped habitat adjacent to the Burton Mesa Ecological Reserve will be removed or affected as a result of project development. As such, implementation of mitigation measures **MM BIO-1.1**, **MM BIO-1.2**, and **MM BIO-2.1** would address mitigation for the unavoidable permanent impacts to these plants by requiring the mitigation and restoration replacement ratios per County standards. All three mitigation measures have been developed to restore special status plant species and minimize or avoid potentially significant impacts to these species.

~~In addition to the direct removal of habitat to accommodate project development, potentially significant impacts to special status plant species located within the 100-foot fuel management zone may occur. As discussed in Chapter 4.12, Fire Protection, the 100-foot fuel management zone includes the initial 0- to 30-foot defensible space low fuel zone and the 30- to 70-foot defensible space zone from structures and open space. While the County Fire Department's fuel management strategies include avoidance of all sensitive plant species and oak trees, and supervision by a qualified biologist, special status plants and vegetation located within the first 30 feet of defensible space~~FMZ-2 ~~from new structures could~~ may ~~be directly and indirectly~~inadvertently ~~impacted by site construction, adjacent grading, and other short- and long-term modifications on the site that may impact the survivability of the special status plants. Additionally, the project's Open Space Management Plan (Rincon 2015c) will require the homeowner to be responsible for the first 15 feet of defensible space. Because the County Fire Department's fuel management strategies do not allow woody, flammable vegetation within the first 15 feet of structures, some special status plant species may be inadvertently removed by homeowners in effort to comply with Fire Department standards. Considering this, potentially significant direct and indirect impacts could occur to the special status plants from the associated accidental or periodic maintenance, homeowner negligence, trimming, and/or removal of vegetation and special status plant species.~~

~~Additionally, because the special status plants on the proposed project site and the off-site mitigation parcel exhibit an annual life cycle that is variable with time, preconstruction surveys for special status plants would need to be completed immediately prior to construction to verify the locations of special status plants for identification and avoidance purposes. As described above, impacts may occur to special status plants located within 100-foot defensible space area between the proposed structures and the on-site open space area which may require~~ While the County Fire Department's fuel management strategies include avoidance of all sensitive plant species and oak trees, special status plants located within FMZ-2 may inadvertently be impacted by selective pruning or thinning, or may experience other human-induced disturbance (~~see Fuel Management in Chapter 2, Project Description~~Class II impact). Implementation of **MM BIO-1.1** would address sensitive plant species impacts by requiring that a qualified botanist demarcates sensitive plant occurrences before pruning and thinning. Implementation of mitigation measure **MM BIO-1.4** would require a botanist to conduct a comprehensive special status plant clearance survey within the proposed FMZ-2.

The feasibility of any proposed location of off-site mitigation sites will also depend on whether the site being proposed is sufficiently outside fire management zones as required by **MM BIO-2.2**. Thus, implementation of **MM BIO-1.3** and **MM BIO-1.4** would ensure that sensitive plant species within the project area and the off-site mitigation parcel, and in any other areas within the limits of disturbance on-site, are identified prior to construction and avoided or adequately protected to minimize impacts to the maximum extent feasible (Class II impact).

Other indirect impacts could occur due to the spread of invasive non-native species from landscaping and construction equipment both on the project site and the off-site restoration

site. Invasive non-native plant species can out-compete native species and/or alter habitat towards a state that is unsuitable for special status species. For example, the spread of certain weed species can reduce the biodiversity of native habitats through displacement of vital pollinators, potentially eliminating special status plant species. Implementation of mitigation measure **MM BIO-2.4** would address potential indirect impacts to special status plant species from invasive weeds both on-site and at the off-site mitigation parcel.

As discussed above, the project proponent proposes to mitigate for the loss of on-site habitat and oak trees and has secured preliminary approval to restore habitat on Assessor's Parcel Number (APN) 097-371-067, a 123-acre parcel located adjacent to the north side of the intersection of Burton Mesa Road and Clubhouse Road. The VVCSD letter dated June 10, 2016 indicates that the VVCSD approved the Oak Hills Estate Offsite Mitigation Concept Plan prepared by Rincon, dated April 6, 2016. According to the e-mail communication from Rincon, the conceptual off-site mitigation area was deemed feasible based on the following characteristics:

1. The site is within the same watershed as the project and is adjacent to intact native vegetation communities that includes maritime chaparral with coast live oak trees;
2. A review of historical aerial imagery indicated that the site was once occupied by mature maritime chaparral;
3. The mitigation site has the appropriate soil, sand, and topography to re-support mature maritime chaparral; and
4. The site is owned by a public agency (VVCSD) that is willing to allow mitigation to be implemented there.

A subsequent letter from VVCSD on July 8, 2016 confirmed that the necessary mitigation acreage is available. Communication from Rincon to the County, dated July 21, 2015, confirmed the feasibility of the conceptual off-site mitigation and restoration on the VVCSD parcel. Subsequent to these communications, the Conceptual Mitigation Plan was prepared (Rincon 2016a; Appendix D-3) that provides a detailed concept level assessment of the proposed off-site mitigation parcel and concluded that the potential for off-site habitat and restoration is present. Subsequent to this communication, Rincon prepared the Offsite Mitigation Area Baseline Biological Report and Conceptual Mitigation Plan (Rincon 2016a; see Appendix D-3) that provides a concept level assessment of the proposed off-site mitigation parcel and concluded that the potential for off-site restoration is present.

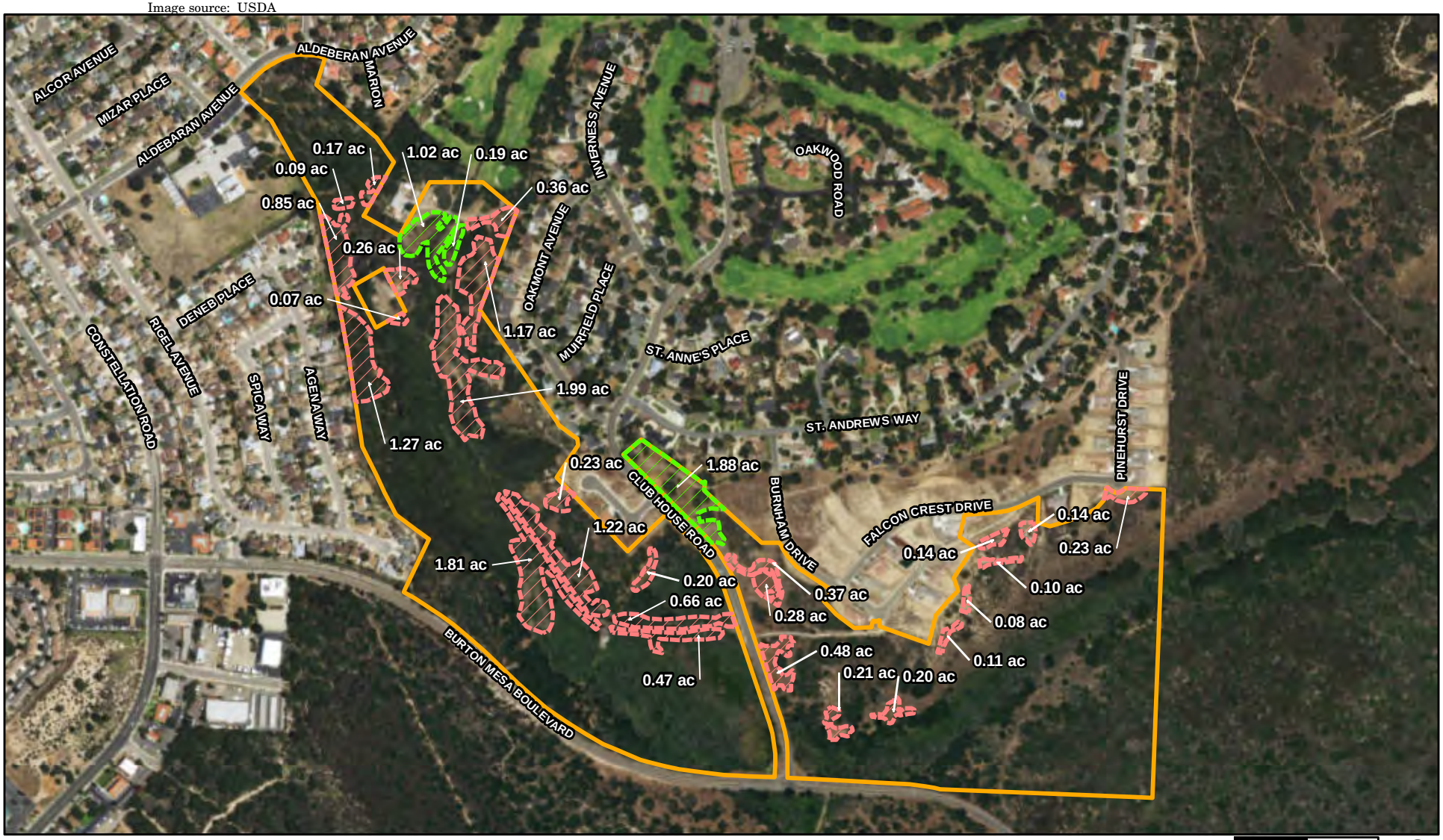
Figure 2-~~12~~ 11 shows the area on the 123-acre VVCSD-owned open space parcel APN 097-371-067 conceptually identified as available for restoration to compensate for project impacts. This same parcel (designated Lot 54) was also previously identified as an off-site mitigation receiver site in the 2005 Clubhouse Estates Environmental Impact Report (County of Santa Barbara 2005) and is currently undergoing habitat enhancement and restoration of maritime chaparral for that project. The Offsite Mitigation Area Baseline Biological Report and Conceptual Mitigation Plan tentatively identified on the VVCSD-owned open space parcel a potential for the off-site mitigation requirements of both projects to be accommodated on this parcel. Preliminary review of aerials, maps, and the current

mitigation plan for the proposed off-site mitigation parcel (Rincon 2016b, 2017c) was conducted ~~as part of this EIR analysis was able~~ to verify that there are 26 individual sites on the VVCSD parcel where only weed abatement is required to be implemented by the Clubhouse Estate project; those areas total approximately 13.19~~10.91~~14.1 acres and ~~ofland on this parcel~~ may be suitable for restoration by the Oak Hills Estate project (see Figure 4.3-3). Additionally, another three sites within the VVCSD parcel totaling 3.08 acres were assessed for suitability for off-site mitigation. These three sites were previously approved mitigation areas for the adjacent Clubhouse Estates project and used for invasive plant removal and native grass reseeding. It was determined that these three areas are suitable for additional mesa horkelia mitigation at a reduced 0.5 acre to 1.0 acre ratio. This would add another 1.54 net acres of potentially suitable off-site mitigation area to the 13.19 acres previously identified, bringing the total area on the 29 off-site mitigation sites to 14.73 acres. Along with the 0.61-acre on-site coyote brush scrub habitat area, the project's total identified area potentially suitable for mitigation of impacts to mesa horkelia is approximately 15.34 acres (Arcadis 2014; LFR 2007; and Rincon 2016b, 2017c). This preliminary review eliminated from consideration land on the proposed mitigation site that presently supports native habitat (i.e., black sage scrub with chamise) ~~and areas in proximity to development and potential fire management areas~~. Restoration on the 29 identified mitigation sites on the VVCSD parcel, while dispersed, would together increase the size and biological value of the adjacent contiguous maritime chaparral habitat by removing invasive species, and improving the overall health of this important habitat.

Although suitable spaces that approximates the needed compensation has been identified for off-site mitigation, the overall short- and long-term success of the proposed restoration efforts cannot be guaranteed due to uncertainty of species survival and adaptation in the new man-made habitat. As shown in Figure 2-11~~2-12~~, the proposed mitigation area borders urban fringe, including public roadways and existing barren land, which create potential edge effects. Additionally, the proposed maritime chaparral mitigation areas are separated along the western and eastern edges. Edge effects can be caused from existing disturbed land and human activity on the proposed restoration location and surrounding areas, causing additional potential impacts. Edge effects can alter the ecology and adaptability of plants of the site, including changes in tolerance and adaptability of shade, soil moisture, hydrologic conditions, competition, and biodiversity. Because two maritime chaparral mitigation areas are proposed bordered by urban disturbance, a potentially significant impact can still occur.

MM BIO-2.2 requires that 13.23~~14.76~~ acres be identified on the 123-acre site to accommodate the off-site restoration area necessary to mitigate project impacts to maritime chaparral. This area includes the 13.84~~12.44~~ acres necessary to mitigate at a 2:1 ratio the on-site loss of 6.92~~6.22~~ acres of Mesa horkelia. Mesa horkelia is the special status plant closely associated with maritime chaparral (see Tables 4.3-5 and 4.3-6). **MM BIO-2.2** requires preparation of an off-site mitigation plan for the VVCSD-owned open space parcel that ensures that 13.84~~14.76~~ acres are available for off-site habitat restoration and that appropriate on-site conditions (soils, location, irrigation) for successful restoration are available. Therefore, off-site mitigation with implementation of **MM BIO-2.2** would ensure

Image source: USDA



Potential Mitigation Parcel

Potential Mitigation Areas (13.19 acres)

Previously Approved Reseeding Areas for Clubhouse Estates (3.08 acres)

0 Feet 700

FIGURE 4.3-3
Proposed Off-site Mitigation Parcel APN 097-371-067: Proposed Suitable Restoration Areas– Revised October 2017

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that on-site project impacts to sensitive maritime chaparral habitat would be adverse but mitigated (Class II impact).

MM BIO-2.1 and **MM BIO-2.2** are proposed to ensure that appropriate on-site and off-site restoration mitigation area is secured and implemented. Collectively, implementation of mitigation measures **MM BIO-1.1** through **MM BIO-1.6** include requirements for special status plant species surveys, flagging, habitat restoration, and a worker awareness program to reduce potentially significant adverse impacts to less than significant (Class II impact).

Special Status Wildlife

~~Eight~~ Fifteen special status wildlife species have the potential to occur within the project site based on known ranges, habitat preferences for the species, species occurrence records from the CNDDB, species occurrence records from other sites in the vicinity of the project site, and previous reports for the project site (Rincon 2017a~~2015a~~). The ~~eight~~ fifteen special status wildlife species are described below and include the American badger, silvery legless lizard, Blainville's horned lizard, western red bat, western spadefoot toad, coast patch-nosed snake, coastal whiptail, vernal pool fairy shrimp, El Segundo blue butterfly, California red-legged frog, ~~and~~ white-tailed kite, Cooper's hawk, burrowing owl, loggerhead shrike, and American peregrine falcon. Specific mitigation measures have been developed for thirteen~~seven~~ of the special status wildlife species with potential to occur on-site and to potentially be significantly impacted as a result of ground disturbance and habitat removal for construction of the proposed project.

No evidence of American badgers was found within the project site during the Biological Resources Assessment (Rincon 2017a~~2015a~~) wildlife surveys. However, suitable habitat is located within the proposed development area and American badgers could be found within the project site at any time of the year. American badgers are highly mobile and are expected to be present throughout the region. Direct impacts could result if ground-disturbing activities directly affect an occupied den. Impacts to American badgers would be significant if breeding adults or adults with offspring are present within the proposed disturbance area during project implementation. Impacts to the American badger could be avoided and minimized with mitigation measure **MM BIO-1.6**, which would require a badger burrow survey by a County-approved biologist a minimum of two weeks prior to initiation of ground-disturbing activities (Class II impact).

Two of the special status wildlife species with potential to occur have been documented within the project site during surveys conducted for the Oak Hill/Oak View Tentative Tract Map, Rezone, and Preliminary Development Plan Final Environmental Impact Report (Morro Group 1994). These two species are the Blainville's horned lizard and silvery legless lizard. Both species are expected to occur within shrubland habitats found within the project site, including the proposed development area. Potential impacts to both species, if present, could occur during ground disturbance in the form of harassment and/or injury during project construction and operations. Thus, potentially significant impacts to the silvery legless lizard and Blainville's horned lizard could be avoided with mitigation

measures **MM BIO-1.7** and **MM BIO-1.8** by requiring species-specific surveys conducted prior to construction (Class II impact).

No evidence of western red bats was found within the project site during the Biological Resources Assessment (Rincon 2017a~~2015a~~) wildlife surveys conducted in 2014. However, trees suitable for roosting as well as foraging habitat can be found within the project site, including the proposed development area. Impacts to western red bats, if present, would include loss of roosting trees and potential direct impacts if western red bats were occupying roosting trees during removal activities. Impacts to foraging western red bats are not expected considering that this species forages during the time of day when active construction is unlikely. However, potentially significant impacts to the western red bat can still be reduced with mitigation measure **MM BIO-1.9**, which aims to minimize night time work and lighting effects and avoidance of suitable tree removal and pre-construction surveys completed during their winter range (September–May) (Class II impact).

Suitable habitat for coast patch-nosed snake ~~(*Salvadora hexalepis*)~~ occurs within the chaparral and scrub vegetation communities within the project site, including the proposed development area. In addition, woodrat nests located within these habitats also provide suitable overwintering sites for the coast patch-nosed snake. Impacts to the coast patch-nosed snake would include loss of overwintering sites, as well as direct impacts during ground disturbance in the form of harassment and/or injury. Implementation of **MM BIO-1.11** would avoid impacts or reduce potentially significant impacts to the coast patch-nosed snake to less than significant levels (Class II impact).

Coastal whiptail is typically observed in open coastal sage scrub, chaparral, woodlands, and streamsides habitats. However, the coastal whiptail was not observed during project surveys nor is it identified within the CNDDB 9-quadrangle search vicinity. In addition, this species' distributional range is mostly between Ventura and San Diego counties, with a small area located in the easternmost portion of Santa Barbara County. As such, this species was determined to have a low potential to occur on-site.

Suitable aquatic and upland habitat for the western spadefoot toad can be found within the project site at the spikerush emergent wetland. The spikerush emergent wetland may provide suitable breeding habitat along the northern edge of the project site. However, the proposed project would avoid the spikerush emergent wetland habitat feature by focusing lot development on the mid-lower half of the project site. As such, direct impacts to western spadefoot toad breeding habitat are not anticipated. However, indirect short- and long-term impacts to the spikerush emergent wetland may occur through sedimentation, water quality degradation, lighting, and human disturbances resulting from project development. Much of the impact area within the project site does occur within suitable upland habitat for the western spadefoot toad. Additional impacts could occur if the western spadefoot toad is present in upland areas, during ground disturbance in the form of harassment and/or injury, particularly because western spadefoot toads are known to burrow underground. Potentially significant impacts to the western spadefoot toad associated with development of the proposed project can be avoided through implementation of mitigation measure **MM**

BIO-1.10, which requires a pre-construction survey for the species and presence of a County-approved biologist during initial ground disturbance. (Class II impact).

Potentially suitable habitat for vernal pool fairy shrimp may be found at the spikerush emergent wetland along the northern boundary of the project site (see Figure 4.3-1). The time for maturity and reproduction for the vernal pool fairy shrimp is temperature dependent, and the vernal pool fairy shrimp are not documented by the CNDDB within the nine-quad search area where the project is located; however, they are known to occur in the nearby Vandenberg Air Force Base (Rincon 2017a~~2015a~~). Cysts of vernal pool fairy shrimp are most commonly transported from one pool to another from the deposition of feces from water fowl and mammals that may have ingested cysts as well as muds containing cysts are attached to these animals. The nearest potentially suitable aquatic habitat to the project site occurs approximately 0.75 mile west and 2.75 miles south of the project site (Rincon 201~~5~~a). No direct impacts to the spikerush emergent wetland are anticipated as project construction and development generally avoids this area. However, indirect impacts to the spikerush emergent wetland could occur during adjacent construction activities. Erosion and sedimentation resulting from construction activities could affect water quality, thereby potentially degrading aquatic habitat for species that could inhabit the area, such as vernal pool fairy shrimp.

To address the USFWS comment regarding the potential for vernal pool fairy shrimp located on the project site, the applicant has changed the project design by removing the previously proposed trail from the project and adjusting the fuel management zones so that the first 30 feet of vegetation management area is located on the individual residential lots. As shown in Table 4.3-7 no direct impacts to spikerush emergent wetland habitat would occur. However, indirect impacts may occur, because 0.01 acre of spikerush emergent wetland habitat (decreased from 0.02 acre) would be located within FMZ-2. Since vernal pool fairy shrimp has a moderate potential to occur in the wetland habitat, **MM BIO-2.1~~1.12~~** and **MM FP-2.1** addresses the protection and avoidance of this habitat area.

Impacts to suitable vernal pool fairy shrimp habitat associated with indirect construction effects would be reduced by implementing the following water quality protection measures: **MM GEO-2** (Erosion and Sediment Control Plan*)*, **MM WQ-1** (Storm Water Pollution Prevention Plan*)*, **MM WQ-2** (Final Drainage Plan and Drainage Study), and **MM WQ-3** (Storm Water Control Plan – Project Operation*).* These water quality protection measures aim to ensure proper grading, erosion and sediment control and the appropriate implementation of storm water plans approved by the County. Further, implementation of **MM BIO-2.1~~1.12~~** and **MM FP-2.1** provides additional protective measures for this federally threatened species. For example, **MM BIO-2.1~~1.12~~** and **MM FP-2.1** will require Covenants, Conditions, & Restrictions (CC&Rs) to contain information regarding the sensitivity of vernal pool wetland habitats explaining all restrictions on the habitat and surrounding area. **MM BIO-2.1~~1.12~~** and **MM FP-2.1** would also ensure protective fencing and restricted access signage would be installed at the spikerush emergent wetland.

To address USFWS comments regarding potential take of the vernal pool fairy shrimp, it was determined ~~T~~through USFWS consultation that protective fencing and signs would be

placed between the spikerush emergent wetland and the proposed development (specifically located at a lower elevation on the development side of the topographical divide that separates the wetland from the adjoining areas of the project site) and that minimal vegetation management for wildfire hazard risk reduction would occur in the vicinity of the wetland. ~~the applicant must obtain USFWS approval of an Incidental Take permit, including a Habitat Conservation Plan pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act.~~

The Santa Barbara County Fire Department has concurred that conducting minimal vegetation management around the wetland would be acceptable (pers. com. Captain Fidler). ~~the Habitat Conservation Plan and any conditions on the Incidental Take Permit are anticipated to mitigate impacts to the highest extent feasible. To ensure the appropriate regulatory processes are followed,~~ MM BIO-1.12 would ensure that prior to issuance of any grading permit the project applicant shall obtain concurrence by the USFWS that the project would avoid impacts to fairy shrimp or obtain an Incidental Take Permit and Habitat Conservation Plan. **MM BIO-2.1~~1.12~~** and **MM FP-2.1** require~~s~~ that approved fencing and signage be installed ~~the applicant obtain these necessary permits/approvals from USFWS~~ prior to the County's issuance of any grading permit ~~approval~~ and the implementation of an approved Fuel Management Plan. With the avoidance measures implemented through **MM BIO-2.1~~1.12~~** and **MM FP-2.1**, ~~Impact BIO-1 would be mitigated to a less than significant level for~~ impacts to the potentially occurring vernal pool fairy shrimp would be avoided and less than significant (Class II impact).~~Therefore, implementation of **MM GEO-2**, **MM WQ-1**, **MM WQ-2**, **MM WQ-3**, and **MM BIO-1.12** would reduce potentially significant impacts to vernal pool fairy shrimp suitable habitat to less than significant levels (Class II impact).~~

The El Segundo blue butterfly has been documented in the region since 2006 and was documented during surveys on the adjacent Burton Mesa Reserve in 2016 (ManTech SRS Technologies, Inc. 2017). Due to the availability on the project site of the requisite host plant, coast buckwheat (*Eriogonum parvifolium*), and adjacent proximity to a known population, the El Segundo blue butterfly has the potential to occur on-site. All lifecycle stages of the El Segundo blue butterfly rely on coast buckwheat. Eggs are laid on the plant and typically hatch within 3 to 5 days. Larvae remain concealed in the flower heads and primarily feed on the seeds of the coast buckwheat. Upon pupation, individuals fall to the ground and remain either under the soil or in leaf litter at the base of the plant until emerging as adults. Pupal stage lasts for one or more years. Adults emerge typically in mid-June through early September, and live for four days to two weeks (Rincon 2017a). Surveys conducted on April 24, 2017 found approximately 99 coast buckwheat plants located on the project site (Rincon 2017a). Of the 99 coast buckwheat plants observed and mapped on-site, 30 are located within the project's permanent impact areas, with the remaining 69 located within the project's proposed open space parcel. Approximately 32 plants are located within FMZ 2 and would be avoided during construction and occupancy per implementation of **MM BIO-1.13 and** MM **FP-2**, requiring that the applicant obtain USFWS approval of an Incidental Take Permit and~~including a~~ Habitat Conservation Plan pursuant to Section 10(a)(1)(B) of the FESA prior to grading permit. For the USFWS to approve a take of El Segundo blue butterfly, the Habitat Conservation Plan must include an assessment of

likely impacts and identify mitigation measures, goals, funding, monitoring, implementation, alternative actions to the taking, and public participation. Implementation of **MM-BIO-1.13** requires the applicant, consistent with the FESA, to engage in consultation with the USFWS for impacts to species covered under the FESA. The USFWS-approved Habitat Conservation Plan would include additional conditions that must be implemented prior to, during, and/or following construction of the project to protect El Segundo blue butterfly, and therefore impacts to El Segundo blue butterfly through implementation of **MM-BIO-1.13** would be significant and mitigated (Class II impact).

The USFWS identified the project site as containing suitable habitat for the California red-legged frog because the species occurs 1.5 miles west of the project site in Santa Lucia Canyon and may use the site for dispersal and sheltering. According to the Biological Resources Assessment (Rincon, 2017a) the project site does not provide suitable breeding habitat. The Biological Resources Assessment also concluded that the off-site occurrences and the site are not located along a path to other suitable aquatic habitat in the area (the species requires slow-moving streams, ponds, etc., with dense vegetation cover providing shade over water surface) and that the site is not conducive to long-term occupation because of moisture constraints. However, to address the USFWS's comments regarding potential take of the California red-legged frog, the applicant must obtain USFWS approval, of an Incidental Take permit, and~~including a~~ Habitat Conservation Plan pursuant to Section 10(a)(1)(B) of the FESA. ~~Through USFWS consultation, the Habitat Conservation Plan and any conditions on the Incidental Take Permit would mitigate impacts to this species.~~ To ensure the appropriate regulatory processes are followed, **MM BIO-1.14** requires that the applicant obtain these necessary permits/approvals from USFWS prior to the County's issuance of any grading permit. With the implementation of **MM BIO-1.14**, Impact BIO-1 would be mitigated to a less than significant level for the California red-legged frog (Class II impact).

The project site also contains suitable foraging habitat for the American peregrine falcon. However, impacts to foraging American peregrine falcons are unlikely considering this species is extremely mobile and would be expected to be able to avoid construction activities. As such, project impacts to American peregrine falcons would be less than significant (Class III impact).

According to the Biological Resources Assessment located in Appendix D-1 of the ~~Revised Draft~~ EIR, the white-tailed kite (*Elanus leucurus*), Cooper's hawk (*Accipiter cooperii*), burrowing owl (*Athene cunicularia hypugaea*), and loggerhead shrike (*Lanius ludovicianus*) were not observed during project surveys nor were they identified within the CNDDB 9-quadrangle search vicinity. The habitat on-site may be appropriate foraging and nesting habitat for these species. Therefore, there is a low to moderate potential for these species to occur on-site. In order to address CDFW's comment regarding these species, MM BIO-5.1 (Preconstruction Surveys for Nesting Birds) has been revised to include a focused survey for raptor species, including any avoidance measures if these species are observed.

The pallid bat and Townsend big-eared bat were determined to have no potential to occur on the project site.

As discussed above, construction of the project could result in the destruction of sensitive species habitat due to grading and vegetation trimming from fuel management and construction of the project homes, infrastructure and roads, and drainage swales. These effects would cause direct, significant impacts to thirteen~~seven~~ of the fifteen~~eight~~ special status wildlife species potentially found at the project site. Impacts to these thirteen~~seven~~ special status wildlife species would be mitigated to less than significant levels through implementation of **MM BIO-1.6~~7~~** through **MM BIO-1.5~~3~~, and MM BIO-5.1** (Class II impact). ~~Specifically~~In addition, **MM BIO-2.2** requires an appropriate receiver site to be restored with suitable habitat to compensate for the loss of individual special status plant species and habitat for special status wildlife further reducing impacts. Restoring and enhancing habitat at the off-site mitigation parcel would include planning and pre-restoration surveys for sensitive wildlife and habitat, and would not involve grading or construction. Therefore, off-site restoration would not result in significant impacts to sensitive wildlife (Class III impact).

Lastly, implementation of **MM BIO-1.5** includes a Worker Environmental Awareness Program (WEAP) which would reduce impacts to sensitive plant and wildlife species to adverse but mitigated by ensuring all construction personnel are instructed regarding the types of biological resources on-site, the biological avoidance measures required for the project, and the schedule of implementation (Class II impact).

Mitigation Measures

MM BIO-1.1: Special Status Plant Species Avoidance and Minimization

All special status plant species and areas to be avoided during proposed project construction, selective pruning/thinning, and restoration activities at the project site, and off-site mitigation property shall be demarcated in the field with highly visible flagging or survey tape wherever possible to protect rare plants from harm ~~during construction~~.

a. Sensitive plant occurrences that are not within the immediate disturbance footprint but that are located within 50 feet of the disturbance limits shall have a highly visible flagging or survey tape installed at least 15 feet beyond their extent to protect them from harm during the construction phase of the project.

Plan Requirements and Timing: A County qualified botanist or designee approved by the County Planning & Development Department shall provide oversight during flagging and/or placement of survey tape and he/she or a designee (e.g., construction foreman) will return to the site once a week during each phase of construction activities to ensure that flagging/survey tape remains intact. This process shall also occur during the preliminary design and development of each individual housing lot.

Monitoring: The Project Proponent/Contractor/Owner/Applicant shall demonstrate to County Planning & Development Department compliance monitoring staff that all protection measures and flagging are in place prior to issuance of grading and building permits and throughout grading and construction for each project phase and lot

development. Santa Barbara County Planning and Development (P&D) staff shall perform site inspections throughout the grading and construction phase.

MM BIO-1.2: Special Status Plant Species Protection and Restoration

Mitigation for loss of special status plants shall be implemented as part of the On-site and Off-site Mitigation Plan (see MM BIO-2.1 and MM BIO-2.2) to create maritime chaparral habitat. Compensatory mitigation ratios shall provide for no-net-loss of each special status plant species impacts, with a minimum 2:1 ratios for individual species lost (area restored/created/enhanced area lost) for CRPR List 1B species and 1:1 ratio for CRPR List 4 species. If any additional special status plant species are identified on the project site, the replacement requirements shall be reflected appropriately through increases in the Off-site Mitigation Plan. The habitat compensation ratios required in both the On-site Habitat and Open Space Protection Plan (see MM BIO-2.1) and the Off-site Mitigation Plan (see MM BIO-2.2) are as follows:

a. To compensate for the removal of approximately 19~~16~~ La Purisima manzanita plants, restoration at a 2:1 ratio shall be undertaken.

b. To compensate for the removal of 27~~11~~ sand mesa manzanita plants, restoration at a 2:1 ratio shall be undertaken.

c. To compensate for the removal of 6.92~~6.22~~ acres of mesa horkelia, restoration at a 2:1 ratio shall be undertaken.

d. To compensate for the removal of 50 curly-leaved dune mint, restoration at a 2:1 ratio shall be undertaken.

e. To compensate for the removal of 7~~4~~ Lompoc ceanothus, restoration at a 1:1 ratio shall be undertaken.

~~To compensate for the removal of 3 paniculate tarplant, restoration at a 1:1 ratio shall be undertaken.~~

f. To compensate for the removal of any identified paniculate tarplant, restoration at a 1:1 ratio shall be undertaken.

g. To compensate for the removal of 35 Lompoc wallflowers, restoration at a 1:1 ratio shall be undertaken.

h. To compensate for the removal of 25 California spineflower, restoration at a 1:1 ratio shall be undertaken.

i. To compensate for the removal of 10 Blochman's ragwort, restoration at a 1:1 ratio shall be undertaken.

These compensating ratios shall apply to any incidental special status species losses that occur during construction of the project (see MM BIO-2.1)

Plan Requirements and Timing: The management and replacement requirements of special status plant species that are being preserved within the project site shall be addressed in the On-site Habitat and Open Space Protection Plan (which may also be the

Owner/Applicant's Open Space Management Plan revised for consistency with this mitigation measure and **MM BIO-2.1** and **MM BIO-2.2**). The specified replacement ratios and numbers must be submitted to the County for approval prior to first zoning ~~land use~~ clearance issuance for the first residential structure ~~of the development plan~~ and shall also include all criteria specified in **MM BIO-2.1**. Existing occurrences of special status plants shall be protected and enhanced to the maximum extent feasible prior to relying on the required off-site mitigation. The identified mitigation measures, replacement ratios, and restoration plan shall be noted on all site, grading, and construction plans.

Monitoring: The restoration components of both the On-site Habitat and Open Space Protection (**MM BIO-2.1**) (or the revised Owner/Applicant's Open Space Management Plan) and the Off-site Restoration Plan (**MM BIO-2.2**) shall include species-specific monitoring requirements and regular restoration status reports to Planning & Development to be prepared in accordance with the details outlined in each plan. The County Planning & Development staff shall ensure that the total restoration requirements of the project in this mitigation measure are addressed prior to issuance of grading permits. Monitoring shall continue for 5 years at a minimum and continue until the restoration requirements are achieved. County Planning & Development compliance staff shall ensure compliance on-site during and post-construction and during project operations.

MM BIO-1.3: ~~Pre-Construction and Off-site Restoration Area(s)~~ Special Status Plant Species Surveys

Reconnaissance level botanical ~~and wildlife pre-construction~~ surveys shall be conducted within 4 weeks prior to initial site work such as clearing, grubbing, staging, or grading to ensure that all sensitive resources within the disturbance areas are identified and appropriately protected and flagged/fenced where applicable on the (1) project site and (2) at all off-site restoration areas.

The ~~2014~~ 2017 botanical survey is valid for 2 years or as deemed appropriate by the County. If project activities that require ground disturbance have not been commenced by March 1, ~~2018~~2019, additional floristic surveys would be required as follows:

a. If groundbreaking activities commence after March 1, 2019~~2018~~, prior to any vegetation removal, grubbing, or other construction activities, a qualified botanist shall conduct a seasonally timed and comprehensive special status plant survey.

b. The intent of these surveys is to document the location(s) and number(s) of any special status plant species that occur within the project site so that an effective mitigation program can be accomplished if required. The special status plant survey shall coincide with the appropriate blooming periods for each species with potential to occur on-site. The special status plant survey shall be conducted in accordance with the current regional, state, and federal protocols.

c. Current listing status of Vandenberg monkeyflower, a species currently proposed for listing as federally endangered with some potential to occur within the project site shall be reviewed prior to conducting a pre-construction rare plant survey.

d. Review of current listing status shall include review of any critical habitat designation decisions. In the event that the species is listed and critical habitat is present on the project site, measures shall be prescribed to minimize impacts to critical habitat for Vandenberg monkeyflower. Vandenberg monkeyflower requires sandy openings (canopy gaps) within Burton Mesa chaparral.

e. Any and all additional special status plant species not previously reported from the ~~2014~~ 2017 botanical survey and new patches of species already documented to occur within the project site shall be mapped onto an aerial photograph of the site at a scale no less than 1 inch = 200 feet during the preconstruction survey.

f. A special status plant survey technical report shall be submitted to the County (and to any other pertinent resource agencies if required) that documents the survey results prior to the onset of construction activities. If needed, the Open Space management Plan (OSMP) shall be updated to include mitigation for any additional species located during preconstruction surveys. Any and all mapped locations of sensitive plant species shall be included in the grading plans for the project.

Plan Requirements and Timing: The Owner/Applicant shall hire a County-qualified biologist to conduct the botanical ~~preconstruction~~ surveys. A copy of the survey report and any recommended measures to protect sensitive species shall be identified prior to grading and/or building permit issuance. Any protection measures shall be maintained in good condition throughout grading and construction. This measure will be printed on all restoration/habitat protection/ grading and construction plans.

Monitoring: If no additional special status plants are observed within the project site or off-site restoration areas, the results shall be documented in a technical report and submitted to the County. Compliance monitoring staff shall confirm that the surveys have taken place and any protection measures are installed prior to the project site's pre-construction meeting. Compliance and monitoring staff shall ensure thorough periodic site inspections that any protection measures are maintained in good condition throughout grading and construction.

MM BIO-1.4: Pre-Fuel Management ~~and Trail~~ Special Status Plant Clearance Surveys

Two weeks prior to any ~~trail construction or~~ fuel management activities located in FMZ-2 ~~occurring outside the development footprint~~ and between the months of March and May (i.e., in spring), a qualified botanist approved by the County shall conduct a comprehensive special status plant clearance survey within the proposed ~~trail alignment and fuel management areas~~FMZ-2.

a. ~~The development footprint~~FMZ-2 includes the area ~~on~~within the project site that ~~has been impacted by any development activity (i.e., hardscape, access roads, parking lots, non-building facilities, and building structures).~~would be selectively pruned and thinned.

b. The intent of this survey is to document the location(s) and number(s) of any and all annual special status plant species so that ~~the trail alignment and~~ fuel management activities can successfully avoid special status plants.

c. If special status plants are discovered, fuel management activities shall avoid special status plants and sensitive vegetation in accordance with recommendations set forth in **MM BIO-1.1**.

d. Should avoidance prove infeasible, relocation and/or off-site restoration to an appropriate receiver site approved by the County shall be undertaken at the appropriate ratios and following the protocols in **MM BIO-2.2**.

Plan Requirements and Timing: The Owner/Applicant shall hire a County-qualified biologist to conduct the ~~preconstruction~~ fuel management surveys. A copy of the survey report and any recommended measures to take to protect sensitive species shall be identified prior to ~~grading and/or building permit issuance~~the start of fuel management activities. Any protection measures shall be maintained in good condition throughout ~~grading and construction~~selective pruning/thinning activities. A special status plant clearance survey shall be conducted on an annual basis. After buildout of the project, annual surveys would continue until three consecutive years have elapsed with no sensitive plants detected during the annual surveys. This measure will be printed on all restoration/habitat protection/ grading and construction plans.

Monitoring: If no additional special status plants are observed within the project site, the results shall be documented in a technical report and submitted to the County. Compliance monitoring staff shall confirm that the surveys have taken place and any protection measures are installed prior to the pre-construction meeting. Compliance and monitoring staff shall ensure thorough periodic site inspections that any protection measures are maintained in good condition throughout grading and construction. Fuel management clearance surveys shall be conducted annually post project construction.

MM BIO-1.5: Worker Environmental Awareness Program

Prior to initiation of construction activities (including staging and mobilization), all personnel associated with project construction shall attend a WEAP training, conducted by a qualified biologist, to aid workers in recognizing special status biological resources that may occur within the project site. The specifics of this program shall include identification of the sensitive species and habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and measures required to avoid and minimize impacts to biological resources within the work area. A fact sheet conveying this information shall also be prepared for distribution to all contractors, their employers, and other personnel involved with construction of the project. All employees shall sign a form provided by the trainer documenting that they have attended the WEAP and understand the information presented to them.

Plan Requirements and Timing: The Owner/Applicant shall hire a County-qualified biologist or designee to conduct the WEAP. The project fact sheet, employee signature

report, and WEAP program shall be developed, approved, and implemented by the County Planning & Development staff prior to issuance of a grading permit, final restoration plan approval, or zoning clearance for each project phase and development of each individual housing lot. This measure will be printed on all restoration/habitat protection/grading and construction plans.

Monitoring: County Planning & Development compliance monitoring staff shall confirm that the WEAP have taken place and any additional trainings have been completed as part of the pre-construction meeting(s). County compliance and monitoring staff including the WEAP designee shall ensure thorough periodic site inspections that any protection measures are maintained in good condition throughout grading and construction. WEAP staff shall be available as needed on-site during and post construction for monitoring and compliance.

MM BIO-1.6: American Badger Avoidance

A survey for badger burrows shall be conducted within the project and off-site restoration site disturbance footprint by a County-approved biologist. If the project is phased, a survey shall be required prior to each phase of construction and/or individual lot development. Dens found within the survey area shall be mapped and monitored using a tracking medium, remote camera system, and/or spotlighting at night for a minimum of 3 days to assess the presence of badgers. Inactive dens shall be collapsed by hand with a shovel to prevent badgers from re-using them during construction.

Plan Requirements and Timing: A County qualified biologist selected by the County Planning & Development Department with experience with badger surveys shall conduct or shall provide oversight during surveys and relocation and he/she or a designee (e.g., construction foreman) will return to ensure den abandonment. This process shall occur prior to issuance of a grading permit, final restoration plan approval, or zoning clearance for each project phase and development of each individual housing lot. Surveys will be conducted a minimum of two weeks before ground-disturbing activities. Active dens located within the survey area shall be avoided during the breeding season (March 1 through June 30). A minimum buffer of 50 feet around the active den within the project site shall be demarcated by construction fencing. The fencing shall be installed 1 foot above ground to permit movement of badgers in and out of the buffer zone. Once the biologist has determined that active dens are no longer in use, the den shall be collapsed by shovel. Prior to grading activities occurring outside the breeding seasons, badgers may be discouraged from using currently active dens by partially blocking the entrance of the den with sticks, debris, and soil for 3 to 5 days. Access to the den would be incrementally blocked to a greater degree over this period. This would cause the badger to abandon the den site and move elsewhere. After badgers have stopped using active dens within the project site, the dens would be collapsed by hand with a shovel. This measure will be printed on all restoration/habitat protection/ grading and construction plans.

Monitoring: The biologist shall demonstrate to County Planning & Development Department compliance monitoring staff that all badger dens have been collapsed and that

the protection measures have been completed prior to and throughout grading and construction for each project phase and lot development.

MM BIO-1.7: Silvery Legless Lizard Avoidance

The following measure is designed to reduce the potential for impact, with the final goal of no net loss of the species.

a. ~~A minimum of two weeks p~~Prior to initiation of ground-disturbing activities and vegetation removal, a County-approved biologist shall coordinate with CDFW to prepare and implement a species relocation plan. ~~conduct capture and relocation efforts for silvery legless lizards within the disturbance area.~~

b. Any subsequent project phases (i.e., individual lot grading) shall require a clearance survey prior to ground-disturbance activities.

c. Designated open space areas on-site or at County-approved off-site locations shall be identified for release of captured individuals.

d. Survey for legless lizards shall include raking of leaf litter and sand under shrubs and trees in suitable habitat within the disturbance footprint to a minimum depth of 8 inches.

e. Captured animals shall be placed into containers with sand or moist paper towels and released in the designated areas within 3 hours.

f. In addition to preconstruction surveys, the biologist shall be on-site during initial grading activities to relocate any legless lizards that are unearthed during excavation in any phase of the project.

   i. If in good health, they shall be immediately relocated to the designated relocation area.

   ii. If injured, the animals shall be turned over to a CDFW approved specialist until they are in a condition suitable for release into the designated release area or deposited at an approved vertebrate museum.

Plan Requirements and Timing: A County qualified biologist selected by the County Planning & Development Department with experience with silvery legless lizard surveys shall conduct or shall provide oversight during surveys and relocation. This process shall occur prior to issuance of a grading permit, final restoration plan approval, or zoning clearance for each project phase and development of each individual housing lot. This measure will be printed on all restoration/habitat protection/ grading and construction plans.

Monitoring: The biologist shall demonstrate to the County Planning & Development Department compliance monitoring staff that all protection/relocation measures are in place prior to and throughout grading and construction for each project phase and lot development.

MM BIO-1.8: Blainville's Horned Lizard Avoidance

The following measure is designed to reduce the potential for impact, with the final goal of no net loss of the species.

a. Prior to initiation of ground-disturbing activities and vegetation removal, a County-approved biologist shall coordinate with CDFW to prepare and implement a species relocation plan.

b. Coverboard surveys shall be completed within 3 months of the start of construction. The coverboards shall be at least 4 feet by 4 feet and constructed of untreated plywood placed flat on the ground. The coverboards shall be checked by a qualified biologist once per week for each week after placement up until the start of vegetation removal.

c. Horned lizards winter underground starting in October; therefore surveys should not be conducted during the winter months.

d. In addition, a minimum of 2 weeks prior to initiation of ground-disturbing activities and vegetation removal, a County-approved biologist shall conduct preconstruction clearance survey.

e. A clearance survey shall be required prior to each phase of construction and/or individual lot development. Any individuals captured by these efforts shall be relocated to designated open space areas on-site or at County-approved off-site locations.

f. Captured animals shall be placed into containers with sand or moist paper towels and released in the designated areas within 3 hours.

g. In addition to preconstruction surveys, the biologist shall be on-site during initial grading activities to relocate any Blainville's horned lizards that are unearthed during excavation.

   i. If in good health, they shall be immediately relocated to the designated relocation area.

   ii. If injured, the animals shall be turned over to a CDFW approved specialist until they are in a condition suitable for release into the designated release area or deposited at an approved vertebrate museum

Plan Requirements and Timing: A County qualified biologist selected by the County Planning & Development Department with experience with Blainville's horned lizard surveys/avoidance shall conduct or shall provide oversight during surveys and relocation. This process shall occur prior to issuance of a grading permit, final restoration plan approval, or zoning clearance for each project phase and development of each individual housing lot. This measure will be printed on all restoration/habitat protection/ grading and construction plans.

Monitoring: The biologist shall demonstrate to the County Planning & Development Department compliance monitoring staff that all protection/relocation measures are in place prior to and throughout grading and construction for each project phase and lot development.

MM BIO-1.9: Western Red Bat Avoidance

The following measures are designed to reduce the potential for impact, with the final goal of no net loss of the species.

a. To the extent feasible, removal of suitable roosting trees should be avoided during the time when western red bats may occupy their winter range (September–May).

b. For construction activities occurring at a time when western red bats may occupy their winter range (September–May), surveys for roosting western red bats shall be conducted by a qualified biologist no more than 14 days prior to vegetation removal. The surveys shall include the entire area of disturbance and focus on the trees located within the impact area. If active roosts are located, all construction work shall be conducted outside a buffer zone from the roost to be determined by the qualified biologist. The buffer area(s) shall be closed to all construction personnel and equipment until May 1.

c. To the extent feasible and if applicable, night time work shall be kept to a minimum and lighting used shall be as dim as legally possible and should be directed to where it is needed to avoid light spillage. Any upward lighting should be minimized.

Plan Requirements and Timing: A County qualified biologist selected by the County Planning & Development Department with experience with western red bat avoidance/surveys shall conduct or shall provide oversight during surveys and relocation. This process shall occur prior to issuance of a grading permit, final restoration plan approval, or zoning clearance for each project phase and development of each individual housing lot. This measure will be printed on all restoration/habitat protection/ grading and construction plans.

Monitoring: The biologist shall demonstrate to County Planning & Development Department compliance monitoring staff that all protection/relocation measures are in place prior to issuance of grading and building permits and throughout grading and construction for each project phase and lot development.

MM BIO-1.10: Western Spadefoot Toad Avoidance

The following measures are designed to reduce the potential for impact, with the final goal of no net loss of the species.

a. Prior to initiation of ground-disturbing activities and vegetation removal, a County-approved biologist shall coordinate with CDFW to prepare and implement a species relocation plan.

b. A pre-construction survey for western spadefoot toads shall be conducted not less than 2 weeks prior to the initiation of construction. If the project is phased, a clearance survey shall be required for each phase of construction and/or individual lot development.

c. If western spadefoot toads are found and these individuals are likely to be killed or injured by construction activities, a qualified biologist shall be allowed sufficient time to capture and relocate the animals from the project site before construction activities begin.

d. A County-approved biologist(s) shall relocate the individuals the shortest distance possible to a location that contains suitable habitat not likely to be affected by activities associated with the proposed project. The biologist(s) should maintain sufficiently detailed records of any individuals observed, captured, relocated, etc., including size, coloration, and distinguishing features and photographs (preferable digital) to assist him/her in determining whether translocated animals are returning to the project site.

e. A County-approved biologist shall be present on-site during initial ground disturbance. Any western spadefoot toads that are unearthed during initial ground disturbance shall be relocated the shortest distance possible to a location that contains suitable habitat not likely to be affected by activities associated with the proposed project.

f. The biologist(s) shall maintain sufficiently detailed records of any individuals observed, captured, relocated, etc., including size, coloration, and distinguishing features and photographs (preferable digital) to assist him/her in determining whether translocated animals are returning to the project site.

g. To ensure the diseases are not conveyed between work sites by the qualified biologist, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force shall be followed at all times.

Plan Requirements and Timing: A County qualified biologist selected by the County Planning & Development Department with experience with western spadefoot toad surveys/avoidance shall conduct or shall provide oversight during surveys and relocation. This process shall occur prior to issuance of a grading permit, final restoration plan approval, or zoning clearance for each project phase and development of each individual housing lot. This measure will be printed on all restoration/habitat protection/ grading and construction plans.

Monitoring: The biologist shall demonstrate to County Planning & Development Department compliance monitoring staff that all protection/relocation measures are in place prior to issuance of grading and building permits and throughout grading and construction for each project phase and lot development.

MM BIO-1.11: Coast Patch-nosed Snake Avoidance

The following measures are designed to reduce the potential for impact, with the final goal of no net loss of the species.

a. A pre-construction survey for coast patch-nosed snake shall be conducted not less than 2 weeks prior to the initiation of construction. It the project is phased, a

clearance survey shall be required prior to each phase of construction and/or individual lot development.

A County-approved biologist shall be present on-site during initial ground disturbance. Any coast patch-nosed snakes that are unearthed during initial ground disturbance shall be relocated the shortest distance possible to a location that contains suitable habitat not likely to be affected by activities associated with the proposed project

Plan Requirements and Timing: A County qualified biologist selected by the County Planning & Development Department with experience with coast patch-nosed snake surveys/avoidance shall conduct or shall provide oversight during surveys and relocation. This process shall occur prior to issuance of a grading permit, final restoration plan approval, or zoning clearance for each project phase and development of each individual housing lot. This measure will be printed on all restoration/habitat protection/ grading and construction plans.

Monitoring: The biologist shall demonstrate to County Planning & Development Department compliance monitoring staff that all protection/relocation measures are in place prior to issuance of grading and building permits and throughout grading and construction for each project phase and lot development.

~~***MM BIO-1.12: Vernal Pool Fairy Shrimp Avoidance***~~

MM BIO-1.12: Vernal Pool Fairy Shrimp USFWS Approval

Prior to issuance of any grading permit the project applicant shall obtain all necessary approvals from the USFWS. Approvals will include either concurrence by the USFWS that the project would avoid impacts to fairy shrimp through the installation of fencing and signs, or the preparation by the Owner/Applicant and USFWS approval of an Incidental Take Permit and Habitat Conservation Plan for vernal pool fairy shrimp on the project site consistent with the federal Endangered Species Act of 1973~~, prior to issuance of any grading permit~~. All required mitigation measures, including but not limited to the location of mitigation site(s), c~~C~~onstruction timing, avoidance measures~~, and~~ monitoring, and mitigation success criteria shall be consistent with USFWS requirements and would consist of measures such as those listed below or other measures identified by the USFWS or the CDFW.

Avoidance and Minimization Efforts: The project proponent and contractor shall adhere to the following protection measures, which apply the spikerush emergent wetland at the project site that may be present and/or filled with water during project construction phases of development. The spikerush emergent wetland locations shall be included on the grading, site, and landscape plans and shall include the following measures:

~~a. Restrict construction within 250 feet of the edge of the pool/pool complex; install protective fencing gate least 250 feet from the edge of pools or spikerush emergent wetland prior to construction.~~

a. No grass cutting shall be permitted within the vernal pools and buffer areas.

b. Install a fence around each identified pool and/or the spikerush emergent wetland to limit access to~~against~~ humans, vehicles, and pets. The fence shall have signs posted to explain this requirement and discourage vandalism. No recreation shall be permitted within the fenced pool/water area.

c. CC&Rs shall contain information regarding the sensitivity of vernal pool and wetland habitats explaining all restrictions on the habitat and surrounding area.

d. No disking for fire control or any other use shall be permitted.

e. No mosquito control shall be permitted except use of mosquito fish.

f. A County qualified biologist shall conduct or shall provide oversight during installation of protective fencing and signs on-site prior to issuance of grading/building permits and pre-construction meeting and shall install permanent fencing prior to Final Building Inspection Clearance(s). All requirements shall be specified on all grading and building plans, graphically depicted if feasible.

g. The project biologist or designee shall demonstrate to County Planning & Development compliance monitoring staff that all protection measures are in place prior to initiation of grading activities and throughout grading and construction phases.

Plan Requirements and Timing: The Owner/Applicant shall provide to P&D ~~copies of Incidental Take Permit and Habitat Conservation Plan approvals obtained from the~~ USFWS clearance prior to issuance of any grading permit for the project site.

Monitoring: Permittee shall provide to P&D copies of ~~confirmation of implementation of mitigation measures in the vernal pool fairy shrimp Incidental Take Permit and Habitat Conservation Plan from USFWS. P&D staff shall confirm receipt of any necessary approvals~~ USFWS clearance prior to issuance of any grading permit for the project site.

MM BIO-1.13: El Segundo Blue Butterfly USFWS Approval

Prior to issuance of any grading permit the project applicant shall obtain all necessary approvals from the USFWS. Approvals include ~~concurrence from the USFWS that the project would avoid impacts to the El Segundo blue butterfly; or obtain~~ ~~including~~ an Incidental Take Permit and Habitat Conservation Plan for the El Segundo blue butterfly on the project site and an USFWS approved off-site mitigation parcel consistent with the federal Endangered Species Act of 1973~~, prior to issuance of any grading permit~~. All required mitigation measures, including but not limited to the location of mitigation site(s), c~~C~~onstruction timing, avoidance monitoring, and mitigation success criteria shall be consistent with USFWS requirements and would consist of measures such as those listed below or other measures identified by the USFWS.

Avoidance and Minimization Efforts: Prior to issuance of any grading permit the project applicant shall acquire a County-approved biologist to conduct a pre-construction survey one week prior to grading for all life stages of the El Segundo blue butterfly within the project disturbance limits. All life stages shall be avoided by the project, and shall not

occur during the adult flight season of the El Segundo blue butterfly (generally around June 15 to September 15) in order to avoid disrupting the reproductive behaviors. Locations of the El Segundo blue butterfly's host plant (*Eriogonum parvifolium*) will be avoided to the maximum extent practicable within the development area during construction activities. Locations of the El Segundo blue butterfly host plant will be avoided to the maximum extent practicable within FMZ-2 during pruning and thinning activities as prescribed by the following:

1. One week prior to any fuel management activities located within the open space lot that will be selectively pruned and thinned (FMZ-2), a qualified biologist approved by the County shall demarcate coastal buckwheat avoidance areas.

2. Avoidance areas shall be demarcated in the field with protective fencing installed at an appropriate distance that would not disturb the plant or the underlying leaf litter.

3. The intent of the avoidance areas is to document the location(s) and number(s) of any and all host plants for the federally endangered El Segundo blue butterfly so that fuel management activities can successfully avoid impacts to the life cycle of this species.

4. Should avoidance prove infeasible, relocation and/or off-site restoration to an appropriate receiver site approved by the County shall be undertaken at the appropriate ratios only after take authorization has been secured from the USFWS through Section 10 of the FESA.

5. Mitigation measures and ratios for ~~P~~permanent impacts to the El Segundo blue butterfly's host plant shall be contingent upon USFWS guidance and the final Habitat Conservation Plan measures. ~~that are authorized by the USFWS shall be salvaged (including underlying litter and soils) and relocated to an approved location. Mitigation for host plants shall be provided at a minimum ratio of 2:1.~~

Plan Requirements and Timing: The Owner/Applicant shall provide to P&D copies of the USFWS approved El Segundo blue butterfly Incidental Take Permit and Habitat Conservation Plan ~~Incidental Take Permit and Habitat Conservation Planapproval obtained from the USFWS~~ prior to issuance of any grading permit for the project site ~~and restoration of the off site mitigation parcel~~.

Monitoring: Permittee shall provide to P&D copies of the USFWS approved El Segundo blue butterfly Incidental Take Permit and Habitat Conservation Plan. ~~of confirmingationof implementation of USFWS mitigation measures and/or conditions of USFWS approval. in the El Segundo blue butterfly Incidental Take Permit and Habitat Conservation Plan from USFWS.~~ P&D staff shall confirm receipt of any necessary approvals prior to issuance of any grading permit for the project site ~~and restoration of the off-site mitigation parcel~~.

MM BIO-1.14: California Red-Legged Frog USFWS Approval

Prior to issuance of any grading permit the project applicant shall obtain all necessary approvals from the USFWS. Approvals include ~~concurrence by the USFWS that the project would avoid impacts to fairy shrimp; or~~ obtaining~~, including~~ an Incidental Take Permit and Habitat Conservation Plan for the California red-legged frog ~~on the project site and restoration of the off-site mitigation parcel~~ consistent with the federal Endangered Species Act of 1973~~, prior to issuance of any grading permit~~. All required mitigation measures, including but not limited to the location of mitigation sites(s), ~~C~~construction timing, avoidance~~, and~~ monitoring, and mitigation success criteria shall be consistent with USFWS requirements and would consist of measures such as those listed below or other measures identified by the USFWS.

Avoidance and Minimization Efforts: The project applicant shall acquire a USFWS-approved biologist to conduct a pre-construction survey within 24-hours prior to grading within the project disturbance limits. Initial grading will be avoided between November 1st and March 31st during the time when California red-legged frogs are most likely moving through upland areas. The spikerush emergent wetland will be avoided to the maximum extent practicable within FMZ-2 during pruning and thinning activities. Specific conservation measures would be provided upon receipt of the Section 10 permit.

Plan Requirements and Timing: The Owner/Applicant shall provide to P&D copies of the USFWS approved California red-legged frog Incidental Take Permit and Habitat Conservation Plan~~ Incidental Take Permit and Habitat Conservation Plan approval,obtained from the USFWS~~ prior to issuance of any grading permit for the project site. ~~and restoration of the off-site mitigation parcel~~

Monitoring: Permittee shall provide to P&D copies of the USFWS approved California red legged frog Incidental Take Permit and Habitat Conservation Plan~~, of confirmingation of implementation of mitigation measures~~ P&D staff shall confirm receipt of any necessary approvals prior to issuance of any grading permit for the project site. ~~and restoration of the off-site mitigation parcel~~

MM BIO-1.15: Vandenberg Monkeyflower USFWS Approval

Prior to issuance of any grading permit the project applicant shall obtain all necessary approvals from the USFWS. Approvals include ~~concurrence by the USFWS that the project would avoid impacts to the Vandenberg monkeyflower; or~~ obtaining~~, including~~ an Incidental Take Permit and Habitat Conservation Plan for the Vandenberg monkeyflower on the project site and restoration of the off-site mitigation parcel consistent with the federal Endangered Species Act of 1973~~, prior to issuance of any grading permit. All required mitigation measures, including but not limited to the location of mitigation site(s), e~~Construction timing, avoidance~~, and~~ monitoring, and mitigation success criteria shall be consistent with USFWS requirements and would consist of measures such as those listed below or other measures identified by the USFWS.

Avoidance and Minimization Efforts: The project applicant shall acquire a USFWS-approved botanist to conduct a pre-construction survey prior to grading, pruning/thinning activities within the project disturbance limits and in FMZ-2 during the appropriate blooming period for the Vandenberg monkeyflower. If the Vandenberg monkeyflower is discovered, grading and/or pruning/thinning activities avoid all plants in accordance with the recommendations in MM BIO-1.1, and the specific conservation measures located in the USFWS's Section 10 permit.

Plan Requirements and Timing: The Owner/Applicant shall provide to P&D copies of the USFWS approved Vandenberg monkeyflower Incidental Take Permit and Habitat Conservation Plan ~~Incidental Take Permit and Habitat Conservation Planapproval obtained from USFWS~~ prior to issuance of any grading permit for the project site. ~~and restoration of the off-site mitigation parcel.~~

Monitoring: Permittee shall provide to P&D copies of the USFWS approved Vandenberg monkeyflower Incidental Take Permit and Habitat Conservation Plan. ~~of confirmation of implementation of USFWS mitigation measures. in the Vandenberg monkeyflower Incidental Take Permit and Habitat Conservation Plan from USFWS.~~ P&D staff shall confirm receipt of any necessary approvals prior to issuance of any grading permit for the project site ~~and restoration of the off-site mitigation parcel~~.

Significance after Mitigation

Implementation of mitigation measures **MM BIO-1.1** through **MM BIO-1.15~~3~~** and **MM BIO-2.1**) would reduce potential project impacts to special status plants and wildlife. However, recommended on-site mitigation would not be sufficient to ensure protection of special status plants on-site due to implementation of project components, including grading for installation of infrastructure and construction of homes, vegetation removal requirements in the 100-foot-wide fuel management zones (see Figure 2-9), and occupancy of the project in areas with known habitat for special status animals and documented occurrences of special status plants. Approximately 14.73~~11.52~~14.1 acres of potentially suitable restoration area was identified in Figure 4.3-3 and would be available for off-site restoration in accordance with **MM BIO-2.2.** The identified area would potentially be suitable to compensate for the loss of special status plants as part of an off-site restoration and mitigation plan approved by the County.

The implementation of mitigation measures **MM BIO-1.1** through **MM BIO-1.15~~3~~** would ensure that impacts are avoided or reduced and **MM BIO-2.2** would ensure that adequate land on an appropriate receiver site would be restored with suitable habitat to compensate for the loss of individual special status plant species and habitat for special status wildlife. Therefore, the project's impacts to special status plants and wildlife and their habitat would be significant but mitigatable to less than significant levels. (Class II impact).

~~The implementation of mitigation measure **MM BIO-1.13** would ensure that impacts related to El Segundo blue butterfly take are avoided or reduced, as the project could not proceed until obtaining USFWS approval of an Incidental Take Permit including a Habitat~~

~~Conservation Plan with mitigation measures implemented and verified. Impacts to El Segundo blue butterfly would be significant and mitigated (Class II).~~

Impact BIO-2: Sensitive Natural Communities

Maritime chaparral is a sensitive natural community tracked by the CDFW. The Biological Resources Assessment (Rincon 2017a~~2015a~~) prepared for the project site identified the maritime chaparral community as being primarily within the western portion of the project site (see Figure 4.3-1). In addition, coast live oak trees are common, particularly on the western side. Oak canopy on the project site is also primarily on the western portion of the project site and varies from dense, nearly impenetrable mature brush to areas with intermittent clearings.

The Santa Barbara County Comprehensive Plan for the Lompoc Area Land Use Element Interpretive Guidelines (1999) characterizes the quality of maritime chaparral (also known as Burton Mesa chaparral) in three categories:

- **High quality Chaparral** habitat includes areas that have very little evidence of disturbance (excluding fire) and are contiguous with larger habitat areas;
- **Moderate Quality Chaparral** habitat includes areas that are somewhat disturbed (i.e., have a road, trails, or populations of non-native species) or are fragmented, but still contain a high proportion of established chaparral species; and
- **Degraded Chaparral** habitat includes areas that demonstrate extensive evidence of disturbance and are either small or isolated, or support low cover (aerial extent of the plant canopy) of chaparral dominants but still provide some habitat value.

As shown above in Table 4.3-1, approximately 10.64 acres (63.1 percent) of the project site is currently covered in maritime chaparral. Applying the above definitions of habitat quality to conditions described in the biological survey report, the approximately 10.64 acres of maritime chaparral within the project site can be considered as moderate quality chaparral habitat. This vegetation community is located primarily within the western portion of the project site and is contiguous with larger habitat areas to the adjacent Burton Mesa Ecological Reserve, and has been somewhat disturbed with unofficial use trails, unauthorized clearing, and non-native species. Additionally, while the project site is contiguous with the Burton Mesa Ecological Reserve on one side of the parcel, it is also contiguous with existing residential development.

Development of the proposed project would result in removal of maritime chaparral, as shown in Table 4.3-~~6~~7 below. Approximately 6.92 acres of maritime chaparral would be directly removed by the proposed development area~~'s building envelopes in addition to impacts within the fuel management zone described below~~. The "development area" includes all area within FMZ-1, grading for lots 1–29, grading for private roads "A" and "B", road and drainage improvements, and three drainage basins. Although the remaining three vegetative communities on the project site are not identified as sensitive vegetative communities by CDFW, direct impacts will still occur to the project site as a result of

removal of habitat. Approximately 2.18 acres of coyote brush scrub and 0.63 acre of ruderal vegetation will be permanently impacted within ~~building envelopes of the~~proposed project, ~~in additional to the additional permanent impacts due the fuel management zone and trail described below~~ the development area. No direct, permanent impacts would result to the spikerush emergent wetland vegetative community, although ~~some neutral~~temporary impacts within FMZ-2~~defensible space~~ would occur as described below.

Table 4.3-~~6~~7
Summary of Impacts to Sensitive Natural Communities

Natural Community	Total Approximate Acreage	Permanent Impacts (acres) within "Development Area"	Permanent Impacted Percent within Project Site	~~Neutral~~ Temporary Impacts (acres) within FMZ-2
Maritime Chaparral	10.64	6.92	65%	~~1.79~~1.81
Coyote Brush Scrub	5.6	2.18	38%	~~2.48~~2.81
Ruderal	0.63	0.63	100%	0
Spikerush Emergent Wetland	0.02	0	0	~~0.02~~0.01
Total	**16.88**	**9.73**	**58%**	**~~4.29~~4.63**

According to County guidelines, FMZ-1 ~~the 30-foot fuel management defensible space area (fuel management zone 1)~~ is required to be cleared of all flammable vegetation, such as native shrub and ground cover, or significantly thinned. ~~Fifteen feet of the 30-foot zone is~~ The project proposes to locate ~~fuel management zone 1~~FMZ-1 entirely within the development footprint. ~~while the remaining 15 feet occur outside of the development envelope. Removal and thinning of the 15-foot zone outside the development footprint would result in an additional 0.38 acre of permanent impacts to maritime chaparral and 0.52 acre of coyote bush scrub. From the 30- to 100-foot defensible space area (fuel management z~~In FMZ-2~~one 2)~~, adjacent islands of native vegetation would be retained in a mosaic pattern, surrounded by intervening low, flammable, drought-tolerant vegetation. Impacts within ~~fuel managemet zone 2~~FMZ-2 ~~the 30- to 100-foot defensible space zone~~ would also occur; however, fuel management within this zone would incur temporary impacts, as the vegetation would only be thinned and not completely removed such that the habitat would continue to function and provide ecosystem services. In addition, implementation of **MM BIO-1.6** would ~~ensure~~ help ensure workers are properly trained and advised on sensitive vegetation communities and species to minimize impairment.

~~A private trail would be provided for residents of the subdivision and located within the open space area along the western and northern perimeter of the project site. Three entrances to the proposed private trail would be located between Lots 1 and 2, between Lots 7 and 8, and from the Road B cul-de-sac between Lots 24 and 25. The trail creates a meandering half-loop through the open space area and would provide on-site hiking but would not provide access to the Burton Mesa Ecological Reserve. The trail would be 3 feet wide, constructed of native soil, and follow a meandering path along the contours of the existing topography. Figure 2-7 shows a cross-section of the proposed trail. Minimal soil disturbance and no machine grading are proposed during installation of the trail. The trail~~

~~construction would be minimally invasive. However, the trail would cross through established areas of maritime chaparral and could potentially impact up to 0.08 acre of this sensitive natural community (see Table 4.3-6). Implementation of MM BIO-1.4 and MM BIO-2.2 would ensure associated impacts are reduced to less than significant levels. The trail would also result in removal of 0.03 acre of coyote brush scrub habitat, though this community is widespread across the region and its removal would not result in an impact to a sensitive species or an impact to a sensitive natural community. Therefore, impacts to coyote brush scrub habitat during trail construction would be adverse but not significant (Class III impact).~~

Associated indirect impacts as a result of the proposed project may include habitat degradation due to incidental introduction of invasive plant species from construction equipment and through selection of invasive landscape plants. Erosion of disturbed areas may also result in indirect effects. Indirect effects may also occur due to the potential edge effects of the proposed project (e.g., intrusion into habitat by pets, increased human presence, water quality impacts to wetland, lighting, and noise) on the adjacent Burton Mesa Ecological Reserve. Potentially significant invasive weed and plant impacts would be reduced to a less than significant level by mitigation measure **MM BIO-2.4**, which requires the implementation of an invasive weed prevention and management program. Potential project-related edge effects to the Reserve, such as pets, human presence, lighting, and noise would be minimized by the open space areas to be retained along the northern and western perimeters of the project site. Providing the northern and western project site perimeter open space areas, and maintaining native vegetation in those areas including some vegetation that would not be subject to fuel management because it would be located more than 100 feet from proposed homes (see Figures 2-8 and 2-9~~2-10~~) would serve as an effective buffer for habitat located on the Reserve. Mitigation measure **MM BIO-2.1** requires the preparation and implementation of an On-Site Habitat and Open Space Protection Plan, which would preserve and establish native habitat along the northern and western perimeters of the project site. Potential short- and long-term water quality impacts to on-site and off-site biological resources would be reduced to a less than significant level through the implementation of mitigation measures **MM GEO-2**, **MM WQ-1**, **MM WQ-2**, and **MM WQ-3**. Therefore, potential indirect impacts of the project to the Reserve and other off-site biological resources would be reduced to a less than significant level (Class II impact).

A total of 6.92~~7.38~~ acres of moderate-quality maritime chaparral community, a CDFW-designated sensitive community, would be permanently impacted by the proposed project as described in the preceding paragraphs (see also Table 4.3-~~6~~7).

The CDFW asserts (Meyer, pers. comm. 10/10/17) that while project-related geotechnical investigations were being conducted on the project site, ground disturbance and plant removal occurred north of the site on the adjacent Burton Mesa Ecological Reserve. The ground disturbance and plant removal was not an authorized activity on the reserve, therefore, the CDFW has requested that the project proponent repair the disturbed areas. In response to this request, mitigation measure **MM BIO-2.1** has been amended to require that the project's On-Site Habitat and Open Space Protection Plan include provisions for

the restoration of areas to the north of the project site within the Burton Mesa Ecological Reserve that were disturbed by previous geotechnical investigations to the satisfaction of the CDFW.

Mitigation measures **MM BIO-2.1** through **MM BIO-2.4** would avoid or reduce impacts to sensitive vegetation communities. These measures include a sensitive community~~ities~~ for avoidance during project construction; off-site mitigation for central maritime chaparral habitat; and preparation and implementation of a landscaping plan and invasive weed management plan (see **MM BIO-2.1** through **MM BIO-2.4**).

MM BIO-2.2 requires that the project Owner/Applicant identify at least 13.23~~84~~14.76 acres of mitigation land~~.~~ on the 123-acre VVCSD-owned open space parcel (APN 097-371-067). Required habitat restoration and oak tree planting must be located on previously disturbed land or areas that support non-native vegetation. Approximately ~~-~~13.19~~10.91~~ 14.1 acres of potentially suitable restoration areas have been identified on the VVCSD off-site property (Figure 4.3-3). ~~and the Offsite Mitigation Area Baseline Biological Report and Conceptual Mitigation Plan (Rincon 2016a) indicates that~~ An additional 0.61~~2.9~~ acres of coyote brush scrub habitat on the project site would be available for habitat restoration (this area does not include FMZ-2). Additionally, another three sites within the VVCSD parcel totaling 3.08 acres were assessed for suitability for off-site mitigation. These three sites were previously approved mitigation areas for the adjacent Clubhouse Estates project and used for invasive plant removal and native grass reseeding. It was determined that these areas are suitable for additional mesa horkelia mitigation at a reduced 0.5 acre to 1.0 acre ratio. (Rincon, 2017c) (Appendix D-4). It was determined that these three areas are suitable for mitigation at a reduced 0.5 acre to 1.0 acre ratio. This would add another 1.54 acres of potentially suitable off-site mitigation area to the 13.19 acres previously identified, bringing the total area on the 29 off-site mitigation sites to 14.73 acres. The 29 off-site mitigation areas are located on small patches of land immediately contiguous to existing maritime chaparral on the VVCSD parcel (see Figure 4.3-3). Restoration on the 29 identified mitigation sites on the VVCSD parcel, while dispersed, would together increase the size of biological value of the contiguous maritime chaparral habitat by removing invasive species and improving the overall health of this important habitat. With the 0.61 acre on-site coyote brush scrub home area, the project's total mesa horkelia mitigation area would be approximately 15.34 acres. Therefore, sufficient land of ~~at least~~approximately 15.34~~11.52~~16.39 acres has~~ve~~ been identified as potentially suitable to implement required on-site and off-site habitat restoration mitigation.~~, and approximately 2.32 acres additional restorable mitigation land must be identified to attain the required 13.84 acres to comply with MM BIO-2.2.~~

The Offsite Mitigation Area Baseline Biological Report and Conceptual Mitigation Plan identified areas on the VVCSD open space property that could be used to restore maritime chaparral habitat. However, much of the identified restoration area currently supports black sage scrub with chamise, which is a native habitat, and the stature and composition of the vegetation in this community is indicative of the early seral stage development into a climax community of maritime chaparral. Conducting habitat restoration on areas that support sage scrub with chamise to mitigate the loss of maritime chaparral would not result

in a net increase in native habitat. Therefore, the proposed mitigation for project-related loss of maritime chaparral habitat has focused on identifying potentially suitable restoration areas on the VVCSD property that do not currently support native habitat.

Areas on the VVCSD open space property that would be suitable for restoration include areas that are currently undergoing weed abatement as mitigation for the Clubhouse Estates project, which is located north of and adjacent to the VVCSD open space property. The Clubhouse Estates project is ~~only~~ primarily required to complete weed abatement actions on the open space property. Mitigation planting (seeding) is only required in two specified areas to create central dune scrub vegetation. ~~One area is located near the golf course maintenance facility and is approximately 1.5~~One area is on the northwestern portion of the mitigation site and comprises two subareas of approximately 1.02 and 0.19 acres. The second area is near Clubhouse Road and approximately 1.88~~2~~ acres (LFR 2007). ~~and is not required to establish native habitat in areas where weed abatement has occurred (pers. comm. from Analise Merlo, Santa Barbara County Planning and Development Department, to Steve Rodriguez, County of Santa Barbara Project Manager, December 22, 2016).~~ The weed abatement areas on the VVCSD open space property are included in the potentially suitable restoration sites identified on Figure 4.3-3. The Oak Hills Estate project could advance habitat enhancement efforts being conducted on the VVCSD property by creating new maritime chaparral habitat on areas where weed abatement efforts have been completed. These enhancement efforts are being conducted on three sites within the VVCSD parcel totaling 3.08 acres that are being used for invasive plant removal and native grass reseeding and were assessed for suitability for off-site mitigation by the applicant's biologist (Rincon, 2017c) (Appendix D-4). The biologist determined that these areas are suitable for mitigation at a reduced 0.5 acre to 1.0 acre ratio. This would add another 1.54 acres of potentially suitable off-site mitigation area to the 13.19 acres previously identified. This would have the beneficial effect of establishing native habitat in areas previously occupied by invasive weeds, and would reduce the potential for weeds to re-establish in the cleared areas.

Therefore, removal of central maritime chaparral within the project site resulting from grading for homes, roadways, ~~and~~ landscaping, ~~trail,~~ and ~~associated fuel management zone~~FMZ-1~~s~~ for defensible space would be a significant but mitigable impact on this sensitive natural ~~communities~~community. Compliance with **MM BIO-2.1** and **MM BIO-2.2** would ensure that ~~an additional 2.32 acres of~~ suitable restorable mitigation land is secured by the project proponent on-site and either on the VVCSD property or the adjacent Reserve and that the project impacts to central maritime chaparral would be significant but mitigated (Class II impact).

Although not identified as sensitive by CDFW or the County of Santa Barbara, direct impacts may still occur from removal of coyote brush scrub and ruderal vegetation communities if the removal contributed to reduction of habitat for other wildlife species and impacted adjoining biological activity. Wildlife species may depend on these particular natural communities as habitat and breeding ground, which can be significantly impacted with development of the proposed project and the off-site restoration parcel. The project would also result in removal of 2.18~~2.10~~2.7 acres of coyote brush scrub habitat; this

community is widespread across the region and its removal would not result in an impact to a sensitive species or an impact to a sensitive natural community. Implementation of **MM BIO-2.2** would not result in removal of coyote scrub brush but could potentially remove non-native grassland. Prior to restoration of the off-site mitigation parcel, sensitive species surveys would be required and appropriate avoidance or relocation measures implemented. Therefore, impacts to sensitive species and wildlife that utilize coyote brush scrub habitat and non-native grassland due to the project and off-site restoration would be adverse but not significant (Class III impact).

Mitigation Measures

The following mitigation measures address project-related impacts to sensitive natural communities and potential edge effects of the project on adjacent biological resources on the Burton Mesa Ecological Reserve.

MM BIO-2.1: On-Site Habitat and Open Space Protection Plan

The Owner/Applicant shall submit for Planning & Development Department approval a revised On-Site Habitat and Open Space Protection Plan for maritime chaparral, oak trees, spikerush emergent wetland, and special status species to be retained on-site within the dedicated open space parcel and FMZ-2~~, designated buffer areas, and adjacent to the on-site trail~~. The On-Site Habitat and Open Space Protection Plan shall be prepared by a P&D-approved arborist and/or biologist and designed wherever possible to protect maritime chaparral that will not be impacted during construction and protect this habitat from construction activity and occupancy of the project; including long-term occupancy of homes, ~~and~~ long-term management of the open space~~, trail, and~~ (including ~~fuel management~~FMZ-2). The existing Open Space Management Plan (OSMP) as an option to preparing a stand alone document, may be revised to incorporate all these requirements and submitted in place of the On-Site Habitat and Open Space Protection Plan. The On-Site Habitat and Open Space Protection Plan shall include the following components:

Measures to replace, restore, and/or enhance impacted sensitive vegetation communities within the project site, with mitigation restoration planting acreage as stated in **MM BIO-1.2** and shall include the following restoration criteria:

a. A section detailing any special status plant translocation for the project that details the logistics and timing of the translocation activities. The On-Site Habitat and Open Space Protection Plan ~~revised OSMP~~ must identify specific transplant locations.

b. Seed and/or cuttings and/or container stock shall be collected from the plant species prior to their removal from the site by a qualified botanist or restoration expert. Container stock may be utilized only for perennial species. Plants may also be salvaged and stored for replanting, where possible. The method (e.g., seed, cuttings, or container stock) shall be determined for each individual species by a qualified botanist. Habitat enhancement shall be initiated prior to habitat impacts, or as

construction schedules and seasonal requirements allow, with a minimum requirement that plant propagation be initiated prior to ground disturbance.

i. The project shall include specific measures to maintain native ant species and discourage the Argentine ant (*Linepithema humile*) from populating the open space. This includes inspection of landscaping and restoration plants by the project biologist (preferably off-site prior to shipment to the site) of native container stock scheduled to be installed. The biologist shall inspect all specimens and reject any that show non-native ants or evidence of non-native ants. Additionally, all restoration areas shall avoid the use of chemicals that would impact or kill native ant species (i.e., herbicides/pesticides).

c. Rare plant collection samplings, data, and records shall be collected by a qualified botanist prior to the seed cutting/collections and the data shall be reported to CDFW. The actual specimens shall be deposited at local herbarium(s) for proper data and record keeping. The data and information collected shall be available for all desired herbarium(s) (e.g., California Polytechnic University at San Luis Obispo, University of California at Santa Barbara, Santa Barbara Botanic Garden).

d. If required, the applicant shall obtain the necessary permit or authorization from the appropriate regional and/or state agency (e.g., CDFW) prior to seed/cutting collections.

e. Seed and/or cuttings shall be redistributed or planted in areas within the portions of the project open space that have the appropriate habitat characteristics (e.g., slope, aspect, amount of sunlight) necessary to support the transplanted species.

f. Survivorship of planted material shall be 80 percent at the end of a 5-year monitoring period. Designated open space and mitigation sites shall be maintained in perpetuity.

g. Identify success criteria to be met, reporting requirements, funding mechanisms, and long-term protections on open space that are mitigation receiver sites for rare plants and special status plant communities.

h. All areas of maritime chaparral and oaks that can be preserved or avoided, including maritime chaparral, coyote brush scrub, and the spikerush emergent wetland shall be demarcated on the On-Site Habitat and Open Space Protection Plan.

i. All areas of maritime chaparral and oaks within the designated open space and habitat buffer that can be avoided during fire management, including maritime chaparral, coyote brush scrub, and the spikerush emergent wetland, shall have limited disturbance within ~~the trail construction area~~FMZ-2.

j. To the maximum extent feasible based on recommendations of an approved arborist, o~~O~~ak trees that are to be removed shall be boxed and replanted within the County approved off-site restoration area consistent with the Tree Protection Plan ~~Off-Site Habitat Restoration Plan~~ in **MM BIO-~~2.2~~3.2**. Depict original & new location for these specimens on the Off-Site Habitat Restoration Plan.

k. Depict approved lots and building envelopes.

l. Depict equipment storage and construction staging and parking areas.

m. Depict the type and location of protective fencing or other barriers to be in place to protect the maritime chaparral, coyote brush scrub, and the spikerush emergent wetland areas (this includes protective fencing and signage [stating to keep out of the area] between the spikerush emergent wetland and the proposed development [specifically located at a lower elevation on the development side of the topographical divide that separates the wetland from the adjoining areas of the project site]). Also depict the type and location of protective fencing on the project site to prevent trespass onto the adjacent Burton Mesa Ecological Reserve.

n. Comply with and specify the following as notes on On-Site Habitat and Open Space Protection Plan and Building & Grading Plans:

i. To avoid damage during construction, all maritime chaparral, coyote brush scrub, and the spikerush emergent wetland shall be temporarily fenced with chain-link or other material satisfactory to P&D, at least the outer drip lines of trees and within 5 feet of all plants and staked to prevent any collapse.

ii. Protective fencing/staking/barriers shall be maintained throughout all grading & construction activities. A qualified botanist shall provide oversight during the installation of fencing, flagging or survey tape and he/she or a designee (e.g., construction foreman) will return to the site once a week during the duration of construction activities to ensure that the fence remains intact. On-Site Habitat Management and Open Space Protection Plan.

iii. ~~Any~~ For excavation or trenching required w/in the dripline or sensitive root zone of any specimen within the habitat:

1. Cleanly cut~~ting~~ any roots of one inch in diameter or greater. ~~w/in the habitat.~~

2, Avoid ~~T~~tree removal and trimming ~~w/in the habitat~~.

iv. If the use of hand tools is deemed infeasible, P&D may authorize work with rubber-tired construction equipment weighing five tons or less. If significant large rocks are present, or if spoil placement will impact surrounding trees, then a small tracked excavator (i.e., 215 or smaller track hoe) may be used as determined by P&D staff and under the direction of a P&D approved biologist.

o. In the event of unexpected damage or removal of habitat:

i. If it becomes necessary (as authorized by P&D) to disturb or remove any plants w/in the habitat area, a P&D-approved biologist shall direct the work. Where feasible, specimens shall be boxed and replanted.

ii. If a P&D-approved biologist certifies that it is not feasible to replant, plants shall be replaced at a minimum using the replacement ratios identified in **MM BIO-1.2** under the direction of the P&D-approved biologist.

iii. If replacement plants cannot all be accommodated on-site, a plan must be approved by P&D to include replacement in the Off-Site Restoration Plan in **MM BIO-2.2**.

p. Grading shall be designed to ensure that habitat areas have proper drainage during and after construction, per biologist recommendations.

q. The On-Site Habitat and Open Space Protection Plan shall describe public outreach to be implemented to educate the residents of the project site about not using invasive species in landscaping, overuse of pesticides and fertilizers, the problem with unleashed pets and pet waste, methods to minimize potentially harmful human/wildlife interaction, and to minimize the use of rodenticides. A public outreach program will be provided for this project to promote, protect, and restore the natural habitats on the project site by fostering education and ongoing community involvement.

r. The On-Site Habitat and Open Space Protection Plan shall describe proposed restoration efforts to be implemented on the Burton Mesa Ecological Reserve to repair ground disturbance and plant removal that occurred when project-related geotechnical investigations were conducted. The plan must also provide documentation that CDFW has reviewed and concurs with proposed restoration and maintenance efforts to be conducted on the reserve.

Plan Requirements and Timing: The Owner/Applicant shall submit a revised final On-Site Habitat and Open Space Protection Plan that has been approved by P&D prior to ~~approval of a zoning clearance for~~ issuance of grading ~~and building~~ permits. The Owner/Applicant shall note or graphically depict all plan components listed above, as well as all temporary and/or permanent protection measures and comply with and depict this measure on all Grading and Building Plans.

Monitoring: P&D staff shall inspect the site to ensure that maritime chaparral, oak trees, spikerush emergent wetland, and special status species identified for protection were not damaged or removed or, if damage or removal occurred, that correction is completed as required by the revised On-Site Habitat and Open Space Protection Plan. P&D staff shall oversee implementation of the On-Site Habitat and Open Space Protection Plan.

The Owner/Applicant shall post a performance security to ensure installation and maintenance for a minimum of five years prior to issuance of a grading permit. The Owner/Applicant shall also demonstrate to County Planning & Development compliance monitoring staff that all required components of the approved plan are in place as required prior to ~~initiation of ground disturbance activities~~ zoning clearance issuance for the first residential structure. ~~and maintained throughout the maintenance period.~~ County Planning & Development compliance monitoring staff signature is required to release the installation security upon satisfactory installation of all items in the approved plans and maintenance security upon successful implementation of the On-Site Habitat and Open Space Protection Plan (or Owner/Applicant's Open Space Management Plan revised per this mitigation measure).

MM BIO-2.2: Off-site Habitat Restoration Plan

The Owner/Applicant shall identify at least 13.23~~14.76~~acres of land on the 123-acre VVCSD-owned open space parcel (APN 097-371-067) for off-site mitigation. Required habitat restoration and oak tree planting must be located on previously disturbed land or areas that support non-native vegetation. The area identified for off-site mitigation:

a. Shall not include areas of established native habitat, adversely affect existing sensitive plants or trees.

b. Habitat restoration may supplement previous habitat enhancement efforts conducted on the VVCSD-owned open space parcel, such as but not limited to planting native vegetation in areas that have been cleared of weeds and non-native plants.

The restoration location shall have topography and soils that are suitable for restoration of central maritime chaparral habitat at a 2:1 ratio and be able to support an oak tree replacement ratio of 10:1. The restoration areas:

c. Shall include a suitable buffer from areas designated as urban in the Comprehensive Plan and from existing developed areas (i.e., residential development and roadways) to minimize the potential for adverse edge effects to the restored habitat..

d. Must be located outside of existing or potential fuel management zones that are required in high fire hazard areas adjacent to land zoned for urban development.

In addition, an Off-site Habitat Restoration Plan that addresses loss of on-site habitat shall be submitted to and approved by the County. The Off-site Habitat Restoration Plan shall be prepared by a County-qualified botanist or biologist with expertise in habitat restoration

Plan Requirements: The Owner/Applicant shall submit for Planning & Development approval an off-site restoration plan prepared by a Planning & Development-approved biologist designed to restore central maritime chaparral habitat and coast live oak trees. The off-site restoration plan shall be approved by the County and VVCSD and at minimum include the following:

a. Goals and objectives for the restoration of maritime chaparral and coast live oak trees.

b. Surveys to identify the location(s) of proposed restoration sites, existing native habitat and special status species located on or near the restoration site(s), and methods to protect identified native habitat and special status species.

c. A restoration schedule with milestones.

d. Sources of plant materials, including salvage from the Oak Hills Estate project site if feasible.

    i. The project shall include specific measures to maintain native ant species, and discourage the Argentine ant (*Linepithema humile*) from populating the restoration areas. This includes inspection of all restoration plants by the project biologist (preferably off-site prior to shipment to the site) of native

container stock scheduled to be installed. The biologist shall inspect all plant specimens and reject any that show non-native ants or evidence of non-native ants. Additionally, all restoration areas shall avoid the use of chemicals that would impact or kill native ant species (i.e., herbicides/pesticides).

e. Plant sources, planting methods, timing, plant density, plant protection, weed control, temporary irrigation, and maintenance details. All native plant materials used for restoration shall be from local sources.

f. A fencing and signage plan to limit encroachment into restored areas. Fencing or other barriers shall be designed to prevent unauthorized motor vehicle entry, reduce human and pet intrusion, while maintaining access for wildlife to move through the area.

g. Performance criteria that specify the minimum requirements for size, ground coverage and health of replacement plants including a period of time without supplemental watering. The maintenance requirements shall be no less than 5 years unless satisfactory habitat as determined by the County or other appropriate agency is established before that time.

h. Measures that would be implemented if it is determined that performance criteria are not being met in conformance with the approved restoration schedule.

i. The off-site restoration plan must be reviewed for consistency with and incorporate the mitigation requirements specified by the USFWS approved Incidental Take Permit and Habitat Conservation Plan.

j. The Off-Site Habitat Restoration Plan public outreach shall be used to educate the residents of adjacent neighborhoods about not using invasive species in landscaping, overuse of pesticides and fertilizers, the problem with unleashed pets and pet waste, methods to minimize potentially harmful human/wildlife interaction, and to minimize the use of rodenticides. A public outreach program will be provided for this project for the surrounding neighborhoods to promote, protect, and restore the natural habitats in their neighborhood by fostering education and ongoing community involvement.

The Owner/Applicant shall include as notes or depictions all plan components listed above, graphically depicting all those related to earth movement, construction, and temporarily and/or permanently installed protection measures prior to issuance of grading/building permits. Comply with and depict this measure on all Grading and Building Plans.

Timing: A Final Habitat Offsite Restoration Plan shall be prepared by a Planning and Development-qualified biologist and reviewed and approved by P&D and the County Fire Department prior to first zoning clearance~~map recordation~~. The Plan shall clearly state who will fund and be responsible for long-term maintenance, who will monitor for success, and specific remedial measures. Installation shall be completed prior to zoning clearance issuance for the first residential structure.

Monitoring: Prior to issuance of a grading permit, the Owner/Applicant shall post a performance security to ensure installation and maintenance of the off-site restoration area for a minimum of five years. The County shall periodically inspect the restored habitat area in the field over time to ensure habitat vegetation establishment and compliance with

approved plans. P&D shall determine successful completion of habitat restoration and when cessation of maintenance can occur, per the criteria in the plan. P&D compliance monitoring staff signature is required to release the installation security upon satisfactory installation of all items in approved plans and maintenance security upon successful implementation of this plan.

MM BIO-2.3: Landscaping Plan

A landscape architect shall develop a revised landscape plan for the entire project site in consultation with a qualified biologist. The plan shall indicate the locations and species of plants to be installed throughout the development, including areas adjacent to the open space (e.g., fuel management areas). Drought-tolerant, locally native plant species shall be used. Noxious, invasive, and/or non-native plant species that are recognized on the Federal Noxious Weed List, California Noxious Weeds List, and/or California Invasive Plant Council Lists shall not be permitted. Species selected for planting shall be similar to those species found in adjacent native habitats.

Plan Requirements and Timing: Final landscape and irrigation plans shall be submitted by the Permittee to the County for review and approval prior to the first zoning clearance ~~tentative tract map approval and issuance of construction permits.~~

Monitoring: **P**rior to issuance of a grading permit, the Owner/Applicant shall post a performance security to ensure installation and maintenance of landscaping for a minimum of five years. Planning and Development compliance monitoring staff shall conduct a Project Compliance Inspection prior to Final Building Inspection Clearance and shall periodically conduct field checks to monitor maintenance thereafter. If the Owner/Applicant fails to either install or maintain according to the approved plan, the County may consider it a permit violation.

MM BIO-2.4: Invasive Weed Prevention and Management Program

An Invasive Weed Prevention and Management Program shall be developed by a qualified biologist to prevent invasion of native habitat by non-native plant species during construction. A list of target species shall be included, along with measures for early detection and eradication.

Plan Requirements and Timing: The Owner/Applicant shall submit the Invasive Weed Prevention and Management Program for approval by the Planning and Development Department prior to the issuance of zoning clearance. These mitigation requirements will be printed on construction plans.

Monitoring. The Owner/Applicant shall demonstrate to P&D compliance staff that all required components of the approved program are in place as required prior to initiation of grading activities.

Significance after Mitigation

Implementation of recommended mitigation measures MM BIO-2.1 through MM BIO-2.4 and MM BIO-1.2 would reduce impacts to sensitive natural communities associated with the project by ensuring that on-site protection and an off-site restoration plan on sufficient land of 14.76 acres are implemented to provide adequate 2:1 mitigation for the removal of 7.38 acres of the moderate quality maritime chaparral from the project site.. Implementation of proposed mitigation measures will ensure adequate land to restore the full 14.76 acres of maritime chaparral and compensate for project's impact to important biological maritime chaparral community. With mitigation implemented, the project's impact from construction of the project will be significant and mitigated (Class II impact).

Impact BIO-3: Loss of Oak Trees

Surveys conducted for the Biological Resources Assessment (Rincon 2017a~~2015a~~) estimated that approximately 360 coast live oak trees exist on the project site. Preservation of individual oak trees is more feasibly achieved when development occurs over relatively level areas. Because grading to create building envelopes (defined as the total area of a lot on which, roads, and landscaped areas would occur, it is reasonable to expect that the majority of oak trees within the development envelope would ultimately be removed. A total of 74 oak trees are anticipated to be removed or otherwise directly impacted by the project as stated in the Biological Resources Assessment (Rincon 2017a~~2015a~~). In addition, grading and construction activities would potentially damage individual oak trees within the development envelope where encroachment into the critical root zone occurs or trimming of oak trees is required for fire protection purposes in FMZ-1~~the fuel management zone~~. An additional 53~~57~~ oak trees will be impacted as a result of these types of encroachment. Thus, there is the potential for a loss of up to 127~~131~~ oak trees. The loss of native oak trees would conflict with County plans and policies protecting these resources and result in a significant impact. The proposed project would result in the loss of between 21 percent and ~~37~~ 35 percent of the oak trees present and exceed the 10 percent County Environmental Threshold. Therefore, impacts to native oak trees would be a significant impact, but mitigable with **MM BIO-3.1** through **MM BIO-3.4** (Class II impact).

Mitigation Measures

MM BIO-3.1: Native Tree Protection

Native trees on-site and on the off-site mitigation parcel should be avoided to the maximum extent feasible. Prior to the onset of construction activities, highly visible flagging or survey tape shall be installed around existing stands and individual trees at a buffer/extent radius of 6 feet beyond the canopy dripline, wherever feasible, or otherwise marked in the field to protect them from harm during implementation of the proposed project.

Plan Requirements and Timing: Applicant/Owner will implement native tree protection measures prior to and during construction as outlined in the measure above.

Monitoring: Planning & Development compliance staff conduct a project compliance inspection immediately prior to commencement of construction activities and periodically during construction.

MM BIO-3.2: Tree Protection Plan

The Owner/Applicant shall submit a Tree Protection Plan (TPP) that addresses both on-site trees and trees on the off-site restoration parcel prepared by a Planning & Development-approved arborist and/or biologist and designed to protect coast live oaks. The plan shall include a description of the trees to be trimmed and/or removed, the trees to be preserved, and the trees that will be boxed and replanted. As a result of the tree inventory and health assessment, the TPP will be revised and submitted to the County by the applicant prior to any work around coast live oaks on the property. The Owner/Applicant shall comply with and depict the following on the TPP exhibit and Grading and Building Plans.

a. Depict location of trees to be removed.
b. Depict original and new location of trees to be replaced.
c. Depict-approved building envelopes. Include utility corridors, irrigation lines, roadways, driveways.
d. Depict equipment storage (including construction materials, equipment, fill soil or rocks) and construction staging and parking areas outside of the protection area.
e. Depict the type and location of protective fencing (see below) or other barriers to be in place to protect trees in protection areas during construction.
f. Depict the location of all tree wells or retaining walls. These shall be located outside the area within six feet of the dripline of all protected trees unless authorized by P&D.
g. Depict the location of all paths, driveways, and sidewalks within 25 feet of dripline areas. Only pervious paving materials (gravel, brick without mortar, turf block) are permitted within 6 feet of dripline areas.

The plan shall include, but would not be limited to, an inventory of trees within the construction, enhancement, and restoration sites, setbacks from trees and protective fencing/flagging, restrictions regarding grading and paving near trees for the infrastructure phases and the individual home sites, as well as direction regarding pruning and digging within root zone of trees defined as a radius 6 feet beyond the furthest extent of the tree canopy. The plan shall specify the following as notes on the TPP and grading plans:

a. All trees to be protected at least 6 feet outside the dripline with chain-link (or other material satisfactory to Planning & Development) fencing at least 3 feet high, staked to prevent any collapse, and with signs identifying the protection area placed in 15-foot intervals on the fencing.
b. Fencing/staking/signage shall be maintained throughout all grading and construction activities.

c. All trees located within 25 feet of buildings shall be protected from stucco and/or paint during construction.

d. No irrigation is permitted within 6 feet of the dripline of any protected tree unless specifically authorized.

e. The following shall be completed only by hand and under the direction of a P&D approved arborist/biologist:

    i. Any trenching required within the dripline or sensitive root zone of any specimen.

    ii. Cleanly cutting any roots of one inch in diameter or greater, encountered during grading or construction.

    iii. Tree removal and trimming.

f. Special equipment: If the use of hand tools is deemed infeasible by P&D, P&D may authorize work with rubber-tired construction equipment weighing five tons or less. If significant large rocks are present, or if spoil placement will impact surrounding trees, then a small tracked excavator (i.e., 215 or smaller track hoe) may be used as determined by Planning & Development staff and under the direction of a Planning & Development-approved biologist.

g. The following are not permitted:

    i. Any trenching within the dripline or sensitive root zone of any specimen.

    ii. Cutting any roots of one inch in diameter or greater.

    iii. Tree removal and trimming.

h. Grading shall be designed to avoid ponding and ensure proper drainage within driplines of oak trees.

Plan Requirements: The Owner/Applicant shall: (1) submit the TPP; (2) include all applicable components in Tree Replacement Plan (TRP) and/or Landscape and Irrigation Plans if these are required; (3) include as notes or depictions all plan components listed above, graphically depicting all those related to earth movement, construction, and temporarily and/or permanently installed protection measures.

Timing: The Owner/Applicant shall comply with this measure prior to land use clearance of the Development Plan. The Owner/Applicant shall install tree protection measures on-site prior to issuance of grading permits and conduct pre-construction and restoration meetings.

Monitoring: The Owner/Applicant shall demonstrate to Planning & Development compliance monitoring staff that trees identified for protection were not damaged or removed or if damage or removal occurred, that correction is completed as required by the TPP prior to Final Building Inspection Clearance.

MM BIO-3.3: Tree Replacement Plan (TRP)

The Owner/Applicant shall submit for Planning & Development approval an off-site TRP prepared by a Planning & Development-approved arborist/biologist as a component of a County approved off-site habitat mitigation plan (see MM BIO-2.2) that addresses loss of on-site oak trees. The tree replacement plan shall be designed to replace native trees removed by the proposed project at a ratio of 10:1 (trees planted: trees impacted) consistent with the County's standard mitigation measures (County of Santa Barbara 2011a) at an approved off-site location (proposed off-site mitigation parcel) prior to land use clearance of the Development Plan. Replacement oak tree plantings would range from a minimum of 740 trees up to a maximum of 1,310 trees. It is expected that mitigation for removal of native coast live oak trees could occur concurrently as a component of the off-site restoration of maritime chaparral. The plan shall include the following components:

a. Description of the project/impact site (i.e., location, responsible parties, areas to be impacted by habitat type);
b. Goal(s) of the compensatory mitigation project;
c. Description of the proposed compensatory mitigation site (location and size, ownership status, existing functions and values);
d. Implementation plan for the compensatory mitigation site (rationale for expecting implementation success, responsible parties, schedule, site preparation, planting plan);
e. Maintenance activities during the monitoring period, including weed removal as appropriate (activities, responsible parties, schedule);
f. Monitoring plan for the compensatory mitigation site, including no less than quarterly monitoring for the first year (performance standards; target functions and values; target acreages to be established, restored, enhanced, and/or preserved; annual monitoring reports);
g. Success criteria based on the goals and measureable objectives; said criteria to be, at a minimum, at least 80 percent survival of container plants;
h. An adaptive management program and remedial measures to address any shortcomings in meeting success criteria;
i. Notification of completion of compensatory mitigation; and,
j. Contingency measures (initiating procedures, alternative locations for contingency compensatory mitigation, funding mechanism).

Plan Requirements: Include the components of the TRP plan in off-site habitat mitigation plan.

Timing: Plans shall be submitted prior to land use clearance of the Development Plan and issuance of zoning clearance. The Owner/Applicant shall post a performance security to ensure installation upon off-site habitat restoration initiation and maintenance for 5 years.

Monitoring: The Owner/Applicant shall demonstrate to Planning & Development compliance monitoring staff that all required components of the approved plan(s) are in place as required upon initiation of habitat restoration and each maintenance visit for 5 years. Planning & Development compliance monitoring staff signature is required to release the installation security upon satisfactory installation of all items in approved plans and maintenance security upon successful implementation of this plan.

MM BIO-3.4: On-site Arborist/Biologist

A certified arborist/biologist will be on-site throughout all initial grading and construction activities that may impact native trees. Duties of the on-site arborist/biologist include the responsibility to ensure all aspects of the approved TPP and TRP are carried out.

Requirements and Timing. Mitigation measures **MM BIO-3.1** through **MM BIO-3.4** are conditions of project approval that shall be verified by the Planning and Development Department prior to the issuance of zoning clearance for grading. These mitigation requirements will be printed on the construction plans.

Monitoring. The Owner/Applicant shall submit to Planning & Development compliance monitoring staff the name and contact information for the approved arborist/biologist prior to commencement of construction/preconstruction meeting. Planning & Development shall site inspect as appropriate.

Significance after Mitigation

Preparation of an off-site habitat restoration plan that includes oak tree replacement on APN 097-371-067, and the above-recommended mitigation measures **MM BIO-1.2**, **MM BIO-2.2**, **MM BIO-2.3**, and **MM BIO-3.1** through **MM BIO-3.4** would reduce impacts to native trees by ensuring that adequate and suitable off-site mitigation land is available with a long-term maintenance agreement by a public entity. A restoration plan in place to establish replacement maritime chaparral and coyote scrub habitat would also allow for planting of replacement oaks at a 10:1 ratio at a County-approved receiver site, compensating for impacts to native trees resulting from impacts to and the removal of 74–127~~131~~ native coast live oaks from the project site. With mitigation implemented, impacts from the removal of 74–127~~131~~ native coast live oaks by the project will be significant and mitigated (Class II impact).

Impact BIO-4: Federal Jurisdictional Wetlands and Waters

The eastern ephemeral drainage would be impacted by the proposed project as it would be placed in a constructed underground channel, resulting in the loss of approximately ~~0.01 acre of RWCQB and~~ 0.03 acre of CDFW and RWQCB jurisdictional waters, comprising 112 linear feet. ~~In addition, a portion of the proposed trail alignment would cross the drainage located in the central portion of the project site.~~ Impacts to this drainage would occur if construction ~~of the trail~~ would be below the top of bank area ~~relevant to CDFW jurisdiction (0.002 acre) and/or below the ordinary high water mark, relevant to RWQCB jurisdiction (0.001 acre)~~. Construction ~~of the trail~~ would require a Waste Discharge Requirements

permit from the RWQCB and will likely require a Streambed Alteration Agreement from the CDFW. Conditions of the Waste Discharge Requirements permit and Streambed Alteration Agreement would aim to reduce impacts to state jurisdictional wetlands to the extent feasible, and would likely require mitigation. Compliance with these permits will ensure compliance with the state's no net loss of waters rule and applicable RWQCB and CDFW requirements.

While there is a spikerush emergent wetland on the project site, project construction would not directly impact or remove the wetland. Additionally, the drainages that would incur impacts on the project site are isolated, they would not likely fall under the jurisdiction of the U.S. Army Corps of Engineers and would not be considered waters of the United States in accordance with Section 404 of the Clean Water Act (Rincon 2017a~~2015a~~). Therefore, impacts to federally protected wetlands and waters would not result and less than significant impacts would occur (Class III impact).

Mitigation Measures

Impacts are less than significant. No avoidance, minimization, or mitigation measures are recommended.

Significance after Mitigation

The project would not impact federal jurisdictional wetlands or waters; therefore, no mitigation is required.

Impact BIO-5: Nesting Birds

Suitable nesting habitat occurs within or in the vicinity of the project site. Shrubs and trees are predominant throughout the majority of the project site. During focused surveys, two passerine (song bird) nest structures were detected. Although no raptor nests were detected during focused surveys, any of the larger oaks within the project site as well as adjacent pine and cypress trees could be utilized by raptors for nesting.

Proposed development within the project site and selective thinning of dead vegetation within the defensible space areas as a part of fuel management activities occurring within native habitats outside the permanent impact area may result in direct or indirect impacts to nesting bird species, should they be present within and/or in the immediate vicinity of areas of disturbance at the time of construction and/or vegetation maintenance. Impacts to nesting birds due to implementation of the proposed project could be avoided with mitigation measures MM BIO-5.1 incorporated (Class II impact).

Mitigation Measures

MM BIO-5.1: Preconstruction Surveys for Nesting Birds

For construction activities and fuel management activities occurring during the nesting season (generally February 1 to September 15), focused surveys for nesting birds and

raptors, including the white-tailed kite, covered by the California Fish and Game Code and the Migratory Bird Treaty Act shall be conducted by a qualified biologist no more than 14 days prior to vegetation removal/trimming. The surveys shall include the entire disturbance area plus a 300-foot buffer around the site. If active nests are located, all construction work shall be conducted outside a buffer zone from the nest to be determined by the qualified biologist. The buffer shall be a minimum of 50 feet for non-raptor bird species and at least 300 feet for raptor species. Larger buffers may be required, and/or smaller buffers may be established depending upon the species, status of the nest, and construction activities occurring in the vicinity of the nest. The buffer area(s) shall be closed to all construction personnel and equipment until the adults and young are no longer reliant on the nest site. A qualified biologist shall confirm that breeding/nesting is completed and young have fledged prior to removal of the buffer.

Plan Requirements and Timing: This survey shall be undertaken 10 days prior to construction of future residences and the start of fuel management activities to determine whether raptors or other special status species are nesting on-site. A report shall be prepared by the biologist and reviewed and approved by Planning & Development prior to the initiation of ground disturbance activities. If raptors or other special status species are found to be nesting, applicant shall avoid work in the area by providing a buffer from active nests until birds have fledged-as determined by the qualified biologist. At their conclusion, the biologist shall inform P&D in writing of the results of the surveys. All required mitigation shall be implemented prior to the start of proposed grading activities.

Monitoring: Planning & Development shall review the report for compliance and inspect the site during construction activities to ensure compliance. Grading Inspectors shall inspect as needed.

Significance after Mitigation

Implementation of the recommended mitigation measure **MM BIO-5.1** would reduce potential impacts to nesting birds to significant and mitigated (Class II impact).

Impact BIO-6: Wildlife Movement

The proposed project is located within an Essential Connectivity Area as mapped in California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California (CDFW 2010). However, the proposed project is not expected to significantly hinder wildlife movement in the region or between natural landscape blocks, in this case the Burton Mesa Ecological Reserve, considering it is surrounded by contiguous native habitat suitable for movement as well as contiguous areas surrounding the limits of disturbance that will be preserved as open space. In addition, development of the 29 lots would be located outside the central drainage within the project site. Figure 2-9 depicts the site fencing for the project, which would include a low rail, salted fence installed between individual lots and open space. No impacts to wildlife movement are anticipated from development of the 29 lots and proposed trail within the project site (Class III impact).

Mitigation Measures

Impacts are less than significant. No avoidance, minimization, or mitigation measures are recommended.

Significance after Mitigation

Any potential impacts to wildlife movement do not reach a level that is considered significant under the County's Environmental Thresholds for Significance, therefore no mitigation is required.

4.3.2.3 Cumulative Impacts

The project site is one of few remaining parcels located within the Vandenberg Village urban area on land designated in the Comprehensive Plan for residential development. The project site is located at the urban fringe adjacent to the Burton Mesa Ecological Reserve, which supports the biologically important and sensitive maritime chaparral habitat that is one of the last significant stands of maritime chaparral in the state (CDFW 2015). Cumulative projects in the vicinity of the project as detailed in Table 3-1 would remove coast live oaks and reduce local maritime habitat in the region that supports sensitive plants and animals and native trees, including coast live oaks. The nearby Village Country Club Development Plan and Clubhouse Estates Tract Map, like the proposed project, may involve the removal of oak trees and other sensitive habitat and result in impacts to sensitive plant and wildlife species with potential to be at the site, as well as nesting birds. Therefore, implementation of the project in conjunction with other cumulative projects may result in significant cumulative impacts to biological resources.

The project proposes to remove a total of 6.927~~7.38~~ acres of maritime chaparral that includes up to 6.926~~6.22~~ acres occupied by Mesa horkelia, which is a species unique to this biological community. The project, with all available on-site avoidance measures and off-site mitigation incorporated, would result in less than significant (Class II) impacts to the on-site sensitive maritime chaparral and coyote sage scrub biological communities, edge effects to the Burton Mesa Ecological Reserve, special status plant and animal species habitat (including up to 30 host plants to the El Segundo blue butterfly, and native trees (including on-site removal of between 74 and 127~~131~~ coast live oaks), and nesting birds. Additionally, the project proposes off-site mitigation that would restore coast live oaks and maritime chaparral habitat at an off-site location within the geographic scope of the cumulative projects. The project would also implement avoidance and protection buffers for on-site resources during construction and require additional protection measures during project fuel management and vegetation maintenance in accordance with this EIR's mitigation measures. In addition, any potential impacts to El Segundo blue butterfly would require a permit through either the Section 10 or Section 7 processes under the FESA, as well as any other state and local permits. Other projects in the cumulative project list would also be subject to similar environmental review and mitigation requires as the project, and therefore would likely include mitigation for avoidance or reduction of impacts. Because the project's impacts to biological resources would be avoided, reduced, or mitigated through implementation of the mitigation measures described in this section, when considered with the cumulative impacts to biological resources from other projects in the area, the project's

impact would not be cumulatively considerable. Therefore, cumulative impacts resulting from the project would be less than significant with project-level mitigation incorporated (Class II impact).

4.4 Cultural Resources

The setting for cultural resources is taken from the Oak Hills Estates Residential Project, Archaeological Resources Report, APN 097-371-010 Vandenberg Village, Santa Barbara County, California (Dudek 2015) and Extended Phase I Archaeological Investigation, Oak Hills Estates Project, Vandenberg Village, Santa Barbara County, California (Dudek 2016a); and the peer review conducted of the Archaeological Investigation: Oak Hills Estate Project – Peer Review of Archaeological Resources Report (RECON 2016b). A cultural resources records search was not conducted for the proposed off-site restoration parcel owned by the Vandenberg Village Community Services District.

4.4.1 Setting

4.4.1.1 Regional Setting

A summary of the prehistory and history of the general project region is provided below.

Prehistoric Setting

The local prehistoric chronology is divided into four major periods – Paleoindian, Early Period, Middle Period, and Late Period. It is generally accepted that humans entered the New World during the latter part of the Wisconsin glaciation between 40,000 and 20,000 years before present (B.P.). The earliest unquestioned evidence of human occupation in southern Santa Barbara County is dated to between 10,000 to 8,000 B.P. Paleoindian groups during this time focused on hunting Pleistocene megafauna, including mammoth and bison. Plants and smaller animals were undoubtedly part of the Paleoindian diet as well, and when the availability of large game was reduced by climatic shifts near the end of the Pleistocene, the subsistence strategy changed to a greater reliance on these resources.

Post-Pleistocene changes in climate and environment are reflected in the local archaeological record by approximately 8,000 B.P., the beginning of the Early Period, as defined by Chester King (King 1981). The Early Period of the Santa Barbara Channel mainland was originally defined by Rogers, who called it the "Oak Grove" Period (Rogers 1929). The diagnostic feature of this period is the use of mano and metate milling stones, which were used to grind hard seeds such as sage for consumption. Toward the end of the Early Period, sea mammal hunting appears to have supplemented subsistence strategies (Dudek 2015).

The Middle Period (3,350 to 800 B.P.) is characterized by larger and more permanent settlements, related to a generally wetter environment. Materials from Middle Period sites reflect a greater reliance on marine resources and include marine shells, fish remains, and

fishhooks. A major shift in vegetable food exploitation occurred, as the mano and metate milling stones were replaced by stone mortars and pestles. This indicates a transition from seed gathering to oak tree acorn gathering and processing, a result of cooler temperatures and more expansive oak woodland habitats. Toward the end of this period, the plank canoe was developed, making ocean fishing and trade with the Channel Islands safer and more efficient. Terrestrial resources continued to be exploited as evidenced by the presence of contracting-stemmed and corner-notched projectile points from Middle Period sites.

The Late Period (800 to 150 B.P. or approximately A.D. 1150 to 1800) was a time of increased social and economic complexity. The increased number of permanent and semi-permanent villages clustered along the Santa Barbara Channel and on the Channel Islands, and the diversity of environmental site settings in which sites have been identified, indicates a substantial increase in prehistoric population. Intensification of terrestrial as well as marine resources occurred. Acorns continued to be processed, and land mammals were hunted with the bow and arrow, rather than exclusively by spear. Trade networks, probably controlled by village chiefs, expanded and played an important part in local Chumash culture, reinforcing status differences and encouraging craft specialization. Shell beads, found throughout the Early and Middle Periods, increased in number and variety, related to status and social value.

At the time of historic contact, the project area was occupied by the Purismeño Chumash, derived from the Mission Purísima Concepción founded in 1787, to the north, who linguistically belonged to the Chumashan family of the Hokan language family. The Purismeño Chumash territory extended from the western Santa Barbara Channel northward to a just north of the Santa Maria River. The Purismeño Chumash shared boundaries with the Obispeño Chumash to the north, the Inezeño Chumash to the east, and the Barbareño Chumash to the south.

The Purismeño Chumash, like their neighbors, were matrilocal, based on baptismal, marriage, and death registers kept by Franciscan missionaries. Lineage groups within villages were probably matrilineal. Specific information on settlement systems based on ethnographic data is not available, but it is thought that villages were headed by chiefs, who controlled wealth as distributed through the shell-bead money economy.

Purismeño Chumash relied extensively on maritime food resources, including shellfish, fish, and sea mammals, although the plank canoe, a pivotal technological component of the Barbareño Chumash to the south, was not used. Terrestrial resources, large and small game, birds, and rodents were hunted. Acorns were processed as well as various seeds including sage.

The protohistoric culture of the Chumash was terminated by the arrival of a Spanish expedition led by Gaspar de Portola in 1769. Chumash culture changed dramatically with the establishment of the missions of Santa Barbara, Santa Ynez, and La Purísima.

Historic Setting

The historic occupation of the project vicinity can be divided into three settlement periods: the Mission Period (A.D. 1769–1830), the Rancho Period (ca. A.D. 1830–1865), and the American Period (ca. A.D. 1865–1915). Construction of Mission Santa Barbara in 1786, Mission la Purísima Concepción in 1787, and Mission Santa Ynez in 1804, altered both the physical and cultural landscape of the region. The missions were the center of Spanish influence in the region and affected native patterns of settlement, culture, trade, industry, and agriculture. Following the secularization of the missions by the Mexican Government in 1821, California became part of the Republic of Mexico.

Secularization of lands and a focus on cattle raising marked the Rancho Period, when large land grants of Mission lands were ceded to wealthy, prominent Spanish families. Native Americans continued to work as laborers on ranchos during this period. With California statehood in 1850 and the advent of the American Period, farming and more intensive land uses steadily replaced cattle stock raising. Cattle ranching was substantially curtailed by a prolonged drought in the 1860s.

Throughout the Spanish Period of influence the proposed project site was a part of the lands controlled by the La Purísima Mission. The La Purísima Mission is located approximately 6 miles southeast from the project site, and its land holdings once covered approximately 470 square miles, bordered by the Santa Maria River in the north and the Gaviota coastline in the south. The land was home to the Chumash and Spanish settlers. The La Purísima Mission began to prosper over time with over 100 large and small adobe buildings built (La Purísima Mission 2016).

Preservation and reconstruction of the La Purísima Mission buildings began in 1934 through efforts by the County, State of California, National Park Service, and Civilian Conservation Corps (La Purísima Mission 2016), and it is now part of the La Purísima Mission State Historic Park. Within the historical La Purísima Mission area, there is also a historic site known as "Matthew's Garden" (Site CA-SBA-1772) (Dudek 2015). This area was cultivated by the La Purísima Mission and contains ruins of an adobe building and other evidence of historic habitation.

Since statehood, major forces of regional change during the last 150 years have been railroads, maritime shipping, agribusiness concerns, oil industry, and college institutions. Specific urbanization of the unincorporated area surrounding the project site began in the 1960s as a result of the expansion of Vandenberg Air Force Base and the establishment of a new community Vandenberg Village.

4.4.1.2 Project Site Setting

A records search was completed for the project and no previously recorded archaeological sites were recorded on the property. In addition, cultural resource surveys have been conducted on the project site, and none of the surveys identified archaeological resources on the project site. The surveys included: (1) 1991 Phase I Survey for the prior development

proposal for the entire project site (Spanne 1991); (2) 2015 Archaeological Resources Report (Dudek 2015); (3) Archaeological Site Distribution Analysis (Dudek 2016b), and (4) Extended Phase I Archaeological Investigation (Dudek 2016a).

Subsequent to the completion of the 2015 Archaeological Resources Report (Dudek 2015) referenced above, the Santa Ynez Tribal Elders Council Cultural Preservation Consultant identified heritage concerns relative to the report's conclusions (Dudek 2016a). Specifically, there was concern that an unknown buried prehistoric deposit could exist that was not detected during the 2015 field investigation.

In order to address the concern raised by the tribal elders, an Archaeological Site Distribution Analysis was completed in 2016 that evaluated the locations of recorded archaeological sites within 2 miles of the project site. The analysis concluded that the project site location was dissimilar in environmental characteristics typical of the buried archaeological sites adjacent to the Santa Ynez River (including CA-SBA-4017) and other major tributaries, including distance to permanent water source, topographic variability, and soil characteristics (Dudek 2016b). However, the tribal consultant continued to discount the results of the 2016 analysis and additional subsurface excavation work was done by Dudek in 2016 (Extended Phase I Archaeological Investigation). These excavations did not identify any prehistoric cultural materials (Dudek 2016a). The absence of cultural material in the subsurface excavations verified that the potential for unknown archaeological deposits was determined to be highly unlikely (Dudek 2016a).

4.4.1.3 Off-Site Oak and Chaparral Restoration

The proposed project includes the Offsite Mitigation Area Baseline Biological Report and Conceptual Mitigation Plan (Rincon 2016a, 2016b, and 2017c) (see Appendix D-3 and D-4) that details the potential for off-site restoration to mitigate for sensitive on-site oak tree and habitat removal. The off-site mitigation would occur on ~~a 28-acre portion of~~ a 123-acre open space parcel owned by the Vandenberg Village Community Services District (APN 097-371-067) that is located approximately 1 mile southeast of the project site. The off-site mitigation would be limited to weed control, habitat and tree restoration, and sensitive/rare plant avoidance. The activities would not require development structures or residences within the off-site mitigation parcel.

4.4.1.4 Regulatory Setting

A cultural resource may be designated as significant by national, state, or local authorities. State historic preservation regulations include the statutes and guidelines contained in California Environmental Quality Act (CEQA; Public Resources Code [PRC] Sections 20183.2 and 21084.1 and Section 15064.5 of the CEQA Guidelines). CEQA requires lead agencies to carefully consider the potential effects of a project on historical resources (see the Historical Resources description below for criteria specifications). In order for a resource to qualify for listing in the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR), it must meet one or more identified criteria of significance. Criteria for determination of significant impacts to historical,

cultural, and archaeological resources, including criteria for consideration of resources as "historically significant" under CRHR, are described below in Section 4.4.2.1.

The disposition of human remains is governed by Section 7050.5 of the California Health and Safety Code and Sections 5097.94 and 5097.98 of the Public Resources Code, and falls within the jurisdiction of the Native American Heritage Commission.

Section 35.60.040 of the Santa Barbara County Land Use and Development Code describes the County's resource protection standards that relate to historical and archaeological resources in the inland area as well as the coastal zone.

The County Thresholds and Guidelines Manual incorporates mandates specified in CEQA Guidelines Sections 15064.5 and 15126.4. It also includes significance criteria for evaluating historic architectural resources identified in the County Cultural Resources Guidelines. According to the Santa Barbara County Historic Preservation Ordinance, in order for a resource to be eligible for designation as a County Landmark or Place of Historic Merit, it must meet the designation criteria defined in Section 18A-3 of the Santa Barbara County Municipal Code under consideration by the Historic Landmarks Advisory Commission and the Board of Supervisors. The Commission has bylaws that provide additional guidance on eligibility for establishing landmarks and places of historic merit (Ord. No. 4425, § 1).

On March 13, 2017, the Santa Barbara County Planning and Development Department notified the Barbareño/Ventureño Band Mission Indians of the proposed project as required by CEQA Section 21080.3.1 (Appendix J). The purpose of the notification was to provide an opportunity to submit comments regarding the potential for the project to result in impacts to tribal cultural resources. No response to the notification has been received.

4.4.2 Impact Analysis

4.4.2.1 Methodology and Significance Thresholds

CEQA Guidelines Appendix G

The significance of a cultural resource and impacts are determined by whether or not that resource can increase our knowledge of the past. The primary determining factors are site content and degree of preservation. A finding of archaeological significance follows the criteria established in the CEQA Guidelines and the County of Santa Barbara Environmental Thresholds and Guidelines Manual.

The CEQA declares that the State of California will "take all steps necessary to provide the people of this state with […] enjoyment of […] historic environmental qualities." The CEQA definition of "environmental qualities" includes objects of historic, archaeological, aesthetic significance [PRC 21001].

CEQA Guidelines Section 15064.5, Determining the Significance of Impacts to Archaeological Resources, states:

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 (PRC, § 5024.1, Title 14 California Code of Regulations, Section 4852) including the following:

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

B. Is associated with the lives of persons important in our past;

C. 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; or

D. Has yielded, or may be likely to yield, information important in prehistory or history.

   a. The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.

   b. A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.

County of Santa Barbara Environmental Thresholds and Guidelines

The County Cultural Resource Guidelines provide local criteria for determining the significance of archaeological resources. County criteria for “important archaeological resource” are identical to the CEQA criteria listed above.

4.4.2.2 Project Impacts and Mitigation Measures

Impacts related to the development of the project site include the following:

Impact CR-1: Unearthing Previously Unidentified Subsurface Cultural Resources

As discussed in Section 4.4.1.2, the project site does not contain known cultural resources. Although the aforementioned surveys, reports, and excavations did not result in locating any cultural resources on the project site, the potential for such resources to exist still remains, albeit unlikely. During excavations and grading for the project, the potential exists for cultural resources to be encountered, including any minor soil excavation

occurring for the habitat restoration at the off-site mitigation parcel on APN 097-371-067. If such resources exist, they could be unearthed during grading of the site and resulting in potentially significant impact (Class II). These impacts could also be mitigated for the on-site project area and off-site mitigation parcel on APN 097-371-067 by implementation of the measures described below. In addition, consistent with state law, if human remains are encountered during excavation within the project area, all work must halt, and the County Coroner must be notified (Section 7050.5-California Health and Safety Code). The Coroner will determine if the remains are of forensic interest. If the County Coroner, with the aid of the supervising archaeologist, determines that the remains are prehistoric, the Coroner will contact the Native American Heritage Commission (NAHC). The NAHC will designate the most likely descendant (MLD), who will be responsible for the ultimate disposition of the remains, as required by Section 5097.98 of the Public Resources Code. The MLD shall make his/her recommendations within 48 hours of their notification by the NAHC. This recommendation may include A) the nondestructive removal and analysis of human remains and items associated with Native American human remains; (B) preservation of Native American human remains and associated items in place; (C) relinquishment of Native American human remains and associated items to the descendants for treatment; or (D) other culturally appropriate treatment.

Mitigation Measures

The following mitigation measures would be required to address potential impacts to subsurface cultural and paleontological resources on both the project site and the off-site mitigation parcel:

MM CR-1 Preconstruction/Pre-Restoration Meeting

Prior to any construction or restoration activity conducted for the project, a pre-construction meeting shall be held by a County-qualified archaeologist and a local Native American (e.g., Chumash) representative funded by the applicant. Meeting attendees shall include the applicant, archaeologist, local Chumash representative, construction supervisors, and heavy equipment operators to ensure that all parties understand the cultural resources monitoring program and their respective roles and responsibilities. All construction and/or landscaping personnel who would work on the site during any phase of ground disturbance in archaeologically sensitive portions of the project area shall be required to attend the meeting. The names of all personnel who attend the meeting shall be recorded denoting that they have received the required training.

The meeting shall review the following: types of archaeological resources that may be uncovered; provide examples of common archaeological artifacts and other cultural materials to examine; describe why monitoring is required; what makes an archaeological resource significant; identify monitoring procedures; what would temporarily halt construction and for how long; describe a reasonable resource discovery scenario (i.e., feature or artifact); and describe reporting requirements and the responsibilities of the construction supervisor and crew. The meeting shall make attendees aware of prohibited activities, including vehicle use in protected areas, and educate construction workers about

the inappropriateness of unauthorized collecting of artifacts that can result in impacts on cultural resources.

Plan Requirements and Timing: The pre-construction meeting requirements shall be shown on approved grading and building and restoration/planting/habitat protection plans**.** The pre-construction meeting shall be conducted prior to issuance of a grading permit.

Monitoring: The Owner/Applicant shall provide P&D compliance monitoring staff with the names and responsibilities of persons who attended the meeting.

MM CR-2 Stop Work at Encounter

In the unlikely event that cultural resources are discovered during project construction, the Owner/Applicant and/or their agents, representatives, or contractors shall stop or redirect work immediately in the event archaeological remains are encountered during grading, construction, landscaping or other construction-related activity. The Owner/Applicant shall retain a County Planning and Development (P&D) approved archaeologist and Native American representative to evaluate the significance of the find in compliance with the provisions of Phase 2 investigations of the County Archaeological Guidelines and funded by the Owner/Applicant.

Plan Requirements and Timing: This condition shall be printed on all building and grading and restoration/planting/habitat protection plans.

Monitoring: County P&D permit Processing Planner shall check plans prior to approval of Zoning Clearance, and P&D Compliance Monitoring Staff shall spot check in the field throughout grading and construction.

MM CR-3 Cultural Phase 2 & 3

If during implementation of **MM CR-2** significant resources are encountered and potential impacts are unavoidable, or if previously undetected resources are discovered during project construction, the Owner/Applicant shall have a P&D-approved archaeologist perform a Phase 2 subsurface testing program to evaluate the nature, extent, and significance of the cultural resources. This evaluation program shall assess each archaeological site consistent with County Archaeological Guidelines and shall include the following:

a. Controlled hand excavation and surface collection of a representative sample of the site deposit determined by P&D staff archaeologist or a P&D-approved archaeologist
b. A detailed analysis of the material recovered
c. An assessment of cultural resource integrity
d. The preparation of a final report with recommendations for impact mitigation if necessary

If the Phase 2 program finds that one is warranted, the Owner/Applicant shall have a P&D approved archaeologist prepare a Phase 3 data recovery excavation consistent with County Archaeological Guidelines. All work shall be funded by the Owner/Applicant.

Plan Requirements: The Owner/Applicant shall submit the required archaeological studies for P&D review and approval. The Owner/Applicant shall include as notes or depictions all plan components, graphically depicting all those related to earth movement, construction, and temporarily and/or permanently installed protection measures.

Timing: Notes and/or depictions of plan components shall be included on plans prior to issuance of grading/building permits. The Owner/Applicant shall install any required resource protection measures or carry out required recovery on-site prior to issuance of grading/building permits.

Monitoring: P&D planning staff shall receive study(s) for review and approval prior to the commencement of construction activities in the vicinity of the cultural resource location. The Owner/Applicant shall demonstrate to P&D Compliance Monitoring Staff that if required protection measures are in place prior to construction, restoration/planting/habitat protection and that any areas identified for protection were not damaged or removed or, if damage or removal occurred, that correction is completed as required by the approved protection plan prior to Final Building Inspection Clearance.

Significance after Mitigation

Implementation of mitigation measures **MM CR-1**, **MM CR-2**, and **MM CR-3** would reduce impacts associated with the potential to unearth unknown cultural resources during grading and construction to a less than significant level (Class II impact).

4.4.2.3 Cumulative Impacts

Buildout of the Vandenberg Village area including the off-site habitat restoration proposed for APN 097-371-067 would have the potential to disturb known and unknown cultural resources. However, potential impacts to cultural resources would be addressed on a case-by-case basis through site-specific investigations and, if necessary, surveys, assessment, and documentation or other appropriate mitigation. Project-specific mitigation as discussed above would ensure that the project's contribution to cumulative impacts would be less than significant. Mitigation applied for each specific development project in the area would reduce cumulative impacts to cultural resources to a less than significant level. No additional mitigation measures are required, and cumulative impacts are less than significant (Class III impact).

4.5 Geology/Soils

4.5.1 Setting

The setting for geologic features is taken from the Geotechnical Investigation for Oak Hills Estate (GSI Soils, Inc. 2015; Appendix F-1) and the peer review conducted of the Geotechnical Investigation: Geotechnical Input to Oak Hills Estate EIR, Oak Hills Estate, Lompoc, California (Fugro Consultants, Inc. [Fugro] 2016; Appendix F-2).

4.5.1.1 Geologic Setting

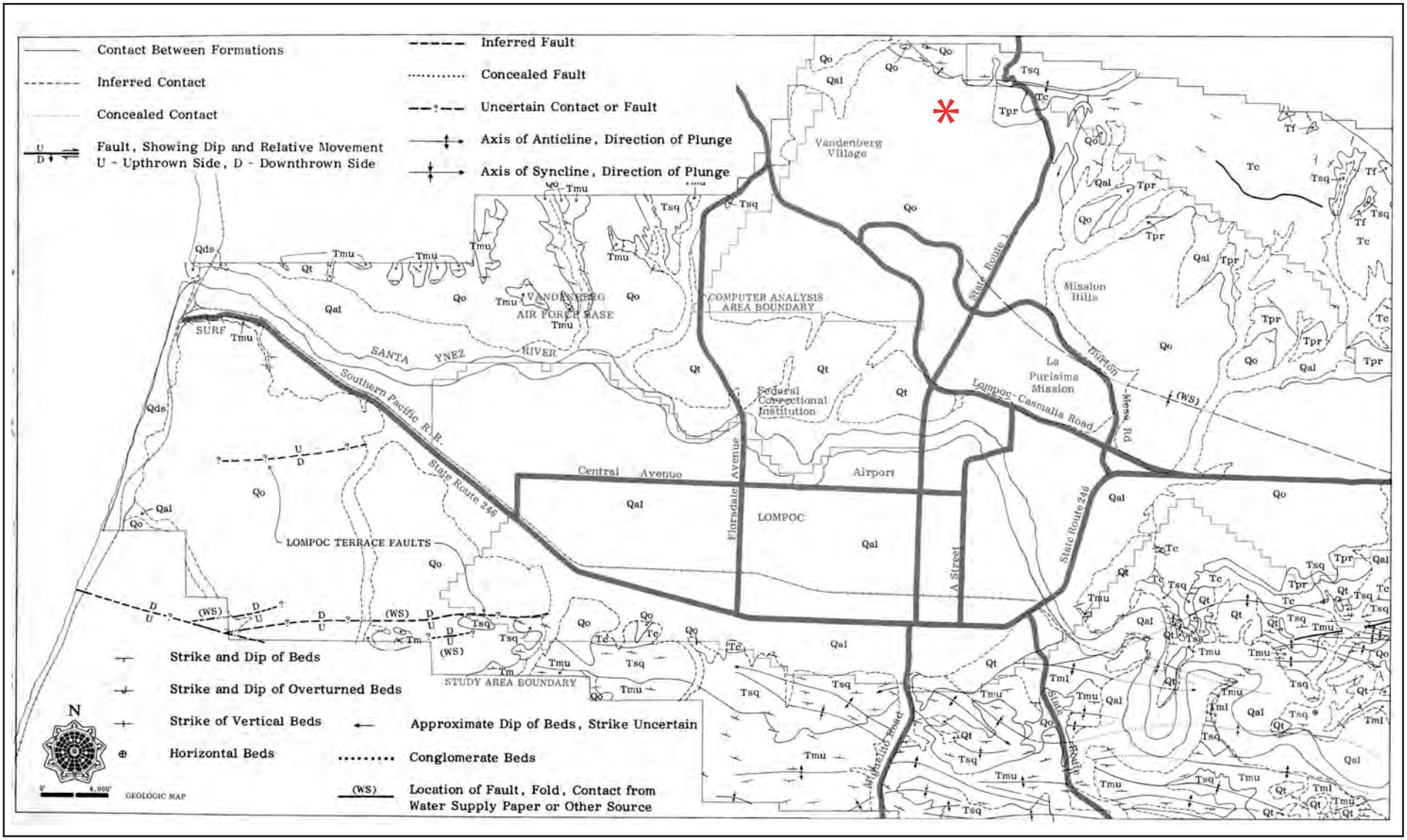
Regional

The project site is located within the San Antonio Valley along the south side of the Purisima Hills in northern Santa Barbara County (County). The San Antonio Valley lies between the Transverse Ranges to the south and the Coast Ranges to the north. The region between the ranges is a structural depression, with Tertiary age rocks forming a series of broad folds (synclines and anticlines) with westward trending axes (Fugro 2016). The project site and surrounding area is underlain by the Orcutt Sand Formation (windblown) of the Pleistocene age (Fugro 2016). This formation is composed of non-marine wind-deposited sand. The sand is tan to rusty brown and poorly consolidated with pebble gravel locally present at the base of the formation (County of Santa Barbara 1995). Figure 4.5-1 shows the project site geologic map.

Topography and Soils

The project site is undeveloped and is characterized by a rolling hillside with a mix of oak woodlands and chaparral habitat. The project site is located to the north and west of Oak Hill Drive on vacant land. In general, the project site slopes to the south and west with gradients in the range of 20H:1V (horizontal : vertical) to 3H:1V near Oak Hill Drive (see Figure 4.1-2 – topography of the project site). Site elevations vary from around 495 feet mean sea level (MSL) in the northwest corner of the west portion of the property to 425 feet above MSL in the southwest corner (GSI Soils, Inc. 2015). Drainage features bisect the central and eastern portions of the project site. The banks along the central drainage consist of steeper slopes, approaching and exceeding a 1:1 slope ratio in some areas (Fugro 2016). Vegetation across the project site consists of native grasses, chaparral and sage brush, and oak trees.

Map Source: Santa Barbara County Planning Department



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Project Location

FIGURE 4.5-1
Project Site Geologic Map

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The near surface soils encountered generally during the Geotechnical Investigation's exploratory borings consisted of very loose to loose sands to a depth of 4 to 6 feet. The sands were typically encountered in a slightly moist to moist state. Similar sands were encountered below the surface soils in a dense to very dense condition to a depth of 20 feet below grade. These deeper soils were typically encountered in a dry to slightly moist state. Sands with some clay and clayey sands were encountered in three borings during the Geotechnical Investigation, which were in a slightly moist to moist state and in a loose to medium dense condition (GSI Soils, Inc. 2015).

The proposed project includes the Offsite Mitigation Area Baseline Biological Report and Conceptual Mitigation Plan (Rincon 2016a, 2016b, and 2017c) (see Appendix D-3 and D-4) that details the potential for off-site mitigation on ~~a 28-acre portion of~~ a 123-acre open space parcel owned by the Vandenberg Village Community Services District (APN 097-371-067) that is located approximately 1 mile southeast of the project site (see Figure 2-11~~12~~). The off-site mitigation area is located in a gently to moderately sloped area of the Burton Mesa that slopes approximately south-southwest toward Burton Mesa Boulevard. Elevations at the site range from approximately 370 feet above MSL in the northeast corner to 255 feet above MSL in the south (Rincon 2016a). The NRCS Web Soil Survey of Santa Barbara County, California, Northern Santa Barbara Area, delineates three soil map units in the off-site mitigation area: Elder sandy loam, 2 to 9 percent slopes, eroded; Marina sand, 9 to 30 percent slopes; and Botella clay loam, wet, 0 to 2 percent slopes. Botella clay loam, wet, has hydric components in coastal Santa Barbara County (Rincon 2016a).

Seismic Conditions

Faulting

The Santa Ynez Valley is traversed by east–west trending faults. These faults include the active Los Alamos–Baseline fault and the potentially active Santa Ynez Fault. The Los Alamos–Baseline fault is located approximately 4 miles north of the project site and is assigned a maximum earthquake magnitude of 7.2. The Santa Ynez Fault is approximately 5 miles south of the project site and is assigned a maximum moment earthquake magnitude of 7.0 (GSI Soils, Inc. 2015) (see Appendix F-1). The level of impact resulting from any seismic activity will depend on factors such as distance from epicenter, earthquake magnitude, and characteristics of soils and subsurface geology.

Other active and potentially active faults in the project area include the Big Pine–Rinconda Fault, Casmalia (Orcutt Frontal) Fault, the Lions Head Fault, and the San Andreas Fault. Fault rupture is the displacement of the ground surface created by movement along a fault plane during an earthquake. The project site is not located within a State of California Fault Hazards Zone, otherwise known as an Alquist–Priolo fault. Based on the Geotechnical Investigation's review of published maps, there is low to negligible potential for fault rupture to impact the project site's proposed buildings (GSI Soils, Inc. 2015).

Liquefaction

Liquefaction is described as the sudden loss of soil shear strength due to a rapid increase of pore water pressures caused by cyclic loading from a seismic event (soils act more like a liquid than a solid in a liquefiable event). In order for liquefaction to occur, the following are generally needed; granular soils (sand, silty sand, and sandy silt); and, groundwater and low density (very loose to medium dense) conditions. Existing liquefaction potential was indicated to be negligible on the project site (GSI Soils, Inc. 2015).

Slope Stability and Landslides

The stability of slopes is a complex function of the height and steepness of slopes, the strength of the basic material underlying the slopes, and the presence and orientation of geologic planes of weakness such as bedding, joints, and faults. Landslides result when the driving forces that act on a slope are greater than the slope's natural resisting forces. Surface and subsurface moisture conditions, weathering, and temporal effects are important factors also in determining slope stability. Slope instability may result from natural processes, such as the erosion of the toe of a slope by a stream, or by ground shaking caused by an earthquake. Slopes can be modified artificially by grading or by the addition of water or structures to a slope. During the Geotechnical Investigation, there was no visual evidence of overall instability at the project site.

4.5.1.2 Regulatory Setting

4.5.1.2.1 State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist–Priolo Earthquake Fault Zoning Act (1972) was established to mitigate the hazard of surface faulting to structures for human occupancy. Pursuant to the act, the state geologist has established regulatory zones (known as earthquake fault zones) around surface traces of active faults. These zones serve as an official notification of the probability of ground rupture during future earthquakes. Where such zones are designated, no building may be constructed on the line of the fault, and before any construction is allowed, a geologic study must be conducted to determine the locations of all active fault lines in the zone. The act also provides that a city or county may establish more restrictive policies, if desired. The project site is not within a state-designated Alquist–Priolo Zone.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) of 1990 (Public Resources Code, Chapter 7.8, Section 2690-2699.6) directs the Department of Conservation, California Geological Survey to identify and map areas prone to earthquake hazards of liquefaction, earthquake-induced landslides, and amplified ground shaking. The purpose of the SHMA is to reduce the threat to public safety and to minimize the loss of life and property by identifying and mitigating these seismic hazards. The SHMA was passed by the legislature following the 1989 Loma Prieta earthquake. The Seismic Hazards Mapping Act addresses geo-seismic hazards, other

than surface faulting, and applies to public buildings and most private buildings intended for human occupancy. Site-specific geotechnical investigations must be performed prior to permitting urban development projects within seismic hazard zones.

California Building and Residential Codes

The California Building Code (CBC) contains specific provisions for structures located in seismic zones. Slope instability and erosion problems are also primarily regulated through the CBC, along with the County's Grading and Building Codes (described below). The CBC requires special foundation engineering and investigation of soils for proposed development sites located in geologic hazard areas. The CBC also contains design and construction regulations pertaining to seismic safety for buildings. These regulations cover issues such as ground motions, soil classifications, redundancy, drift, and deformation compatibility.

The CBC, along with the California Residential Code (CRC), contains seismic safety standards outlining design and construction requirements. Development projects must show compliance with the CBC and/or CRC through the development review process. Building plans must be submitted and reviewed for compliance with these codes prior to issuance of necessary construction and building permits by the County.

4.5.1.2.2 Local Multi-jurisdictional Hazard Mitigation Plan (MJHMP)

The County's MJHMP (September 2011) is "a tool for all stakeholders to increase public awareness of local hazards and risks, while at the same time providing information about options and resources available to reduce those risks." The emphasis of the MJHMP is on the assessment and avoidance of identified risks, implementing loss reduction measures for existing exposures, and ensuring that critical services and facilities survive a disaster. Hazard mitigation strategies and measures avoid losses by limiting new exposures in identified hazard areas; altering the hazard by eliminating or reducing the frequency of occurrence; averting the hazard by redirecting the impact by means of a structure; or adapting to the hazard by modifying structures or standards. The 2011 MJHMP addresses hazards including flooding and coastal storm surge, wildfire, agricultural pests, earthquakes, landslides and coastal erosion, dam failure, and tsunamis.

Santa Barbara County Comprehensive Plan

Seismic Safety and Safety Element

The Seismic Safety and Safety Element of the County's Comprehensive Plan (updated in August 2010) is intended to guide land use planning with goals and policies to minimize the adverse effects of hazards related to geology, seismicity, fires, and flooding. The following goals and policies are pertinent to the proposed project:

- Geologic and Seismic Goal 1: Protect the community to the extent feasible from risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche and dam failure; slope instability leading to mudslides and landslides; subsidence, liquefaction and other seismic hazards

pursuant to Government Code §65302(g)(1), Chapter 7.8 (commencing with Section 2690) of Division 2 of the Public Resources Code, and other geologic hazards known to the legislative body.

- Geologic and Seismic Protection Policy 1: The County shall minimize the potential effects of geologic, soil, and seismic hazards through the development review process.

- Geologic and Seismic Protection Policy 2: To maintain consistency, the County shall refer to the California Building Code, the Land Use Development Code, County Ordinances, the Coastal Land Use Plan, and the Comprehensive General Plan when considering the siting and construction of structures in seismically hazardous areas.

- Geologic and Seismic Protection Policy 6: The County should reference the Santa Barbara County Multi-Jurisdiction Hazard Mitigation Plan when considering measures to reduce potential harm from seismic activity to property and lives.

Environmental Resource Management Element

This element summarizes various environmental factors analyzed in the Seismic Safety and Safety, Conservation, and Open Space Elements. This element states that urbanization should be prohibited on slopes 30 percent and greater and should be prohibited, except in a relatively few special instances, on slopes between 20 and 30 percent.

County Building Code

The design of structures to resist earthquake forces is a critical factor in their ability to withstand severe earthquakes without structural failure or collapse. Although seismic shock waves can act in any direction, design concern is usually focused on lateral (horizontal) forces because buildings are inherently much weaker with respect to horizontal forces than they are to vertical forces. The County uses the California Code of Regulations, Title 24, Part 2 of the California Building Code to regulate building design and construction in unincorporated areas of the County.

County Grading Code

Grading is regulated by County Code Chapter 14, Grading, Erosion and Sediment Control, which complies with Title 24 of the California Code of Regulations. One of the most important functions of the Grading and Building Codes is to require a detailed geologic and soil investigation of the specific site under consideration. The study is usually conducted by a qualified private consultant and reviewed by the County. The site investigation is essential for all structures of any consequence and frequently is necessary even for a single-family residence or similar structure if located in an area with possible soil or geologic problems. The County Public Works and Planning and Development departments have the authority to require geologic and soil engineering reports. Existing requirements are worded broadly enough to provide justification for requiring consideration of seismic hazards in design of graded slopes.

4.5.2 Impact Analysis

4.5.2.1 Methodology and Significance Thresholds

CEQA Guidelines Appendix G

Assessment of impacts is based on review of site information and conditions, and County information regarding geologic issues. In accordance with California Environmental Quality Act Guidelines, a project would result in a significant impact if it:

- Exposes people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides;
- Result in substantial soil erosion or the loss of topsoil;
- Result in the loss of a unique geologic feature;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse;
- Be located on expansive soil, creating substantial risks to life or property; or
- 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.

County of Santa Barbara Environmental Thresholds

The County of Santa Barbara Environmental Thresholds and Guidelines Manual (2015) provides guidance for addressing potential geologic impacts in County environmental documents. Impacts are classified as potentially significant with regard to geology if the proposed development activity, including all proposed mitigation measures, could result in substantially increased erosion, landslides, soil creep, mudslides, and unstable slopes. In addition, impacts are considered significant when people or structures would be exposed to major geologic hazards upon implementation of the project. If the project involves any of the following, impacts related to geology are potentially significant:

- The project site or any part of the project is located on land having substantial geologic constraints, as determined by Planning and Development or Public Works. Areas constrained by geology include parcels located near active or potentially active faults and property underlain by rock types associated with compressible/collapsible soils or susceptible to landslides or severe erosion. Special problem areas designated by the Board of Supervisors have been established based on geologic constraints, flood hazards, and other physical limitations to development;

- The project results in potentially hazardous geologic conditions such as the construction of cut slopes exceeding a grade of 1.5 horizontal to 1 vertical;
- The project proposes construction of a cut slope over 15 feet in height as measured from the lowest finished grade; and
- The project is located on slopes exceeding 20 percent grade.

4.5.2.2 Project Impacts and Mitigation Measures

Impact GEO-1 Unstable Soils, Steep Slopes, and Erosion

Slope stability is a concern along the central ephemeral drainage, which has slopes along the banks that approach or exceed 1H:1V in some areas. In other areas of the project site, the building pad area is located in sloping to slightly sloping terrain with gradients in the range of 3H:1V to 20H:1V (GSI Soils, Inc. 2015). Shallow instability could occur on the south side of the site near Oak Hill Drive and along the drainage area, if oversaturated conditions occur. The project grading details are described in Chapter 2.0, Project Description. According to the project application, manufactured slopes would be established on both sides of the central ephemeral drainage with a slope gradient of 5H:1V. Slopes of 30 percent or greater on the project site (see Figure 4.1-3) are primarily located along the central ephemeral drainage and on the southernmost portion above Oak Hill Drive below Lots 1–21. Development of the individual lots would not occur in these areas. Grading would also remove dense vegetative cover on the project site and disturb the ground surface, exposing bare slopes and thus increasing the potential for erosion and sedimentation impacts.

Additionally, GSI's Geotechnical Investigation for the project site concluded that the primary soils engineering concern was as follows:

- The presence of very loose and loose sands in the upper 4 to 6 feet and the potential for these soils to settle. In general these sands become medium dense to very dense at approximately 4 to 6 feet below grade.

The Geotechnical Investigation and Geotechnical Input reports both agree that the on-site soils have little to no cohesion and are highly erodible. The Geotechnical Investigation contains design recommendations to minimize impacts related to unstable soils, steep slopes, and erosion at the project site. Cut and/or fill slopes constructed of or exposing the on-site sandy materials are likely to be subject to erosion from rainfall, irrigation, uncontrolled runoff, and wind. Due to the lack of nutrients in the on-site soils, typical slope planting to mitigate erosion may be difficult to establish and maintain. In an effort to reduce erosion impacts, GSI recommends that the soils be covered with an erosion control blanket (GSI Soils, Inc. 2015). As surficial instability and erosion impacts may be more pronounced in steeply sloping areas and natural slopes that flank the drainage channel, more stabilization measures may locally be required to control surficial instability (Fugro 2016).

Based on the preliminary analysis of the project grading plans and geotechnical reports, impacts related to unstable soils, steep slopes, and erosion at the project site have the potential to result in significant impacts. In addition, specific designs for individual residences and development of the residential lots are not a part of the proposed project. The development of proposed individual residential lots would be separate actions and would undergo subsequent design, building, and grading review by the County at the time of development of the lots. The off-site mitigation would not require grading or construction of infrastructure or buildings that would expose such activities to geologic hazards. GSI's Geotechnical Investigation and Fugro's Geotechnical Input reports contain recommendations to minimize impacts related to geologic hazards at the project site and residential lots. Compliance with standard County erosion control and drainage requirements during and after construction and adherence to **MM GEO-1** and **MM GEO-2** would reduce impacts to less than significant with mitigation (Class II impact).

Proposed habitat restoration activities on the off-site open space parcel owned by the Vandenberg Village Community Services District would include planting native vegetation in areas where invasive weeds have been removed, potentially leaving the ground surface without vegetative cover. Planting native vegetation in the weed management areas would have the beneficial effect of minimizing the potential for erosion in areas where invasive plants have been removed.

Mitigation Measures

The following mitigation measures, in addition to compliance with the CBC and County Code requirements would reduce the project impacts to a less than significant level:

MM GEO-1 Geotechnical Recommendations

The applicant shall follow the recommendations contained in the Geotechnical Investigation prepared by GSI Soils, Inc. (January 2015) and the Geotechnical Input (June 2016) prepared by Fugro for the project. Compliance with the recommendations of both reports would ensure that proper foundation and structural design criteria for the Oak Hills Estate project are implemented. These measures are described in detail in the reports and address (1) clearing and stripping; (2) preparation of building pads; (3) preparation of paved areas; (4) structural fill; (5) foundations; (6) slab-on-grade construction; (7) retaining walls; (8) pavement design; (9) underground facilities construction; (10) surface and subsurface drainage; (11) temporary excavations; and (12) percolation testing.

Plan Requirements and Timing: The Owner/Applicant shall submit the GSI Soils, Inc. (2015) and Fugro (2016) studies for County Planning and Development (P&D) and Public Works review and approval. Elements of the approved studies shall be reflected on grading and building plans as required. The Owner/Applicant shall submit the studies prior to approval of a Zoning Clearance.

Monitoring: P&D staff shall review the GSI Soils, Inc. (2015) and Fugro (2016) studies. The Owner/Applicant shall demonstrate that the submitted plans conform to both required study components. Grading and building inspectors shall ensure compliance in the field.

MM GEO-2 Erosion and Sediment Control Plan

Where required by the latest edition of the California Green Code and/or Chapter 14 of the Santa Barbara County Code, a Storm Water Pollution Prevention Plan (SWPPP), Storm Water Management Plan (SWMP), and/or an Erosion and Sediment Control Plan (ESCP) shall be implemented as part of the project. Grading and erosion and sediment control plans shall be designed to minimize erosion during construction and shall be implemented for the duration of the grading period and until regraded areas have been stabilized by structures, long-term erosion control measures, or permanent landscaping. The Owner/Applicant shall submit the SWPPP, SWMP or ESCP using Best Management Practices (BMP) designed to stabilize the site, protect natural watercourses/creeks, prevent erosion, convey storm water runoff to existing drainage systems keeping contaminants and sediments on-site. The SWPPP or ESCP shall be a part of the Grading Plan submittal and will be reviewed for its technical merits by P&D. Information on erosion control requirements can be found in the County Code Chapter 14 – Grading Code (http://sbcountyplanning.org/building/grading.cfm). Information on SWPPP (projects < 1 acre) and/or SWMP requirements can be found in the California Green Code.

Plan Requirements and Timing: The grading and SWPPP, SWMP, and/or ESCP shall be submitted for review and approved by P&D prior to approval of land use clearances. The plan shall be designed to address erosion and sediment and pollution control during all phases of development of the site until all disturbed areas are permanently stabilized.

The SWPPP requirements shall be implemented prior to the commencement of grading and throughout the year. The ESCP/SWMP requirements shall be implemented between November 1st and April 15th of each year, except for pollution control measures, which shall be implemented year round.

Monitoring: P&D staff shall perform site inspections throughout the construction phase.

Significance After Mitigation

Potentially significant impacts from unstable soils, steep slopes and erosion would be less than significant with compliance with CBC regulations, County Code, and implementation of mitigation measure **MM GEO-1** and **MM GEO-2** (Class II impact).

Impact GEO-2 Seismic Hazards

Structures built in California are susceptible to the effects of seismic activity and seismic hazards. The project site is not located within an Alquist–Priolo Earthquake Zone, which is a zone that delineates areas of known active faults, as defined by the State of California (Fugro 2016). Based on the review of geologic maps published by Dibblee (1988), there are no active or potentially active faults traversing or trending toward the project site. The Geotechnical Investigation indicates that the project site "was positioned on the USGS Seismic Hazard Maps for a 2 percent probability of exceedance in 50 years to determine the maximum considered earthquake spectral response accelerations" (GSI Soils, Inc. 2015). The seismic parameter values are provided in Section 4.2 of the Geotechnical Investigation.

Overall, the Geotechnical Investigation (GSI Soils, Inc. 2015) and peer review (Fugro 2016) indicate that there is a low to negligible potential for fault rupture to impact the project site.

Besides the direct physical damage to structures caused by ground shaking, marginally stable landslides, slopes, and inadequately compacted fill material could move and cause additional damage. Gas, water, and electrical lines can be ruptured during ground shaking, or broken during the movement of material activated by a seismic event, which can jeopardize public safety after an earthquake.

Although there are no known earthquake faults located in the project vicinity, according to the County Seismic Safety and Safety Element, the project site is approximately 5 miles north from the potentially active Santa Ynez River Fault (Fugro 2016). Other active and potentially active faults in the surrounding area include the Big Pine–Rinconada Fault, Casmalia (Orcutt Frontal) fault, the Lions Head fault, and the San Andreas Fault (GSI Soils, Inc. 2015). As such, the project has a potentially significant impact related to seismic ground motion. Additionally, the very loose to loose surficial sands associated with compressible/collapsible soils at the project site, as identified in the Geotechnical Investigation and Geotechnical Input, would be susceptible to seismic settlement as particles densify during seismic ground shaking. However, Fugro's Geotechnical Input (2016) found the underlying denser sands to be unlikely to experience significant seismic settlement from earthquakes, and incorporation of the GSI Soils, Inc. grading recommendations would reduce the potential for seismic settlement at the site resulting from strong ground shaking. Implementation of the off-site restoration would be temporary and not include grading or construction of infrastructure or buildings that would expose people to the documented seismic hazards of the area. In addition, implementation of the latest CBC seismic design standards during grading and building pad construction would reduce the hazards from seismic hazards and ground shaking to a less than significant level.

Overall, the GSI Soils, Inc.'s Geotechnical Investigation provides recommendations for appropriate foundation design and incorporation of the design recommendations with proper engineering measures, in accordance with existing state and County regulations. Compliance with the aforementioned requirements would undergo standard County building permit review and inspection process, thereby reducing geologic hazards and risks. As such, implementation of **MM GEO-1** would further ensure that all building design and structural design recommendations within the Geotechnical Investigation and Geotechnical Input peer review are incorporated into the project to reduce potentially significant impacts related to seismic hazards (Class II impact).

Mitigation Measures

Refer to **MM GEO-1** above.

Significance After Mitigation

Impacts would be less than significant with mitigation (Class II impact).

Impact GEO-3: Liquefaction

Soils encountered during GSI's Geotechnical Investigation borings on the project site were found to have very dense sandy layers. In general, dense to very dense sands were found below a depth of 5 feet to 20 feet below grade (GSI Soils, Inc. 2015). In addition, near refusal to the auger drilling was encountered at depths varying from 5 to 20 feet. In this area, GSI expected similar very dense sand materials to be found to a depth of 50 feet and anticipated no groundwater to be found to this depth. This information provided by the Geotechnical Investigation indicates that the potential for liquefaction at the project site would be in the negligible category (GSI Soils, Inc. 2015). Restoration at the off-site mitigation parcel would be temporary and not include grading or construction of structures or infrastructure that would expose people to the risk of liquefaction.

Based on the encountered soils at the project site, the absence of groundwater, and dense to very dense sand consistency located up to 50 feet below existing grade, impacts associated with liquefaction would have a very low to low risk and would be less than significant (Fugro 2016). Furthermore, compliance with the CBC would reduce potential risks associated with liquefaction and includes specific requirements to address such hazards. Therefore, impacts from liquefaction would be less than significant (Class III impact).

Mitigation Measures

Impacts are less than significant. No mitigation measures are required.

Significance After Mitigation

Impacts would be less than significant (Class III impact).

Impact GEO-4: Lateral Spreading and Expansive Soils

Lateral spreading is a phenomenon in which surficial soil displaces along a shear zone that has formed within an underlying liquefied layer. Upon reaching mobilization, the surficial blocks are transported downslope or in the direction of a free face by earthquake and gravitational forces (Fugro 2016).

The Geotechnical Input (Fugro 2016) concludes that the potential for lateral displacements from strong ground shaking would be minimal due to the presence of dense to very dense soils at depth and the absence of liquefiable soil materials to an interpreted depth of 50 feet below the ground surface. Based on data provided in the Geotechnical Investigation, lateral spreading does not represent a significant hazard to the proposed development (GSI Soils, Inc. 2015). Temporary restoration at the off-site mitigation parcel would not include grading or construction of structures or infrastructure that would be subject to lateral spreading. In addition, the Geotechnical Investigation reports the expansion index testing of project on-site soils as indicating no expansion potential. However, clayey sand was encountered in local areas at the site (GSI Soils, Inc. 2015). Potentially expansive soils should be removed from pavement or structural areas during grading, if encountered.

Compliance and adherence to state and County building and grading codes would minimize such risks. As such, impacts would be less than significant (Class III impact).

Mitigation Measures

Impacts are less than significant. No mitigation measures are required.

Significance after Mitigation

Impacts would be less than significant (Class III impact).

4.5.2.3 Cumulative Impacts

The proposed project, in conjunction with other cumulative projects proposed in Vandenberg Village~~, and~~ the unincorporated County area, and City of Lompoc would expose additional people and property to seismic and geologic hazards that exist in the region. The proposed project's off-site restoration mitigation occurring on APN 097-371-067 would not be expected to require grading or construction that would expose life or property to the documented seismic or geologic hazards of this area. The severity of geologic hazards for individual projects would depend upon location, type, and size of development and the specific hazards associated with individual sites. Any specific geologic hazards associated with each individual site would be limited to that site without affecting other areas. In addition, standard County Code regulations and policies, including compliance with CBC requirements, would be expected to reduce seismic and geologic hazards to acceptable levels. Future projects with potential seismic and geologic hazards would be addressed on a case-by-case basis and be subject to individual California Environmental Quality Act (CEQA) review. Future projects would also be required to adhere and comply with County Code and CBC building and construction regulations to prevent potential significant impacts related to geologic hazards. Therefore, cumulative geologic hazard impacts are not cumulatively considerable and would be less than significant (Class III impact).

4.6 Greenhouse Gas

This section evaluates the potential for the proposed project to result in adverse impacts to global climate change. The project's potential to generate greenhouse gas (GHG) emissions that impact global climate change are assessed along with the project's potential to conflict with local, regional, or state plans to reduce GHG emissions. It is based on the GHG emissions modeling and analysis completed specifically for the project. The GHG emissions modeling results are included in Appendix E-3.

4.6.1 Setting

Climate change is not restricted to a single geographic area, collective human actions taking place throughout the world contribute to climate change and effects are global. Although climate change is global, efforts to mitigate climate change are primarily implemented by local jurisdictions. As such, the setting includes a discussion of global mechanisms and effects, as well as local emissions.

4.6.1.1 The Greenhouse Effect, Greenhouse Gases, and Global Climate Change

The greenhouse effect is a natural process that contributes to regulating the earth's temperature. Without it, the temperature of the earth would be about 0 degree Fahrenheit [°F] (−18 degrees Celsius [°C]) instead of its present 57°F (14°C). The greenhouse effect traps heat in the troposphere through a threefold process as follows: short-wave radiation emitted by the sun is absorbed by the earth; the earth emits a portion of this energy in the form of long-wave radiation; and gases in the upper atmosphere absorb this long-wave radiation and emit it into space and toward the earth. This "trapping" of the long-wave (thermal) radiation emitted back toward the earth is the underlying process of the greenhouse effect.

Gases that contribute to the greenhouse effect by trapping heat in the atmosphere are often called "greenhouse gases." There are numerous GHGs, both naturally occurring and manmade. Principal GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), ozone (O_3), and water vapor (H_2O). Some GHGs, such as CO_2, CH_4, and N_2O, occur naturally and are emitted to the atmosphere through natural processes and human activities. The effect each GHG has on climate change is measured as a combination of the mass of its emissions and the potential of a gas to trap heat in the atmosphere, known as its global warming potential (GWP). GWP varies between GHGs; for example, the GWP of CO_2 is 1, the GWP of CH_4 is 21, and the GWP of N_2O is 310. Total effect of GHG emissions on the greenhouse effect is expressed as a function of how much warming would be caused by

the same mass of CO_2; thus, GHG emissions are typically measured in terms of metric tons (MT) of CO_2 equivalent (CO_2E).

The earth's climate is in a state of constant flux with periodic warming and cooling cycles. Global climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind, lasting for an extended period (decades or longer). Since the beginning of the Industrial Revolution around 1750, the average temperature of the earth has been increasing at a rate that is faster than can be explained by natural climate cycles. Because recently observed increased concentrations of GHGs in the atmosphere are believed to be largely due to human activity taking place throughout the world, the current cycle of "global warming" is quintessentially a global or cumulative issue.

4.6.1.2 Implications of Climate Change

The primary effect of global climate change has been a rise in average global tropospheric temperature of 0.2°C per decade, determined from meteorological measurements worldwide between 1990 and 2005. Climate change modeling using emission rates from the year 2000 shows that further warming will occur, which will induce further changes in the global climate system during the current century. The increase in the earth's temperature is expected to have wide-ranging effects on the environment. In California, the impacts in California of global warming are anticipated to include loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (California Energy Commission [CEC] 2016).

4.6.1.3 Contributions to Greenhouse Gas Emissions

a. Nationwide Emissions

In 2013, the United States produced 6,673 million metric tons (MMT) of CO_2E (U.S. Environmental Protection Agency [U.S. EPA] 2015). The primary GHG emitted by human activities in the United States was CO_2, representing 82.5 percent of total GHG emissions. The largest source of CO_2, and of overall GHG emissions, was fossil-fuel combustion, which accounted for approximately 94 percent of the CO_2 emissions. Since 1990, emissions have increased at an average annual rate of 0.3 percent. This average rate of increase includes notable emissions reductions corresponding to the economic downturn in 2008 and 2009.

b. Statewide Emissions

In 2007, the California Air Resources Board (CARB) began inventorying past emissions and periodically performing statewide GHG inventories. State GHG inventories are divided into nine broad sectors of economic activity: agriculture, commercial, electricity generation, forestry, high GWP emitters, industrial, recycling and waste, residential, and transportation. Table 4.6-1 shows the estimated statewide GHG emissions for the years 1990, 2005, and 2013 in terms of MMT of CO_2E.

Table 4.6-1
California GHG Emissions by Sector in 1990, 2005, and 2013

Sector	1990 Emissions in MMT CO_2E (% total)[1,2]	2005 Emissions in MMT CO_2E (% total)[2,3,4]	2013 Emissions in MMT CO_2E (% total)[2,3,4]
Agriculture	23.4 (5%)	35.08 (7%)	36.21 (8%)
Commercial	14.4 (3%)	14.27 (3%)	14.73 (3%)
Electricity Generation	110.6 (26%)	107.85 (22%)	90.45 (20%)
High GWP	--	10.34 (2%)	18.50 (4%)
Industrial	103.0 (24%)	96.01 (20%)	92.68 (20%)
Recycling and Waste	--	7.93 (2%)	8.87 (2%)
Residential	29.7 (7%)	27.98 (6%)	28.81 (6%)
Transportation	150.7 (35%)	188.76 (39%)	169.02 (37%)
Forestry (Net CO_2 flux)	-6.7	--	--
Not Specified	1.3	--	--
TOTAL	**426.6**	**488.23**	**459.28**

SOURCE: California Air Resources Board (CARB) 2007 and 2015b.
[1]1990 data was retrieved from the CARB 2007 source.
[2]Quantities and percentages may not total properly due to rounding.
[3]2005 and 2013 data was retrieved from the CARB 2015b source.
[4]Reported emissions for key sectors. The inventory totals for 2005 and 2012 did not include Forestry or Not Specified sources.

As shown in Table 4.6-1, statewide GHG source emissions totaled 426 MMT CO_2E in 1990, 488 MMT CO_2E in 2005, and 459 MMT CO_2E in 2013. Many factors affect year-to-year changes in GHG emissions, including economic activity, demographic influences, environmental conditions such as drought, and the impact of regulatory efforts to control GHG emissions. However, transportation-related emissions consistently contribute the most GHG emissions, followed by electricity generation and industrial emissions.

c. Regional Emissions

In 2012, Santa Barbara County (County) completed a GHG emissions inventory for the unincorporated County using 2007 as a base year. The inventory was subsequently updated in 2014. Table 4.6-2 summarizes the 2007 base year emissions by sector.

Table 4.6-2
2007 Unincorporated County GHG Emissions by Sector

Sector	Emissions (MT CO_2E)	Emissions (MMT CO_2E)**	Percentage of Total
Transportation	521,160	0.52	43.69%
Residential Energy	195,490	0.19	16.39%
Commercial Energy	121,580	0.12	10.19%
Off-Road*	102,140	0.10	8.56%
Solid Waste	91,920	0.09	7.71%
Agriculture	62,110	0.06	5.21%
Water and Wastewater	49,520	0.05	4.15%
Industrial Energy	46,780	0.05	3.92%
Aircraft	2,270	0.002	0.19%
TOTAL	**1,192,980**	**1.19**	**100**

SOURCE: County of Santa Barbara 2015b.
*The Off-Road Sector includes emissions from agricultural, construction, and industrial equipment.
**Provided for ease of comparison with the statewide emissions listed in Table 4.6-1.

Similar to statewide emissions, emissions in unincorporated Santa Barbara County are driven primarily by transportation and energy use emissions. Transportation sources and agricultural sources (including emissions accounted for in the Agriculture Sector and emissions from agricultural equipment accounted for in the Off-Road Sector) comprise a greater portion of the Santa Barbara inventory than the statewide inventory, whereas industrial emissions comprise a much lesser portion.

d. Project Site Emissions

The project site is currently undeveloped, thus it does not include anthropogenic sources of GHG emissions. Based on data from the Intergovernmental Panel on Climate Change (IPCC), the project site (16.88 acres of forest lands with shrub vegetation) is estimated to provide approximately 241 MT CO_2E of carbon sequestration annually (14.3 MT CO_2E per acre; IPCC 2006). As vegetation is well established, the annual change in carbon sequestration is estimated to be near net-zero.

4.6.1.4 Regulatory Setting

a. State Regulations

The State of California has a number of policies and regulations that are either directly or indirectly related to GHG emissions. Only those most relevant to local land use are included in this discussion.

Executive Orders - Statewide GHG Emission Targets

S-3-05

This executive order (EO) established the following GHG emission reduction targets for the State of California:

- by 2010, reduce GHG emissions to 2000 levels;
- by 2020, reduce GHG emissions to 1990 levels; and
- by 2050, reduce GHG emissions to 80 percent below 1990 levels.

This EO also directs the secretary of the California EPA to oversee the efforts made to reach these targets, and to prepare biannual reports on the progress made toward meeting the targets and on the impacts to California related to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry. With regard to impacts, the report shall also prepare and report on mitigation and adaptation plans to combat the impacts. The first Climate Action Team Assessment Report was produced in March 2006, and has been updated every two years.

B-30-15

This EO, issued on April 29, 2015, establishes an interim GHG emission reduction goal for the state of California to reduce GHG emissions 40 percent below 1990 levels by 2030. This EO also directed all state agencies with jurisdiction over GHG-emitting sources to implement measures designed to achieve the new interim 2030 goal, as well as the pre-existing, long-term 2050 goal identified in EO S-3-05. Additionally, this EO directed CARB to update its Climate Change Scoping Plan to address the 2030 goal. CARB is expected to develop statewide inventory projection data for 2030, as well as commence its efforts to identify reduction strategies capable of securing emission reductions that allow for achievement of the EO's new interim goal.

Assembly Bill 32—California Global Warming Solutions Act of 2006

In response to EO S-3-05, the California Legislature passed Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006, and thereby enacted Sections 38500–38599 of the California Health and Safety Code. The heart of AB 32 is its requirement that CARB establish an emissions cap and adopt rules and regulations that would reduce GHG emissions to 1990 levels by 2020. AB 32 also required CARB to adopt a plan by January 1, 2009, indicating how emission reductions would be achieved from significant GHG sources via regulations, market mechanisms, and other actions.

Climate Change Scoping Plan

As directed by the California Global Warming Solutions Act of 2006, in 2008, CARB adopted the Climate Change Scoping Plan: A Framework for Change (Original Scoping Plan). CARB has periodically revised GHG emissions forecasts and prepared supplemental revisions to the initial Scoping Plan. Most recently, in 2014, CARB adopted the

comprehensive First Update to the Climate Change Scoping Plan: Building on the Framework (First Update to the Scoping Plan) (CARB 2014). The First Update to the Scoping Plan ". . . highlights California's success to date in reducing its GHG emissions and lays the foundation for establishing a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050" (CARB 2014). The First Update to the Scoping Plan found that California is on track to meet the 2020 emissions reduction mandate established by AB 32, and noted that California could reduce emissions further by 2030 to levels squarely in line with those needed to stay on track to reduce emissions to 80 percent below 1990 levels by 2050, if the State realizes the expected benefits of existing policy goals (CARB 2014).

Senate Bill 375—Regional Emissions Targets

Senate Bill (SB) 375 was signed into law in September 2008 and requires CARB to set regional targets for reducing passenger vehicle GHG emissions in accordance with the Scoping Plan. The purpose of SB 375 is to align regional transportation planning efforts, regional GHG reduction targets, and fair-share housing allocations under state housing law. SB 375 requires Metropolitan Planning Organizations to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy to address GHG reduction targets from cars and light-duty trucks in the context of that Metropolitan Planning Organization's Regional Transportation Plan (RTP).

The Santa Barbara County Association of Governments (SBCAG) is the County region's Metropolitan Planning Organization. The SBCAG Board adopted the 2040 Regional Transportation Plan and Sustainable Communities Strategy (RTP-SCS) in August 2013. The CARB targets for SBCAG call for per capita GHG emissions from automobiles and light duty trucks to remain constant at 2005 levels (expressed as a zero percent increase by 2020 and 2035; SBCAG 2013). The reduction targets are to be updated every eight years, but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. The 2040 RTP-SCS plans to exceed regional emissions targets by achieving reductions of 10.5 percent per capita in 2020 and 15.4 percent per capita in 2035 (SBCAG 2013).

California Building Standards Code (Title 24)

The California Code of Regulations (CCR), Title 24, is referred to as the California Building Code, or CBC. It consists of a compilation of several distinct standards and codes related to building construction including, plumbing, electrical, interior acoustics, energy efficiency, handicap accessibility, and so on. Of particular relevance to GHG reductions are the CBC's energy efficiency and green building standards.

Part 6 – California Energy Code

The CCR, Title 24, Part 6 is the Energy Efficiency Standards or California Energy Code. This code, originally enacted in 1978, establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California's energy consumption. The Energy Code is updated periodically to incorporate and consider new energy-efficiency

technologies and methodologies as they become available. New construction and major renovations must demonstrate their compliance with the current Energy Code through submission and approval of a Title 24 Compliance Report to the local building permit review authority and the CEC. The 2008 update to the Energy Code, which became effective January 1, 2010, was developed in large part in response to AB 32. The 2008 Energy Code required energy savings of at least 21 percent above the former 2005 Energy Code, which is relevant as the original GHG inventory for the state was based on the 2005 Energy Code.

The current version of the Energy Code, known as the 2013 Energy Code, became effective July 1, 2014. The 2013 Energy Code provides mandatory energy-efficiency measures as well as voluntary tiers for increased energy efficiency. Based on an impact analysis prepared by the CEC for single-family residences, the 2013 Energy Code has been estimated to achieve a 36.4 percent increase in electricity efficiencies and a 6.5 percent increase in natural gas efficiencies over the 2008 Energy Code (CEC 2013). The same report estimates increased efficiencies for multi-family residences of 23.3 percent for electricity use and 3.8 percent for natural gas use, and 21.8 percent increased efficiency for electricity use and 16.8 percent increased efficiency for natural gas use for non-residential buildings.

The next update to the Energy Code (2016) became~~will become~~ effective January 1, 2017. According to the CEC's frequently asked questions on the 2016 Energy Code, they indicate the 2016 standards will be 28 percent more efficient than the current 2013 standards (CEC 2016).

Part 11 – California Green Building Standards Code

The California Green Building Standards Code, referred to as CalGreen, was added to Title 24 as Part 11 first in 2009 as a voluntary code, which then became mandatory effective January 1, 2011 (as part of the 2010 CBC). The ~~2013~~ 2016 CalGreen institutes mandatory minimum environmental performance standards for all ground-up new construction of non-residential and residential structures. It also includes voluntary tiers (I and II) with stricter environmental performance standards for these same categories of residential and non-residential buildings. Local jurisdictions must enforce the minimum mandatory Green Building Standards and may adopt additional amendments for stricter requirements.

The mandatory standards require:

- 20 percent mandatory reduction in indoor water use relative to specified baseline levels;
- 50 percent construction/demolition waste diverted from landfills;
- Infrastructure requirements for electric vehicle charging stations;
- Mandatory inspections of energy systems to ensure optimal working efficiency; and
- Requirements for low-pollutant emitting exterior and interior finish materials such as paints, carpets, vinyl flooring and particleboards.

The voluntary standards require:

- Tier I—15 percent improvement in energy requirements, stricter water conservation requirements for specific fixtures, 65 percent reduction in construction waste, 10 percent recycled content, 20 percent permeable paving, 20 percent cement reduction, cool/solar reflective roof; and

- Tier II—30 percent improvement in energy requirements, stricter water conservation requirements for specific fixtures, 75 percent reduction in construction waste, 15 percent recycled content, 30 percent permeable paving and 30 percent cement reduction, cool/solar reflective roof.

Similar to the reporting procedure for demonstrating Energy Code compliance in new buildings and major renovations, compliance with the CalGreen water reduction requirements must be demonstrated through completion of water use reporting forms for new low-rise residential and non-residential buildings. The water use compliance form must demonstrate a 20 percent reduction in indoor water use by either showing a 20 percent reduction in the overall baseline water use as identified in CalGreen or a reduced per plumbing fixture water use rate.

b. Local

County of Santa Barbara Energy and Climate Action Plan

The County Energy and Climate Action Plan (ECAP) was adopted in May 2015. The ECAP is intended to outline coordinated steps to reduce the County's GHG emissions by quantifying current emissions (see Section 4.6.1.3.c., Regional Emissions), forecasting future emissions, and assessing the feasibility of reduction measures.

The ECAP forecasted emissions for the years 2020 and 2035. The baseline forecasts for 2020 were used as a starting point for the County to determine the level of emissions reductions needed to reach a reduction target. After accounting for the reductions from state policies and plans it was determined that the County needs to reduce emissions by approximately 15 percent below the 2007 baseline levels (as the ECAP shows that state policies and plans would reduce emissions to approximately the baseline level). Therefore, the GHG reduction target is 15 percent below the 2007 baseline level.

To achieve the GHG reduction target, the ECAP proposes GHG measures including promoting infill development, transit-oriented development, and supporting SBCAG's SCS policies to reduce GHG emissions from the transportation sector. The objective of the ECAP is to outline a clear path to successfully implementing measures that will achieve the County's GHG reduction targets, including the following specific objectives:

- Create a GHG emissions baseline from which to benchmark GHG emissions reductions.
- Reduce the County's GHG emissions by 15 percent from baseline emissions by 2020 to be consistent with the reduction target of AB 32.

- Increase the community's resilience to the effects of climate change.
- Provide a policy document with specific implementation measures to be considered as part of the planning process for future development projects.
- Provide a list of specific actions that will reduce GHG emissions, with the highest priority given to actions that provide the greatest reduction in GHG emissions and benefit the community at the least cost.
- Identify energy efficiency goals and targets.
- Create an energy efficiency strategy to meet the County's energy reduction goals.
- Implement programs to comply with the State of California's GHG reduction and long-term energy efficiency goals.
- Establish a qualified reduction plan from which future development within the unincorporated County can tier and thereby streamline the environmental analysis necessary under the California Environmental Quality Act (CEQA), as identified in CEQA Guidelines Section 15183.5(b).

4.6.2 Impact Analysis

4.6.2.1 Thresholds of Significance

a. CEQA Guidelines Appendix G

CEQA Guidelines Appendix G provides sample criteria for environmental review of projects. As stated in the Guidelines, these questions are "intended to encourage thoughtful assessment of impacts and do not necessarily represent thresholds of significance" (Title 14, Division 6, Chapter 3 Guidelines for Implementation of the CEQA, Appendix G, Environmental Checklist Form). Lead agencies may tailor the criteria to address individual agency needs or project circumstances. Sample criteria indicate projects may result in significant impact to climate change if the project would:

- Generate [GHG] emissions, either directly or indirectly, that may have a significant impact on the environment; and/or

- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of [GHGs].

The CEQA Guidelines encourages each lead agency to adopt their own GHG thresholds of significance. When adopting these thresholds, the amended guidelines allow lead agencies to consider thresholds of significance adopted or recommended by other public agencies, or recommended by experts, provided that the thresholds are supported by substantial evidence, and/or to develop their own significance threshold.

b. County Significance Thresholds

The County's Environmental Thresholds and Guidelines Manual identifies significance thresholds for GHG emissions only from industrial projects. The County guidelines state that industrial significance thresholds are not applicable to residential or commercial

development projects. As such, the County has not adopted its own CEQA significance thresholds for GHG emissions from non-industrial sources and looks to other public agencies for appropriate numerical significance thresholds.

There has been recent debate about the suitability of various GHG thresholds for development projects. Commonly suggested approaches include bright-line (numeric) thresholds, business as usual (BAU) thresholds, or various performance thresholds such as per capita or per service population thresholds. With few exceptions, bright-line thresholds are more stringent and rigid, while other thresholds may allow for a wider range of interpretation.

The project analysis follows the significance thresholds of the San Luis Obispo Air Pollution Control District (SLOAPCD) Greenhouse Gas Thresholds, as adopted in April 2012 (SLOAPCD 2012). The SLOAPCD threshold was developed to help reach the AB 32 emission reduction targets by attributing an appropriate share of the GHG reductions needed from new land use development projects subject to CEQA. Land use sector projects that comply with the GHG thresholds would not be "cumulatively considerable" because they would be helping to solve the cumulative problem as a part of the AB 32 process. Such small sources would not significantly add to climate change and would not hinder the state's ability to reach the AB 32 goal, even when considered cumulatively. Therefore, a project which falls below the quantitative GHG emissions annual threshold of 1,150 MT CO_2E is consistent with the reduction goals of AB 32 and is presumed to have a less than significant GHG impact. SLOAPCD thresholds of significance for GHG Emissions are stated in Tables 4.6-3 and 4.6-4 below.

Table 4.6-3
Thresholds of Significance for Construction Emissions

Pollutant	Threshold[1]		
	Daily	Quarterly Tier 1	Quarterly Tier 2
ROG + NO_X (combined)	137 lbs	2.5 tons	6.3 tons
Diesel Particulate Matter (DPM)	7 lbs	0.13 tons	0.32 tons
Fugitive Particulate Matter (PM_{10}), Dust[2]		2.5 tons	
Greenhouse Gases (CO_2, CH_4, N_2O, HFC, CFC, F_6S)	**Amortized and Combined with Operational Emissions (see Table 4.6-4)**		

SOURCE: SLOAPCD 2012.
1. Daily and quarterly emission thresholds are based on the California Health & Safety Code and the CARB Carl Moyer Guidelines.
2. Any project with a grading area greater than 4.0 acres of worked area can exceed the 2.5 ton PM_{10} quarterly threshold.

Table 4.6-4
SLOAPCD GHG Significance Determination Criteria

GHG Emission Source Category	Operational Emissions
Residential and Commercial Projects	Compliance with Qualified GHG Reduction Strategy OR Bright-Line Threshold of 1,150 MT CO_2E/yr OR Efficiency Threshold of 4.9 MT CO_2E/SP*/yr

SOURCE: SLOAPCD 2012.
*SP = Service Population (residents + employees) For projects other than stationary sources, compliance with either a Qualified Greenhouse Gas Reduction Strategy, or with the Bright-Line (1,150 CO_2E/ yr.) or Efficiency Threshold (4.9 MT CO_2E/SP/yr.) would result in an insignificant determination, and in compliance with the goals of AB 32. The construction emissions of projects will be amortized over the life of a project and added to the operational emissions. Emissions from construction-only projects (e.g. roadways, pipelines, etc.) will be amortized over the life of the project and compared to an adopted GHG Reduction Strategy or the Bright-Line Threshold only.

Additionally, focused GHG analysis of development projects that are in unincorporated areas may be streamlined based on the ECAP's programmatic review. If projects are consistent with the assumptions used to develop the ECAP, project environmental review may tier from and/or incorporate by reference the ECAP's programmatic review. Consistency with the ECAP may be demonstrated using the ECAP Consistency Checklist. Projects that would not be consistent with the assumptions of the ECAP would warrant alternative GHG analysis methods on a case-by-case basis.

4.6.2.2 Methodology

The project would result in GHG emissions associated with construction and operation. Project GHG emissions were calculated following methodologies discussed below.

a. Construction Emissions

Construction-related activities are temporary, short-term sources of GHG emissions. Sources of construction-related emissions include:

- Equipment exhaust;
- Vehicle trips by workers, delivery trucks, and material-hauling trucks;
- Construction-related power demand; and
- Loss of carbon sequestration associated with vegetation clearing.

GHG emissions associated with each phase of project construction are calculated by multiplying the total fuel consumed by the construction equipment and worker trips by applicable emission factors. Estimates of the required construction activities and equipment are based on surveys performed by the South Coast Air Quality Management District (SCAQMD) and the Sacramento Metropolitan Air Quality Management District (SMAQMD) of typical construction projects. The analysis is scaled based on the project's size, schedule, and equipment needs.

Project construction is anticipated to commence in 2017 and would last approximately 17 months. Construction phases would include site preparation, grading, building construction, and paving. Site preparation would include limited clearing of vegetation and removal of stones prior to grading and is anticipated to take approximately 2 weeks. Grading is anticipated to take approximately 6 weeks and would include roughly 23,100~~5,700~~ cubic yards of cut soil and 20,100~~2,600~~ cubic yards of fill soil, necessitating net export of 3,000~~3,100~~ cubic yards of soil (see Table 2-4). The grading amounts include 29 lots and all phases of infrastructure. Building construction is anticipated to take approximately 14 months. Paving interior roads would take approximately 4 weeks. Application of architectural coatings, which is often considered a separate construction phase, was conservatively modeled as occurring concurrently with the final 4 weeks of building construction. Construction phasing, equipment use, and construction-related vehicle trips were estimated based on surveys performed by the SCAQMD and the SMAQMD and take into account both the proposed land use (single-family residential) and the size of the project.

As discussed in Section 4.6.1.3, based on data from the IPCC the project site (16.88 acres of forest lands with shrub vegetation) is estimated to provide approximately 241 MT CO_2E of carbon sequestration annually. During site clearing, approximately 105 MT CO_2E would be released as a result of vegetation clearing.

Construction emissions associated with building construction are calculated for each year of construction activity based on the construction equipment profile and other factors determined as needed to complete all phases of construction by the target completion year. Total project construction GHG emissions are amortized over 30 years, the approximately lifetime of a project, and added to operational emissions in order to provide the equivalent annual emission rate over the lifetime of a project (SCAQMD 2009). It was calculated that project construction, including the 105 MT CO_2E that would be released as a result of vegetation clearing would result in a total of 626 MT CO_2E. These short-term emissions were amortized over 30 years and added to the long-term operational emissions (calculated as described below). When amortized over 30 years, construction emissions would be 21 MT CO_2E annually.

b. Operational Emissions

Operational activities are long-term sources of GHG emissions that occur throughout the life of a project. Sources of operational emissions include:

- Mobile (on-road vehicle use)
- Energy Use (electricity and natural gas)
- Water Use (supply, distribution, and treatment water and wastewater)
- Solid waste (disposal)
- Area (fireplaces, consumer products, landscaping equipment, architectural coatings)

The California Emissions Estimator Model (CalEEMod) includes algorithms for calculating emissions from each operational source and default assumptions based on regional data such as typical trip distances, vehicle types, fireplace use, water use, and solid waste

generation. Project-specific data was used to refine GHG emissions estimates where available. Model inputs and methodology used in the GHG analysis is described below.

Mobile emissions are generated by the combustion of fossil fuels in vehicle engines. Mobile emissions are calculated based on the vehicle type and the trip rate for each land use. Project trip generation obtained from the project Traffic and Circulation Study (Penfield & Smith 2015) would be 276 trips per day. Vehicle emission factors and fleet mix were based on regional averages from CARB's Emission Factors 2011 (EMFAC2011) model. Trip lengths were based on reported average trip lengths in Santa Barbara County.

Energy use emissions are typically generated directly by combustion of natural gas for space and water heating and indirectly by the generation of electricity from fossil fuels off-site in power plants. The project includes natural gas and electric power connections. Proposed residences would comply with Title 24 of the California Building Code, Part 6, also known as the Energy Code. Energy use emissions were revised to account for a 36.4 percent reduction in electricity use over the 2008 Energy Code for single-family residential structures and a 6.5 percent reduction in natural gas use (CEC 2013). The electric provider for the project would be Pacific Gas & Electric (PG&E) and the natural gas provider would be Southern California Gas Company (SoCalGas). The energy intensity factor (ratio of GHG emissions to electricity generated) for PG&E is anticipated to decline as PG&E increase renewable sources of energy in accordance with Renewable Portfolios Standard (RPS) goals. This analysis conservatively uses the most recently reported PG&E energy intensity factors rather than accounting for anticipated reductions from PG&E compliance with 2020 RPS goals.

Water use results in indirect emissions associated from the energy used to supply, distribute, and treat water and wastewater. In addition to the indirect emissions associated with energy use, wastewater treatment can directly emit lesser quantities of both CH_4 and N_2O. Project water use is modeled based on historical averages and accounts for water-efficiency measures required by the 2013 CalGreen, which include a 20 percent reduction in indoor water use when compared to previous building code standards.

Solid waste emissions result from the anaerobic decomposition of organic waste in landfills. Solid waste and area emissions were calculated based on regional waste disposal rates identified by California Department of Resources Recycling and Recovery.

Area emissions include emissions from the use of fireplaces and landscaping equipment. Area sources were calculated based on regional use factors.

c. Off-site Oak and Chaparral Restoration

Off-site mitigation on APN 097-371-067 would include temporary sources of GHG emissions including commute and hauling trips; the off-site mitigation would not require the use of heavy-duty construction equipment. Based on similar scale oak tree and chaparral restorations, it is expected that the initial restoration effort would last approximately one year and would employ a crew of 6 to 8 persons per day. Worker commute was modeled assuming an average of seven roundtrips per day and hauling was modeled assuming one

hauling roundtrip per day. Depending on the success of the initial restoration effort, subsequent monitoring and routine maintenance are expected to last another two to five years and would employ a crew of up to three persons. Although monitoring and maintenance would employ a crew of up to three persons, trips often occur as infrequently as once a week or once a month. Worker commute was modeled assuming an average of one roundtrip per day.

4.6.2.3 Project Impacts and Mitigation Measures

Impact GHG-1: GHG Emissions

Project GHG emissions resulting from construction and operation of the project were calculated as described in Section 4.6.2.2. Table 4.6-5 below displays the total annual GHG emission levels. The CalEEMod output files for construction and operation emissions are contained in Appendix E-3.

Table 4.6-5
Project Site Annual GHG Emissions

Emission Source/Pollutant	Total Emissions (MT CO_2E)
Vehicles	270
Energy Use	189
Area Sources	>1
Water Use	4
Solid Waste Disposal	15
Construction	21
Total Project Emissions	**399**

SOURCE: Appendix E-3
NOTE: ">1" denotes any positive value that is less than 0.5 MT CO_2E. Totals may vary due to independent rounding.

As shown in Table 4.6-5, the construction and operation of the project would result in the annual emission of 399 MT CO_2E. This is well below the County recommended SLOAPCD bright-line threshold of 1,150 MT CO_2E. As discussed in Section 4.6.2.2(c), off-site mitigation on APN 097-371-067 would include temporary sources of GHG emissions including commute and hauling trips for up to six years. The initial restoration effort would result in approximately 10 MT CO_2E and subsequent efforts monitoring and routine maintenance would result in approximately 1.3 MT CO_2E per year. Overall restoration would result in the emission of approximately 17 MT CO_2E. Project construction, operation and restoration efforts would result in emissions that are well below the County recommended SLOAPCD bright-line threshold of 1,150 MT CO_2E. Therefore, the project and off-site mitigation plan would not generate GHG emissions that may have a significant impact on the environment. Impacts would be less than significant (Class III impact).

Mitigation Measures

Impacts would be less than significant and no mitigation is required.

Impact GHG-2: Consistency with GHG Plans, Policies, and Regulations

EO S-3-05 established GHG emission reduction targets for the state, and AB 32 launched the CARB Climate Change Scoping Plan that outlined the reduction measures needed to reach the 2020 target. As discussed in Section 3.2.3, Local Climate Change Regulations, local plans to reduce GHG emissions include the County's ECAP, which is intended to outline coordinated steps to reduce the County's GHG emissions and achieve compliance with AB 32 and identifies a communitywide reduction target of 15 percent below 2007 levels by 2020.

As discussed under Impact GHG-1, the project emissions in 2020 are below the SLOAPCD 1,150 MT CO_2E bright-line threshold. Therefore, the project GHG emissions would have a less than significant impact on achieving the 2020 reduction targets identified by AB 32.

To assist in making determinations if proposed development projects would be consistent with the County' ECAP, a Planner's Step-by-Step Guide for Evaluating Greenhouse Gas Emissions was prepared (Santa Barbara County 2016b). The Guide established the following five steps that can be used to evaluate a project's consistency with the ECAP:

- Step 1: Identify CEQA Exemptions.
- Step 2: Determine GHG Emissions. Determine whether the proposed project would generate GHG emissions, either directly or indirectly, as compared to the existing environmental setting.
- Step 3: Determine Significance of GHG Emissions. Were the proposed project's expected GHG emissions excluded from the ECAP's forecasted 2020 emissions?
- Step 4: Is the proposed project an industrial stationary source permitted by the Santa Barbara County Energy Division?
- Step 5: If the proposed project, other than an industrial stationary source, was not included in the ECAP's forecasted 2020 emissions, does it exceed a threshold of significance determined by the County to be applicable to the project?

The proposed project is not exempt from the requirements of CEQA (Step 1) and would result in direct and indirect GHG emissions (Step 2). The proposed project includes a request to change to the project site's zoning classification from RR-10 to DR-1.8, which would result in an increase the number of residences that could potentially be developed on the project site. Therefore, the project's expected GHG emissions were excluded from the ECAP's forecasted 2020 emissions (Step 3). The proposed project is not an industrial stationary source that would be permitted by the Santa Barbara County Energy Division and is not subject to adopted emissions thresholds for such sources (Step 4). As described above in the analysis provided for Impact GHG-1, the project's estimated GHG emissions of approximately 399 MT CO_2E would be substantially below the numeric threshold of 1,150 MT CO_2E. Therefore, the project would not exceed a threshold of significance determined by the County to be applicable to the project (Step 5) and would be consistent with the County's ECAP.

As discussed in Section 4.6.1.2, EO B-30-15 establishes an interim GHG emission reduction goal for the state of California by 2030 of 40 percent below 1990 levels. As discussed above, EO B-30-15's goal to reduce statewide GHG emissions to 40 percent below 1990 levels by 2030 has not been codified by the legislature. Nonetheless, because of the ongoing controversy regarding the application of EOs in the context of CEQA and the strong interest in California's post-2020 climate policy, this analysis renders a determination as to whether the project would conflict with or impede substantial progress towards the statewide reduction goals established by EO B-30-15 for 2030 and by EO S-3-05 for 2050.

Project emissions would continue to decline as a result of federal, state and local implementation measures such as increased Federal and State vehicle efficiency standards, PG&E's increase renewable sources of energy in accordance with RPS goals. Based on currently available models and regulatory forecasting, project emissions would continue to decline from 2030 through at least 2050. Given the reasonably anticipated decline in project emissions once fully constructed and operational, the project is in line with the GHG reductions needed to achieve the EOs' interim (2030) and horizon-year (2050) goals. The project would not impede substantial progress toward long-term GHG goals. As such, the project's impacts with respect to EO B-30-15 and EO S-3-05 would be less than significant (Class III impact).

Mitigation Measures

Impacts would be less than significant and no mitigation is required.

4.6.2.4 Cumulative Impacts

Because recently observed increased concentrations of GHGs in the atmosphere are believed to be largely due to human activity taking place throughout the world, the current cycle of "global warming" is quintessentially a global or cumulative issue. The assessment of project GHG emissions in Impact GHG-1 is a cumulative emissions analysis. As concluded above, impacts would be less than significant (Class III impact).

Mitigation Measures

Cumulative impacts would be less than significant and no mitigation is required.

4.7 Hydrology and Water Quality

This section assesses potential impacts to hydrology and water resources associated with the Oak Hills Estate project proposal in the County of Santa Barbara (County). This discussion is based on the Project Drainage – Preliminary, Prepared for the Oak Hills Estate (RRM Design Group, July 2015) (Appendix G-1), and the Peer Review Drainage Report for the Oak Hills Estates, Vandenberg Village (Rick Engineering 2016) (Appendix G-2).

4.7.1 Setting

4.7.1.1 Project Site Setting

The project site is located within the San Miguelito Creek – Santa Ynez River watershed. The nearest major drainage to the project site is the Santa Ynez River located approximately 3.5 miles south (Rincon Consultants, Inc. [Rincon] 2015a). The site does not contain any named streams. In general, the project site slopes to the south and west with gradients in the range of 20:1 (horizontal: vertical) to 3:1 (horizontal: vertical) near Oak Hill Drive (see Figure 4.1-2). Site elevations vary from approximately 495 feet mean sea level (MSL) in the northwest corner of the west portion of the property to 425 feet above MSL in the southwest corner. The soils are generally sandy and permeable.

An intermittent drainage is shown by the National Hydrography Dataset to occur approximately 0.7 mile east of the project site (Rincon 2017a~~2015a~~). This drainage runs through the golf course located to the south. Two ephemeral stream channels are located within the project site, one at the center of the site and a second near the eastern boundary. Both drainages run approximately south toward existing culverts located under Oak Hill Drive. There is no indication these two channels have surface connection to adjacent surface waters beyond storm drains. Direct hydrologic connection to waters of the U.S. could not be established. It was determined that the features are isolated and, therefore, only potentially under state jurisdiction (Rincon 2017a~~2015a~~).

Storm Water Drainage. The existing site is divided into three drainage subareas that generally flow southerly. Drainage from the western portion of the project site (Area 1) flows south along Oak Hill Drive entering a downstream system of inlets and pipes. Drainage from the central and eastern portions (Areas 2 and 3) of the project site flows into the existing drainage culvert crossing Oak Hill Drive, mixing with existing upland flows, which enter the Village Country Club Golf Course property (Figure 4.7-1).

Map Source: RRM Design Group

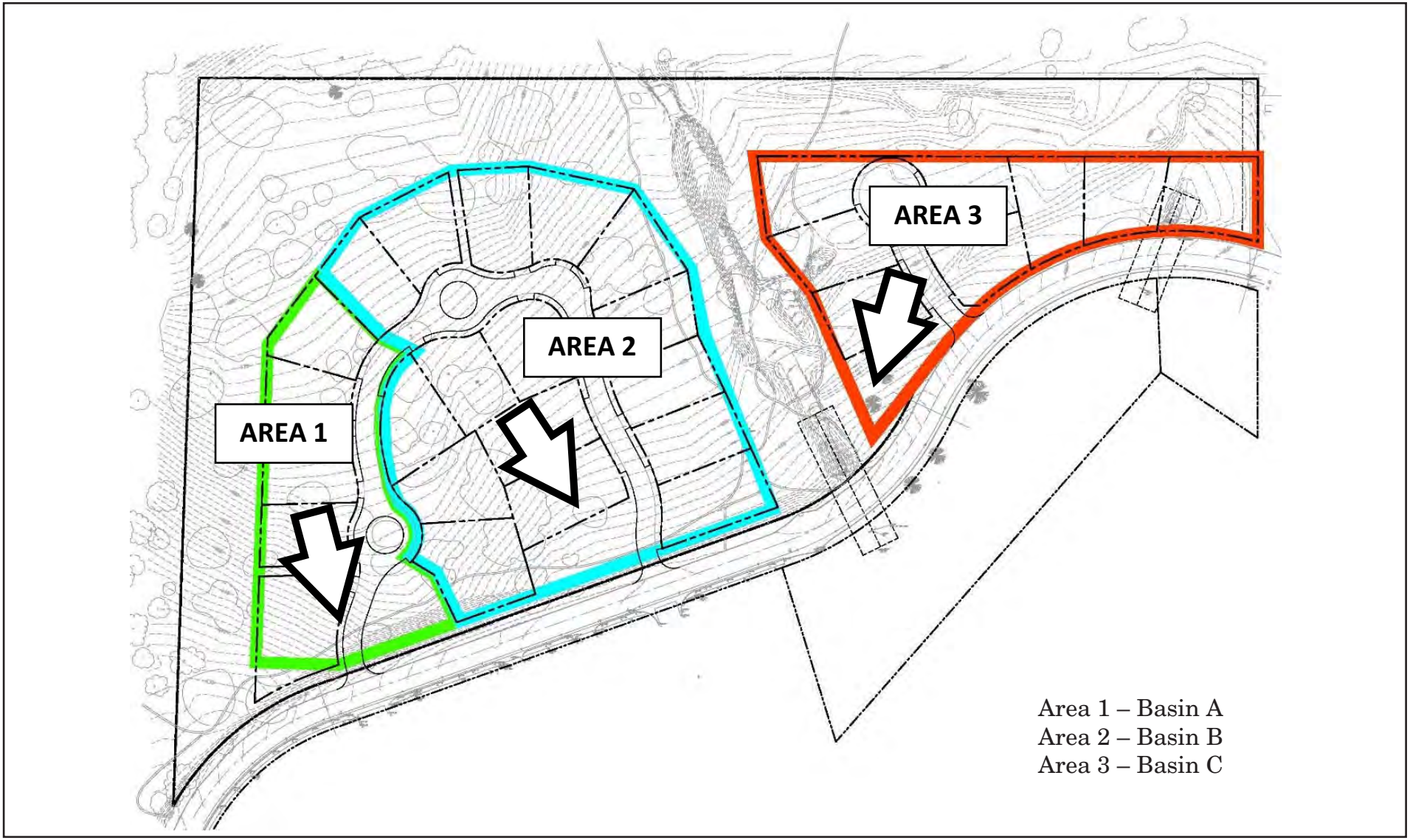

FIGURE 4.7-1
Project Site and Drainage Sub-Areas

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Groundwater. Water service for the proposed project would be provided by the Vandenberg Village Community Services District (VVCSD), which pumps its water from the Lompoc Groundwater Basin of the Santa Ynez River Watershed and underlies the Vandenberg Village area. The Lompoc Groundwater Basin is generally located between the Lompoc Hills on the south and the Purisima Hills on the north. The basin consists of three hydrologically connected areas: the Lompoc Plain, Lompoc Terrace, and the Lompoc Uplands. Together, the three sub-basin areas encompass approximately 76 square miles and are hydraulically connected directly or indirectly to the Santa Ynez River. Groundwater extracted from any of the subunits affects the water balance of the entire basin.

The Santa Ynez River is the principal source of groundwater recharge, and the long-term average recharge from the Santa Ynez River correspondingly depends on the long-term net pumping from the basins (City of Lompoc 2010). Other sources of recharge to the basin include percolation of rainfalls and stream flow (including Lake Cachuma Reservoir releases), agricultural water return flow, and underflow into the basin (City of Lompoc 2010).

Groundwater quality in the Lompoc Groundwater Basin generally decreases from east to west as the basin nears the coastline of the Pacific Ocean (County of Santa Barbara 2013). Historically, the Lompoc Plain subunit has been pumped the most intensively, because its soils and topography are the most suitable for agriculture (County of Santa Barbara 2013). The remaining two sub-units are more elevated and have less fertile soils, and have functioned primarily as recharge areas to the Lompoc Plain subunit.

The existing status of the Lompoc Groundwater Basin is summarized in Table 1 of the County Groundwater Thresholds Manual for Environmental Review in Water Resources. The table includes data from August 1992 and indicates the available storage of the Lompoc Groundwater Basin to be approximately 170,000 acre-feet, with existing pumping exceeding the safe yield for pumping of 28,537 acre-feet per year (AFY) by 2,500 AFY. The table also reports that approximately 25 percent of the pumped water returns to the Lompoc Groundwater Basin and reports the net overdraft in 1992 as 1,918 AFY (County of Santa Barbara 2015a).

The County published recent studies on the present day status of the groundwater basin resources. The County Groundwater Basins Status Report (2014) and Integrated Regional Water Management Plan (2013), that concluded the Lompoc Groundwater Basin is ~~not~~ in a state of overdraft ~~and has a surplus~~ of approximately 913 AFY, with an estimated usable storage of 170,000 acre-feet and annual draw of approximately 28,000 AFY.

Water Quality. There are no water quality impaired water bodies on or adjacent to the project site that have been identified by the State Water Resources Control Board or the Regional Water Quality Control Board under Section 303(d) of the Federal Water Pollution Prevention and Control Act (i.e., the Clean Water Act).

Flooding. Figure 4.7-2 shows the most recent Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map for the 100-year floodplain hazard areas in the vicinity of the project site. As shown, the project site is located outside the FEMA designated 100-year and 500-year flood zones.

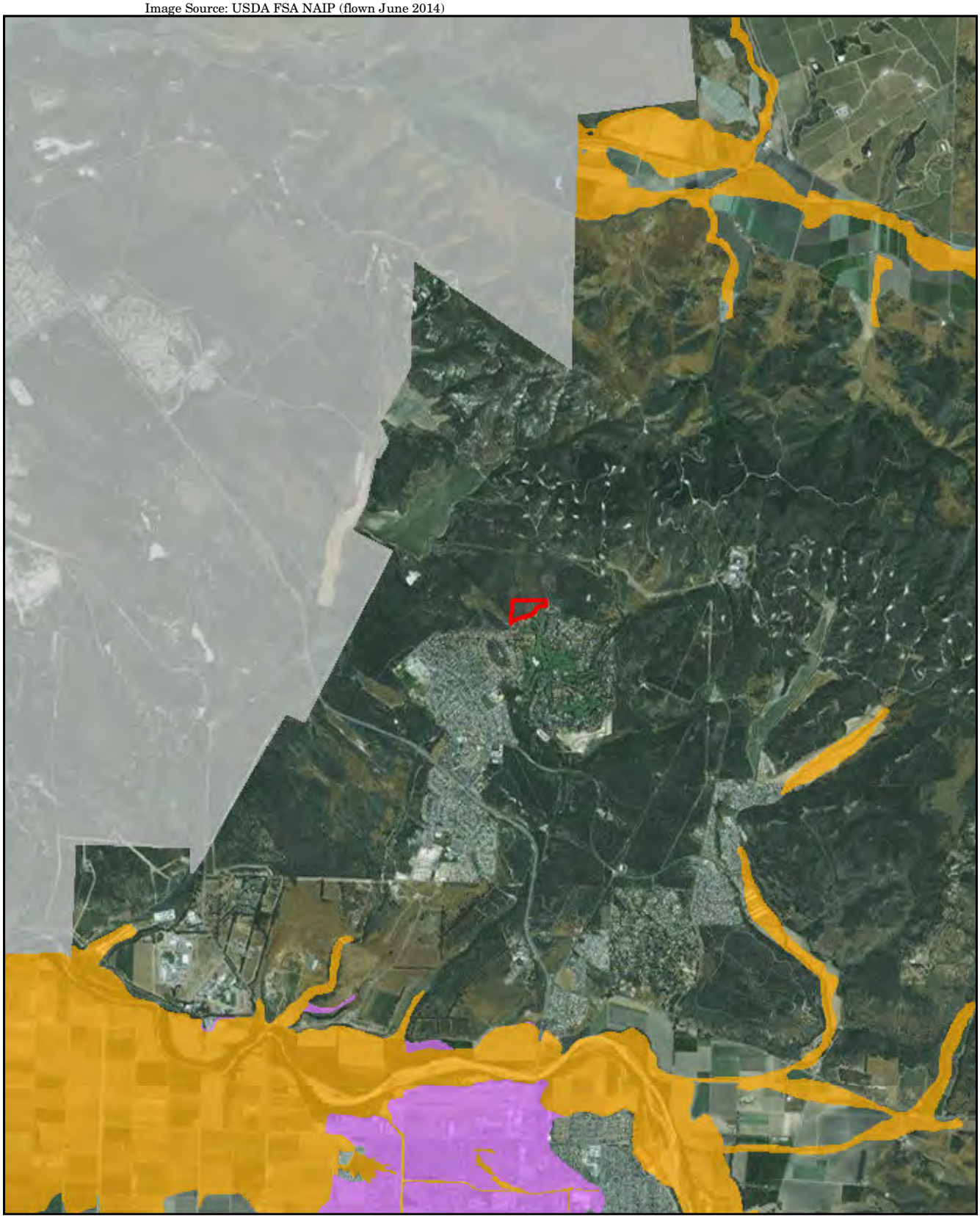
4.7.1.2 Hydrology and Water Quality Background

Storm Water Runoff. Storm water runoff from lands modified by human activities can harm surface water resources and, in turn, cause or contribute to an exceedance of water quality standards by changing natural hydrologic patterns, accelerating stream flows, destroying aquatic habitat, and elevating pollutant concentrations. Such runoff may contain or mobilize high levels of contaminants, such as sediment, suspended solids, nutrients (phosphorous and nitrogen), heavy metals and other toxic pollutants, pathogens, oxygen-demanding substances, and floatables. After a storm event, water runoff carries these pollutants into nearby streams, rivers, lakes, estuaries, wetlands, and oceans. The highest concentrations of these contaminants often are contained in "first flush" discharges, which occur during the first major storm after an extended dry period. Individually and combined, these pollutants impair water quality, threatening designated beneficial uses and causing habitat alteration or destruction.

Urbanization alters the natural infiltration capability of the land and generates a host of pollutants that are associated with the activities of dense populations, thus causing an increase in storm water runoff volumes and pollutant loading in storm water that is discharged to receiving water bodies. Urban development increases the amount of impervious surface in a watershed, as farmland, forests, and other natural vegetation with natural infiltration characteristics are converted into buildings with rooftops, driveways, sidewalks, roads, and parking lots with virtually no ability to absorb storm water. Storm water runoff washes over these impervious areas, picking up pollutants along the way while gaining speed and volume because of their inability to disperse and filter into the ground. What results are storm water flows that are higher in volume, pollutants, and temperature than the flows from more pervious areas, which have more natural vegetation and soil to filter the runoff. Studies reveal that the level of imperviousness in an area strongly correlates with decreased quality of the nearby receiving waters.

Construction Site Runoff. Polluted storm water runoff from construction sites often flows to storm drains and is ultimately discharged into local rivers and streams. Sediment is usually the main pollutant of concern. Sediment runoff rates from construction sites are typically 10 to 20 times greater than those of agricultural lands, and 1,000 to 2,000 times greater than those of forest lands. Pollutants that are commonly discharged from construction sites include sediment, solid and sanitary wastes, nitrogen (fertilizer), phosphorus (fertilizer), pesticides, concrete truck washout, construction chemicals, and construction debris.

Image Source: USDA FSA NAIP (flown June 2014)



Project Boundary

FEMA Flood Zones

100-Year Flood Zone

500-Year Flood Zone

Possible but Undetermined Flood Hazard

0 Miles 1.5

RECON

M:\JOBS5\8147\common_gis\fig4.7-2.mxd 6/17/2016 sab

FIGURE 4.7-2

FEMA Flood Zones

Post-Construction Runoff. There are generally two forms of substantial impacts of post-construction runoff. The first is caused by an increase in the type and quantity of pollutants in storm water runoff. As runoff flows over areas altered by development, it picks up harmful sediment and chemicals such as oil and grease, pesticides, heavy metals, and nutrients (e.g., nitrogen and phosphorus). These pollutants often become suspended in runoff and are carried to receiving waters, such as lakes, ponds, and streams. Once deposited, these pollutants can enter the food chain through small aquatic life, eventually entering the tissues of fish and humans. The second kind of post-construction runoff impact occurs by an increase in the quantity of water delivered to a water body during storms. Increased impervious surfaces interrupt the natural cycle of gradual percolation of water through vegetation and soil. Instead, water is collected from surfaces such as asphalt and concrete and routed to drainage systems where large volumes of runoff quickly flow to the nearest receiving water. The effects of this process include stream bank scouring and downstream flooding, which often lead to a loss of aquatic life and damage to property.

4.7.1.3 Regulatory Setting

a. Federal

Flooding

Federal Emergency Management Agency

FEMA is the primary agency in charge of administering programs and coordinating with communities to establish effective floodplain management standards. FEMA is responsible for delineating areas of flood hazards. It is then the responsibility of states and local agencies to implement the means of carrying out FEMA requirements.

The National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973 made the purchase of flood insurance mandatory for the protection of property located in Special Flood Hazard Areas. FEMA provides subsidized flood insurance to communities that comply with FEMA regulations. The Special Flood Hazard Areas and other risk premium zones applicable to each participating community are depicted on Flood Insurance Rate Maps.

Water Quality

Water Pollution Prevention and Control Act (i.e., the Clean Water Act)

The Clean Water Act (CWA), enacted in 1972, is intended to restore and maintain the integrity of the nation's water, including lakes, rivers, aquifers, and coastal areas, through a system of water quality standards, discharge limitations, and permits. The fundamental purpose of the CWA is the protection of designated beneficial uses of water resources. Implementation of the CWA is the responsibility of the U.S. Environmental Protection Agency (EPA), which has delegated much of that authority to the U.S. Army Corps of Engineers, as well as state and regional agencies.

Section 402 / National Pollutant Discharge Elimination System

Section 402 of the CWA established the National Pollutant Discharge Elimination System (NPDES) Regulations for wastewater and other pollutant discharges. Section 402 implementation is delegated by U.S. EPA to the State Water Quality Control Board (SWRCB) as discussed further, below).

Facilities that discharge pollutants through a point source, including municipal and industrial sources, are regulated by the U.S. EPA and SWRCBs under the NPDES program.

Section 303(d) / Water Quality Standards

Section 303(d) of the CWA defines water quality standards as consisting of both the uses of surface waters (beneficial uses) and the water quality criteria applied to protect those uses (water quality objectives). SWRCB and Regional Water Quality Control Board (RWQCB) have been charged with ensuring that beneficial uses and water quality objectives are established for all waters of the state. The Section 303(d) process of the CWA requires states to identify surface waters that have been impaired. Under Section 303(d), states, territories, and authorized tribes are required to develop a list of water quality segments that do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology. The Section 303(d) is updated by the RWQCB and SWRCB biannually.

b. State and Region

Water Quality

Porter – Cologne Water Quality Control Act

The Porter–Cologne Water Quality Control Act established the principal California legal and regulatory framework for water quality control, including waste discharge standards pursuant to the federal NPDES program. The state has the authority to issue NPDES permits to individuals, businesses, and municipalities. The Porter–Cologne Water Quality Control Act is embodied in the California Water Code. The California Water Code authorizes the SWRCB to implement the provisions of the federal CWA. The Porter–Cologne Act also provides for the development and periodic review of Water Quality Control Plans (basin plans, described below) that designate beneficial uses of California's major rivers and groundwater basins and establish water quality objectives for those waters.

State Water Resources Control Board / NPDES General Permit (MS4)

The County is subject to SWRCB Water Quality Order No. 2013-0001-DWQ NPDES General Permit No. CAS0000004, which establishes the Waste Discharge Requirements for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4; General Permit). The General Permit establishes certain unincorporated areas, including the proposed project area in which the County is responsible for discharges in storm drains.

NPDES General Permit for Construction Sites

In addition to the General Permit, the NPDES General Permit for Construction Sites requires development of a Storm Water Pollution Prevention Plan (SWPPP) and submittal of a Notice of Intent directly to RWQCB for construction activities disturbing greater than 1.0 acre.

Regional Water Quality Control Board (Region 3 – Central Coast)

The state of California is divided into nine regions governed by RWQCBs. The RWQCBs implement and enforce provisions of the California Water Code and the CWA under the oversight of the SWRCB. The County is within the area covered by the Central Coast RWQCB. The RWQCB is charged with the establishment of requirements prescribing the quality of point sources of waste discharge including discharges of municipal wastes, individual industrial waste discharges, and solid waste disposal sites. These waste discharge requirements establish the minimum acceptable quality of the wastes, as measured by those water quality parameters that are of significance for the particular receiving waters to which the wastes are discharged.

The SWRCB, in cooperation with the regional boards, is charged with the responsibility for formulating overall water quality management programs. To accomplish this task, the SWRCB initiated the preparation of basin water quality management plans for each of the basins in the state. The basin plan for the Central Coastal Area was first adopted in April 1975. The current basin plan was adopted on June 8, 2011. This basin plan contains a recommended program for management of the quality of the water resources in the County, as well as encourages the use of reclaimed water.

Central Coast RWQCB has specified its own rules for post-construction storm water that is separate from the Municipal General Permit adopted by the SWRCB, discussed above. The Central Coast Post Construction Requirements apply to projects that create or replace over 2,500 square feet of impervious area, including ministerial and discretionary projects. Performance criteria include: (1) site design and runoff reduction, (2) water quality treatment, (3) storm water control plan requirements, (4) runoff retention, (5) peak management, and (6) special circumstances. Alternative compliance measures such as in-lieu arrangements or use of regional facilities may also be appropriate in certain circumstances. The requirements also include field verifications and monitoring of the post-construction control measures to ensure the proposed measures operate effectively.

c. Local - County of Santa Barbara Comprehensive Plan

The County's Comprehensive Plan includes a Seismic Safety and Safety Element. It is intended to guide land use planning by providing pertinent data regarding geologic, soil, seismic, fire, and flood hazards within the County. To address potential flood hazards, it also includes a discussion of the location and history of flood hazards in the County; common types of flood hazards in the County; measures used to mitigate potential flood hazards and the County's flood hazard reduction goals, policies, and implementation measures. Policies regarding the protection of water quality in the unincorporated areas of

the County are also provided in the Comprehensive Plan Land Use Element and the Local Coastal Plan. Project approvals require a finding of consistency with all applicable flooding, drainage, and water quality policies in the County Comprehensive Plan.

Land Use Element Development Policy 4

The Comprehensive Plan Land Use Element Development Policy 4 requires the County to make a finding, based on information provided by environmental documents, staff analysis, and the owner/applicant, that adequate public or private services and resources (i.e., water, sewer, roads, etc.) are available to serve the proposed development prior to the issuance of a Land Use Permit. The owner/applicant must assume full responsibility for costs incurred in service extensions or improvements that are required as a result of the proposed project. Lack of available public or private services or resources shall be grounds for denial of the project or reduction in the density otherwise indicated in the land use plan.

Flooding

Multi-jurisdictional Hazard Mitigation Plan (MJHMP)

The County's Multi-jurisdictional Hazard Mitigation Plan (MJHMP; September 2011) is "a tool for all stakeholders to increase public awareness of local hazards and risks, while at the same time providing information about options and resources available to reduce those risks." The emphasis of the MJHMP is on the assessment and avoidance of identified risks, implementing loss reduction measures for existing exposures, and ensuring that critical services and facilities survive a disaster. Hazard mitigation strategies and measures avoid losses by: limiting new exposures in identified hazard areas; altering the hazard by eliminating or reducing the frequency of occurrence; averting the hazard by redirecting the impact by means of a structure; or adapting to the hazard by modifying structures or standards. The 2011 MJHMP addresses hazards including flooding and coastal storm surge, coastal erosion, dam failure, and tsunamis.

Flood Control and Water Conservation District

The County Flood Control and Water Conservation District provides for the control of flood and storm waters County-wide as well as the conservation of such waters for beneficial and useful purposes. The Design Section of the Flood Control District designs and performs construction contract administration for flood control capital improvement projects located throughout the County. Flood Control has standard conditions that apply to any development that increases impervious surfaces. At minimum, projects are required to do a drainage analysis to show effects and, if there would be increased runoff, a project would need to show how it would reduce flood impacts, (i.e., by metering post-construction peak flows to match pre-development peak for specific storm events).

Floodplain Management Section

The County Flood Control and Water Conservation District is responsible for providing floodplain management for the unincorporated areas of the County. The Floodplain

Management Program contains several components including, but not limited to: compliance with the National Flood Insurance Program (NFIP); implementation and enforcement of the Floodplain Management Ordinance (see below); construction and maintenance of flood control projects, and floodplain planning. Development in floodplain areas is subject to the standard conditions of approval of the County Flood Control and Water Conservation District as well as requirements and development standards set forth in the County Floodplain Management Ordinance (Chapter 15-A of the County Code) and the Development Along Water Courses Ordinance (Chapter 15-B of the County Code). These conditions of approval typically include, but are not limited to: (1) anchoring of the structure, (2) special construction materials and methods to reduce flooding damage, and (3) flood proofing and elevation 2 feet above the flood base elevation. This includes utility improvements that include siting design or installation to avoid issues that could occur during flooding. Also, the projects must be designed by a registered professional engineer. The coastal high hazard area also has specific standards, which include anchoring, siting at locations above high-tide, limit of non-habitable space below the floor level, and prohibiting the use of fill to support structures.

Floodplain Management and Water Course Setback Ordinances

As a condition of participation in the NFIP, the County adopted County Code Chapter 15A, Floodplain Management, and Chapter 15B, Development Along Watercourses, which meet the requirements of the NFIP and FEMA for development in flood-prone areas. The purpose of County Code Chapter 15A, Floodplain Management (Floodplain Management Ordinance), is to promote public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas. The Floodplain Management Ordinance requires the finished floor elevation of all habitable structures to be a minimum of 2 feet above the 100-year flood elevation.

County Code Chapter 15B, Development Along Watercourses, outlines the controls that the County imposes on development adjacent to watercourses in unincorporated areas. These controls are necessary to prevent undue damage or destruction of development by flood waters

Water Quality

Project Clean Water: Storm Water Management Program

The County's Project Clean Water program helps the County implement its Storm Water Management Program (SWMP). The new MS4 Permit that was adopted in February 2013 no longer requires the County to have a storm water management program, but the SWMP has been retained by the County for reference. The goals of the SWMP are to (1) protect public health and the environment, (2) comply with the CWA mandates through compliance with the General Permit requirements and applicable regulations, and (3) to increase public involvement and water quality awareness. The SWMP describes those best management practices (BMPs) that will reduce, control, or eliminate identified pollutants of concern from discharges to the storm drain system.

Grading Code

The County Grading Code (Chapter 14 of the County Code) generally requires a grading permit and an Erosion and Sediment Control Plan for all new grading, excavation, and fill where the transported amount of materials exceeds 50 cubic yards or the cut or fill exceeds 3 feet in vertical distance to the natural contour of the land. The County will accept a SWPPP in lieu of an Erosion and Sediment Control Plan, as long as the SWPPP contains the required elements of the County's Erosion and Sediment Control Plan. Either a SWPPP or an Erosion and Sediment Control Plan is required prior to issuance of a grading permit, both of which describe construction-related BMPs to prevent pollutant discharge.

Storm Water Management and Discharge Control

The County Storm Water Management and Discharge Control Ordinance (Chapter 29 of the County Code) regulates non-storm water discharges into the storm drainage system (also known as the MS4) to the maximum extent practicable as required by federal and state law. The Discharge Control Ordinance prohibits the discharge of pollutants into the storm drain system. Chapter 29 also references the County's Technical Guide developed through Project Clean Water. The Technical Guide is intended to provide guidance on implementing the Central Coast Post Construction Requirements from the initial pre-application meeting to construction and ultimately to maintenance during project operations.

4.7.1.4 Off-site Oak and Chaparral Restoration Plan

The proposed project includes the Offsite Mitigation Area Baseline Biological Report and Conceptual Mitigation Plan (Rincon 2016a) (see Appendix D-3 and D-4) that details the potential for ~~14.73~~ ~~11.52~~ 13.5 acres of off-site restoration to mitigate for on-site oak tree and habitat removal. In total, approximately 14.73 acres of potentially suitable restoration area has been identified on ~~The off-site mitigation would occur on in designated areas on a 28-acre portion of~~ a 123-acre open space parcel owned by the Vandenberg Village Community Services District (APN 097-371-067) that is located approximately 1 mile southeast of the project site (see Figure 2-11~~2-12~~).

4.7.2 Impact Analysis

4.7.2.1 Methodology and Significance Thresholds

CEQA Guidelines Appendix G

Appendix G of the California Environmental Quality Act (CEQA) guidelines considers a project to have significant impacts if the project would:

- Violate any water quality standards or waste discharge requirements;

- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff;
- Otherwise substantially degrade water quality;
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam;
- Be subject to inundation by seiche, tsunami, or mudflow.

County of Santa Barbara Environmental Thresholds and Guidelines

The Santa Barbara County Environmental Thresholds and Guidelines Manual provides guidance for addressing potential hydrology and water quality impacts in environmental documents. Project-related impacts would be considered significant if the project:

- Is located within an urbanized area of the County and the project construction or redevelopment individually or as a part of a larger common plan of development or sale would disturb one (1) or more acres of land;
- Increases the amount of impervious surfaces on a site by 25% or more;
- Results in channelization or relocation of a natural drainage channel;
- Results in removal or reduction of riparian vegetation or other vegetation (excluding nonnative vegetation removed for restoration projects) from the buffer zone of any streams, creeks or wetlands;

- Is an industrial facility that falls under one or more of categories of industrial activity regulated under the NPDES Phase I industrial storm water regulations (facilities with effluent limitation; manufacturing; mineral, metal, oil and gas, hazardous waste, treatment or disposal facilities; landfills; recycling facilities; steam electric plants; transportation facilities; treatment works; and light industrial activity);

- Discharges pollutants that exceed the water quality standards set forth in the applicable NPDES permit, the RWQCB Basin Plan or otherwise impairs the beneficial uses of a receiving waterbody;

- Results in a discharge of pollutants into an "impaired" waterbody that has been designated as such by the State Water Resources Control Board or the RWQCB under Section 303 (d) of the Federal Water Pollution Prevention and Control Act (i.e., the Clean Water Act); or

- Results in a discharge of pollutants of concern to a receiving waterbody, as identified in by the RWQCB.

Adverse environmental effects that can be caused by overdraft of an alluvial groundwater basin include: (1) degradation of water quality; (2) saltwater intrusion; (3) land subsidence; (4) loss of well yield; (5) well interference; (6) or reduction of surface water available to support biological resources. The County's Threshold of Significance established in 1992 for the Lompoc Groundwater Basin for groundwater withdrawal is 12 AFY.

4.7.2.2 Project Impacts and Mitigation Measures

Impact WQ-1 Water Supply and Groundwater Resources

Water resources in the County are provided from two sources, either surface water impounded behind dams on the Santa Ynez River into delivery tunnels drilled through the Santa Ynez Mountains or through groundwater pumped from the County's 14 alluvial basins. The VVCSD would supply water to the project site and relies entirely upon groundwater from the Lompoc Groundwater Basin, specifically from the Lompoc Uplands subunit. Groundwater supplies are limited and finite, and limited in terms of the annual amount of water that can be withdrawn without causing a long-term drop in water levels and in the amount of total storage of a basin which can be removed without significant environmental effects.

~~Using the VVCSD's prescribed water consumption rates for single-family dwelling units of 0.4 AFY, the proposed project is estimated to require a gross water demand of 11.6 AFY from buildout of 29 single-family units (pers. comm. from Cynthia Allen, VVCSD Administrative Services Manager, to Bret McNulty, Central Coast Manager, RECON Environmental, Inc., June 2016). The VVCSD's 0.4 AFY per unit rate is based on a 10-year average of residential consumption rates in the VVCSD's territory.~~ Water consumption for the proposed project was estimated using water demand factors for the Lompoc area included in the County's Environmental Threshold and Guidelines Manual, and the

associated net consumptive use factor. Based on a per residence water use of 0.4 acre feet of water per proposed residential unit and a consumptive use factor of 0.75, the project would have an estimated annual water demand 11.3 AFY. Therefore, the water demand of the proposed project would not exceed the County threshold of 12 AFY for the Lompoc Groundwater Basin. The project's demand is estimated to be 0.74 AFY below the County's significance threshold adopted for the Lompoc Groundwater Basin.

The 2013 County Integrated Regional Water Management Plan (IRWMP) indicates from recent studies that the Lompoc Groundwater Basin is not in a state of overdraft and has a surplus of approximately 913 AFY (County of Santa Barbara 2013). Improvements in water conservation practices and modifications to VVCSD's water distribution system have increased water use efficiency over time. VVCSD established a water conservation program in 1996, which was revised in 2007 and 2014. The program requires developers to purchase and install/retrofit residences with low-flow and high-efficiency water appliances or contribute in-lieu fees to ensure that development does not increase VVCSD's net consumption of groundwater or results in a "no net increase" in water use by VVCSD as a result of new development projects. This is due to concerns regarding potential overdraft conditions in the Lompoc Groundwater Basin and possible deterioration of the quality of the groundwater (VVCSD 1998).

The project parcel previously received a VVCSD Intent to Serve letter on October 9, 1995, granting a water supply of 13.68 AFY that was reaffirmed in a letter to the project Owner/Applicant from VVCSD General Manager, Joe Barget (March 12, 2015) (see Appendix A).

The proposed project's estimated water demand of 11.311.6 AFY would be 2.382.08 AFY below the VVCSD approved water allocation of 13.68 AFY. However, severe drought conditions, concerns regarding a stable water supply, and drought conditions throughout the County and state have occurred in recent years. On January 17, 2014, Governor Jerry Brown declared a drought emergency in California and asked that all Californians reduce their water consumption by 20 percent. On April 25, 2014, the Governor continued the state of emergency and issued Executive Order B-29-15 imposing restrictions on water supplies to achieve a statewide 25 percent reduction in potable water use by February 28, 2016 that was extended to all water districts through October 2016. However, Executive Order B-29-15 has since been rescinded by Executive Order B-40-17 on April 7, 2017 and terminated the January 17, 2014 drought state of emergency and encourages water conservation as a California way of life. In the VVCSD, approximately 60 percent of all water is used for outdoor irrigation and 40 percent is used indoors. The VVCSD has implemented a district-wide water conservation program to address state-mandated conservation targets, which offers rebates for water efficient appliances. Since 1996, VVCSD has issued over 1,290 toilet rebates, 195 washing machine rebates, and 65 cash-for-grass rebates (VVCSD 2014). In addition, VVCSD has had restrictions on irrigation hours, potable water use, and enforcement through fines effective since June 1, 2015.

The VVCSD Board will consider the proposed project with water efficiency measures and compliance with the VVCSD water conservation program, and the developer would be

required to adhere to VVCSD's terms and conditions and enter into a development agreement in order to obtain a Can and Will Serve letter.

Overall, the project would have a water demand of 11.3~~11.6~~ AFY sourced from the Lompoc Uplands groundwater basin, which would not exceed the 1992 County threshold of 12 AFY. Proposed restoration activities (i.e., temporary irrigation of native plants) at the off-site VVCSD open space parcel would temporarily increase water consumption but would not cause the project to exceed the water use threshold of 12 AFY on a long-term basis. While the estimated long-term project water demand would be approximately 0.7~~4~~ AFY below County groundwater threshold, the state and County are in declared water emergencies due to severe drought. Therefore, the proposed project could result in an impact on water supplies by contributing to regional water consumption during a severe drought. However, the increase in water consumption resulting from the proposed project would be slight in context of the entire VVCSD service territory and Lompoc Groundwater Basin, and the VVCSD has confirmed that service capacity is available for the proposed project. Additionally, the VVCSD has met the mandated 25 percent statewide water conservation target, and the proposed project is not anticipated to obstruct continued compliance. Therefore, the project would have a less than significant impact to water supply and groundwater resources (Class III).

Mitigation Measures

The project would have a less than significant impact to groundwater resources and available supply has been verified by the VVCSD. Therefore, no mitigation is required.

Impact WQ-2 Water Quality: Temporary (Construction and Grading)

The preliminary grading plan for the project (dated August 25, 2015) includes three phases, not including grading for the 29 individual for sale residential home sites and the open space lot (see grading summary in Table 2-4). As discussed in Chapter 2, Project Description, the specific designs for individual residences and development of the residential lots will undergo subsequent design, building, and grading review by the County at the time of development of the lots. Grading activities and vegetation removal associated with construction could result in short-term water quality impacts associated with increased erosion and the potential transport of pollutants into drainage swales. If construction grading on the proposed project site occurs during the rainy season or in the event of heavy storms, soils from the site could be entrained, eroded, and transported to drainages within and adjacent to the site. Uncontrolled discharges of sediment are considered a significant impact to water quality.

All construction activities disturbing one or more acres exceed the County Environmental Threshold and are subject to the General Permit for Storm Water Discharge Associated with Construction and Land Disturbance activities (Order No. 2009-0009-DWQ), which require preparation of a SWPPP to control the discharge of pollutants, including sediment, into local surface water drainages. As such, the proposed project would prepare a SWPPP, which would minimize water quality degradation through storm water monitoring and

establishment of BMPs, erosion control and spill prevention measures, and containment measures.

In addition to implementation of a project-specific SWPPP per the NPDES permit requirements, construction activities would also be subject to the County's grading ordinance. The grading ordinance generally requires a grading permit and an Erosion and Sediment Control Plan for all new grading, excavations, fills, curs, borrow pits, stockpiling, compaction of fill, and land reclamation projects on privately owned land where the transported amount of materials exceeds 50 cubic yards or the cut or the fill exceeds 3 feet in vertical distance to the natural contour of the land. However, the County will accept a SWPPP in lieu of an Erosion and Sediment Control Plan, as long as the SWPPP contains the requirements of the County's Erosion and Sediment Control Plan. In addition, a master drainage plan is required as part of the grading plan for all grading permit applications.

As discussed above, the preparation and implementation of a project-specific SWPPP in accordance with regulatory requirements, including the County's grading ordinance, would serve to avoid or minimize potential water quality impacts during construction. MM WQ-5 would ensure that the Owner/Applicant obtains Construction General Permit coverage and provides documentation to the County. The measure also requires County compliance monitoring staff to monitor the project site for SWPPP compliance during construction. Therefore, project-related impacts to water quality of nearby drainages from construction and grading would be less than significant with mitigation (Class II impact).

Mitigation Measures

The following mitigation measures are required to address the project's potential impacts to water quality during construction:

MM WQ-1 Storm Water Pollution Prevention Plan (SWPPP)

The Owner/Applicant shall submit a copy of the Notice of Intent to obtain coverage under the Construction General Permit of NPDES issued by the California RWQCB.

Permit Requirements and Timing: The Owner/Applicant shall submit proof of exemption of a copy of the Notice of Intent and shall provide a copy of the required SWPPP to the County's Planning & Development and Building & ad Safety Division. The Owner/Applicant shall keep a copy of the SWPPP on the project site during grading and construction activities.

Monitoring: A County P&D permit processing planner shall review the documentation prior to approval of permits. The County P&D and the County Public Works' Project Clean Water compliance monitoring staff shall inspect the site during construction for compliance with the SWPPP.

Significance After Mitigation

With implementation of MM WQ-1, construction-related impacts to water quality would be reduced to a less than significant level (Class II impact).

Impact WQ-3 Drainage, Storm Water Flows, and Runoff

The project site is currently undeveloped and consists of maritime chaparral, scrub, ruderal vegetation, and gently sloping hills. Drainage from the project site flows generally south. Drainage from the western portion of the project site flows south along Oak Hill Drive entering a downstream system of inlets and pipes. Drainage from the central and eastern portions of the project site flows into the existing drainage culvert crossing Oak Hill Drive, mixing with existing upland flows, which enter the golf course property (RRM Design Group 2015).

Surface water flows from the developed project site would travel faster, as they run along impermeable surfaces and channelized drainages, which could result in increased peak discharge flows, soil erosion, and risk of flooding. In addition, as storm water runoff increases ~~in~~ flow speed, scouring velocity at discharge points could lead to increased soil erosion and sedimentation, thereby degrading water quality. Increased runoff from impermeable surfaces lessens the amount that is infiltrated, changing the conditions of shallow groundwater recharge.

Project design features, outlined in Section 2.0, Project Description, include the following low impact development (LID) measures: vegetated swales and buffers, channeling runoff into roadside swales paralleling the road, permeable pavement where appropriate, and impervious surface reduction. The LID features would reduce runoff velocity and volume that would otherwise result from an increase in impervious materials at the project site.

For the water that is not absorbed by proposed LID features, the project also proposes a system of detention basins to control runoff rates. Three on-site detention basins that would encompass a total area of approximately 0.72 acres, and vegetated bio-swale areas are proposed. On the western portion of the site, the collected storm water would be conveyed via a system of drains and pipe to Detention Basins A and B, located north of and adjacent to Oak Hill Drive. For the eastern portion of the site, storm water would be conveyed to Detention Basin C, also located north of and adjacent to Oak Hill Drive (see Figure 2-11). Each proposed detention basin would have a maximum ponding depth of 2.5 feet. A proposed 10-foot-wide privately maintained drainage easement would be located along Lots 15, 18, and 19 and would be used to convey runoff water to Detention Basin B.

The County Public Works, Water Resources Division limits post-development discharge loads to 0.07 cubic foot per second per acre for 25-year storm events (a 25-year storm event has a 4 percent probability of occurring within a given year). This rate approximates discharge loads from a natural, undeveloped site in the vicinity of the proposed project, and therefore, approximates pre-development runoff rates. The Oaks Hills Estate Preliminary Project Drainage Report (see Appendix G-1) analyzed post-development storm water and detention routing and concluded that the basins are sized to attenuate post-development

flow to pre-development levels and flows for up to the 25 year storm event threshold. The proposed project would adequately meet post-development runoff criteria set forth by the Santa Barbara County Flood Control District (refer to Appendix G-1 for the complete drainage report). Because storm water would be captured and then slowly released to mimic existing drainage conditions, the detention basins would reduce impacts related to increased peak flows, including soil erosion, and flooding.

The County Public Works Water Resources Division and Planning and Development require that erosion control measures, such as plantings and hard surfaces, be incorporated into the drainage plan for all project drainages. The California Building Code requires that landscaped areas adjacent to structures receiving roof drainage would be graded so that drainage is away from structures.

The analysis in this chapter is based upon the Project Drainage Study – Preliminary, Prepared for the Oak Hills Estate (RRM Design Group, July 2015; see Appendix G-1). A Peer Review of the drainage study was conducted by Rick Engineering in June 2016 (see Appendix G-2), and indicated that further analysis and clarification of the project site drainage features should be studied, including boring/percolation tests conducted within the area of the three proposed drainage basins. Boring/percolation tests would provide data necessary to determine anticipated percolation rates and potential measures required to maximize percolation. Although the aforementioned LID project features and adherence to the required County Storm Water Quality Management Plan (SWQMP) would reduce water quality impacts related to drainage and runoff, approval of the final design of proposed LID features would be required to ensure that project-related impacts to water quality from drainage would be less than significant. Therefore, potential impacts related to drainage on the project site and storm water runoff would be less than significant with implementation of Mitigation Measure MM WQ-2 (Class II impact).

Mitigation Measures

The following mitigation measure is required to address the project's potential impacts to drainage, storm water flows, and runoff:

MM WQ-2 Final Drainage Plan and Drainage Study

The Owner/Applicant shall submit a Final Drainage Plan and Drainage Study to the Planning & Development Department and the County Flood Control District. The Final Drainage Plan and Drainage Study shall incorporate and assess all additional components as stated in the Peer Review Drainage Report for the Oak Hills Estate, Vandenberg Village, dated June 9, 2016, by Rick Engineering Company (see Appendix G-2).

Plan Requirements and Timing: The Owner/Applicant shall submit the Final Drainage Plan and Drainage Study to the County Planning and Development and Flood Control District for review and approval prior to issuance of ~~Zoning~~ Land Use Clearance for grading. Installation and maintenance of drainage components shall be ensured through a performance security provided by the Owner/Applicant. Long-term maintenance requirements shall be specified in the Oak Hills Estate Homeowners Association (HOA)

Covenants, Conditions, and Restrictions. All property owners shall be aware of maintenance requirements. Drainage features shall be installed (landscaped and irrigated subject to P&D and Flood Control District approval) prior to Final Building Inspection Clearance.

Monitoring: P&D building staff shall oversee drainage installation. The Owner/Applicant shall demonstrate to P&D compliance monitoring staff and Building and Safety grading inspector(s) that all required components of the approved Final Drainage Plan and Drainage Study are in place as required. The installation security shall be released upon satisfactory installation of all items in approved plans. Compliance monitoring staff will review required maintenance records.

Significance After Mitigation

Impacts to drainage, storm water flows, and runoff are less than significant with mitigation (Class II impact).

Impact WQ-4 Impervious Surfaces & Long-Term Water Quality

The project site is currently vacant and undeveloped. Development of the proposed project would increase the amount of additional storm water runoff as a result of the construction of impermeable surfaces, including roads, driveways, buildings, patios, and other structures. The County Land Use and Development Code (Sec. 35.23.050) states that the net site area coverage in the Design Residential zone is a maximum of 30 percent for dwelling unit structures. As indicated in the project's Vesting Tentative Map (see Figure 2-5), the proposed project could utilize up to 30 percent maximum building coverage on proposed residential lots (Lots 1 through 29). Therefore, the project could increase the impervious surfaces on the proposed residential lots by 30 percent, which would exceed the County threshold of increasing the amount of impervious surfaces on a site by 25 percent. However, when considering the total square footage and acreage of the project parcel, including the open space lot comprising 9.469~~9.53~~ acres or 56~~.6~~ percent of the total project site, the maximum increase in impervious surfaces at the project site would be reduced to 19.27 percent. Table 4.7-1 shows the estimated maximum totals of impervious surfaces at the project site. Roadways are considered as impervious surfaces and as part of Lot 30 and are included in the impervious surface calculations. Nevertheless, the project would still exceed the County standards for treating storm water runoff and water quality as it would exceed more than one acre of additional land disturbance. As such, the project would be required to treat storm water runoff consistent with County requirements under its NPDES General Permit.

Table 4.7-1 Project Site - Impervious Surfaces				
	Gross Area (square feet)	Gross Area (acres)	Total 30% Maximum Coverage (Impervious Coverage square footage)	Impervious Surfaces (acres)
Lots 1-29	323,240~~320,356~~	7.42~~7.35~~	96,107	2.21
Lot 30 (Open Space Lot)	412,149~~415,029~~	9.46~~9.53~~	48,904 (Roadways)	1.12
Total	735,385	16.88	145,011	3.33
Percent Change in Impervious Surfaces	**Total 30% Max. Coverage Impervious Lot Area (Lots 1-29): 2.21 Acres + Project Roadways: 1.12 Acres / Total Project Acreage (16.88 Acres) = 19.72%**			
SOURCE: Oak Hills Estate Vesting Tentative Map and Development Site Plan, RRM Design Group, May~~August~~ 2017~~2015~~.				

According to the County Environmental Thresholds for surface and storm water quality, the County has a general urban runoff water quality problem. As such, the proposed project, which would introduce new residential development to a previously natural area, has the potential to result in significant water quality impacts. Operation of the project could both decrease the quality and increase the quantity of storm water runoff from impervious surfaces. The project-related use of fertilizers, pesticides, common cleaners, and chemicals, as well as increased litter, pet waste, and other urban waste have the potential to impact runoff water quality. Runoff from driveways and parking lots could introduce oil and other hydrocarbons into drainage facilities that also have the potential to impact water quality. All site runoff from proposed residential lots and roadways would be directed to the project's vegetated roadside swales, which discharge to adjoining storm water basins for each of the three drainage subareas on the project site. Proposed MM WQ-3 would require a SWQMP to be prepared and implemented in accordance with County standards. The SWQMP would reduce the operational water quality impact of the proposed project to the maximum extent practical through proper placement of structural and non-structural BMPs and implementation of an inspection and maintenance program. Therefore, impacts to water quality associated with the increase of impermeable surfaces and the introduction of new residential uses on the project site would be less than significant with mitigation (Class II impact).

Mitigation Measures

The following mitigation measure is required to address the project's potential impacts to water quality related to water runoff from impervious surfaces:

MM WQ-3 Storm Water Quality Management Plan – Operation

The Owner/Applicant shall submit and implement a SWQMP designed to prevent the entry of pollutants from the project site into the storm drain system after development. The SWQMP shall identify:

a. A combination of structural and non-structural BMPs from the California Storm Water BMP Handbook for New Development and Redevelopment (California Storm Water Quality Association 2003), or other approved methods;
b. Potential pollutant sources that may affect the quality of the storm water discharges;
c. Design and placement of structural and non-structural BMPs to address identified pollutants;
d. Inspection and maintenance program;
e. Method for ensuring maintenance of all BMPs over the life of the project.

Plan Requirements and Timing: The Owner/Applicant shall: (1) submit the SWQMP to the Planning and Development Department for review and approval prior to issuance of permits; (2) include design and field components on land use, grading and building plans as applicable; (3) post performance securities prior to issuance of permits to ensure installation and maintenance. SWQMP measures shall be constructed and operational prior to Final Building Inspection Clearance. The Homeowners' Association shall maintain the SWQMP components for the life of the project and keep a record of maintenance and submit the maintenance record to the Planning and Development Department – Compliance Monitoring staff annually between October 1 and 31. The Owner/Applicant shall record a buyer notification prior to sale of lots that states: "IMPORTANT: BUYER NOTIFICATION" and contains the maintenance requirement language above.

Monitoring: The Owner/Applicant shall demonstrate to Public Works' Project Clean Water staff that SWQMP components are in place prior to Final Building Inspection Clearance. The installation security shall be released upon satisfactory installation of all items in approved plans, and the maintenance security shall be released after five consecutive years of satisfactory maintenance and maintenance reporting. ~~Planning and Development Department compliance monitoring staff and~~ Public Works' Project Clean Water staff will review the required maintenance records and, once approved, provide a copy to the P&D Department compliance monitor.

Significance After Mitigation

Impacts would be less than significant with mitigation (Class II)

Impact WQ-5 Flooding

As shown in Figure 4.7-2, the entire project site is located outside of FEMA designated 100-year and 500-year flood zones. No residences or other subdivision improvements are proposed within a 100-year floodway. Furthermore, the project would not be expected to lead to significant upstream or downstream impacts in the floodplain. As indicated in the preliminary drainage report, the proposed drainage and detention basin system would maintain post-project runoff equal to or less than pre-project (existing) conditions (RRM Design Group 2015). The project site is also located inland, approximately eight miles east from the Pacific Ocean and would not be at risk at inundation or flooding from a tsunami. There are no large open water bodies near the project site that would have the potential to

result in a significant seiche impact. The topography of the project site and surrounding area would not be susceptible to potential mudflow impacts. In addition, no dams or levees are located within the project vicinity that would expose people or structures to a significant risk of loss, injury or death involving flooding. Therefore, potential impacts of project development due to flooding would be less than significant (Class III impact).

Mitigation Measures

No mitigation measures are required.

Significance After Mitigation

Impacts to flooding are less than significant. No mitigation is required. (Class III).

Impact WQ-6 Off-site Restoration Area

Project-related activities on the off-site mitigation parcel would be limited to restoration and habitat maintenance. The plant and seed material used for the off-site restoration may require temporary irrigation systems to be used as a water supply until they have become established but would not require permanent water supply connection to VVCSD or substantially deplete local groundwater basins. The off-site mitigation plan would not introduce any impervious surfaces or permanent structures to the off-site mitigation parcel and is not located within any jurisdictional wetlands, waters, streambed or riparian habitats (Rincon 2016a). As such, water quality, storm water, drainage, and runoff would not be impacted by the off-site mitigation plan. In addition, the off-site mitigation parcel site was selected to avoid streams and riparian areas that occur east and south of the off-site mitigation parcel and is not located in a flood zone (Rincon 2016a). Because the off-site mitigation plan does not require a permanent connection to water supply and would not increase impervious surfaces or impair drainage, potential impacts of the off-site mitigation plan related to hydrology and water quality would be less than significant (Class III impact).

Mitigation Measures

No mitigation measures are required.

Significance After Mitigation

Impacts are less than significant. No mitigation is required (Class III impact).

4.7.2.3 Cumulative Impacts

Water Supply and Groundwater. This project would have a cumulatively significant impact to water supply and groundwater if it were, along with development in the region (see Tables 3-1 and 3-2), to exceed the available water supply of the VVCSD. Historically, the ongoing trends of the Lompoc Groundwater Basin have indicated overdraft. ~~However, r~~Recent publications indicate the Lompoc Groundwater Basin is in a state of overdraft by

approximately ~~to be relatively stable and have a surplus of~~ 913 AFY (County of Santa Barbara 2013). ~~Additionally, based~~ Based on the Santa Barbara County 2015–2023 Housing Element, VVCSD has a current water service capacity of 1,800 AFY with a current (2015) usage level of 1,480 AFY. It is estimated that VVCSD can accommodate 617 new additional units (County of Santa Barbara 2015c).

The proposed project and other development requiring VVCSD services would contribute to an increased demand for groundwater resources. VVCSD regularly monitors its supply and demand and periodically updates its Strategic Plan to prepare for future constraints, plans for upgrading or expanding water and wastewater infrastructure, and guidance for VVCSD's budget and rate structure. No water-intensive cumulative projects such as residential or agriculture projects were identified within the Vandenberg Village area. However, future or recently completed projects in the Lompoc Valley area would have water-consuming uses, such as the Village Country Club Development, Clubhouse Estates Tract Map, Scoggin/Sundheim Winery Tier II, Archdiocese Queen of Angles, Heritage II Senior Apartments, Pence Ranch Winery, and Santa Rosa Road Tier II Winery. The Burton Ranch Specific Plan and Summit View Homes project are~~is~~ in the City of Lompoc; however, projects within this city also depend on the Lompoc Groundwater Basin for water supply. These projects would be required to adhere and comply with the County Code, VVCSD's water conservation program, and City of Lompoc requirements as applicable, and other applicable water conservation policies.

Although cumulative development projects would increase the demand for water resources, the proposed project's water demand would not be cumulatively considerable as it includes 29 homes whose water demand would not exceed the County's threshold of 12 AFY. The off-site mitigation plan for restoration on APN 097-371-067 would also not depend on water supply and demand from VVCSD and would not establish permanent water connections to the service district. Additionally, the proposed project and all other applicable cumulative projects would be required to comply with County Comprehensive Plan Land Use Element Policy 4 and obtain a Letter of Intent/Can and Will Serve letter prior to development, which would ensure availability of groundwater supply and capacity. Therefore, cumulative impacts related to water supply and groundwater would be less than significant (Class III).

Hydrology and Water Quality. The proposed project and development throughout the Vandenberg Village area would have the potential to contribute to hydrological and water quality impacts. Substantial portions of land have the potential to be developed with impermeable surfaces, which would alter drainage patterns, increase peak flows and risk of flooding, and degrade water quality. The proposed project's impacts to hydrology and water quality would be mitigated to less than significant with implementation of mitigation measures MM WQ-1 requiring a SWPPP. All other future development proposals would be subject to similar project implementation requirements such as implementation of a project-specific SWPPP that would reduce hydrology and water quality impacts due to site drainage-related issues, thereby minimizing the potential for significant cumulative impacts to occur. The proposed off-site mitigation on APN 097-371-067 would not introduce impermeable or permanent structures and would not impair cumulative hydrology and water quality in the open space parcel. Through the implementation of federal and state

policies with Santa Barbara County and City of Lompoc standards, potential cumulative impacts of cumulative development projects would be minimized. Cumulative impacts related to hydrology and water quality would be less than significant (Class III).

Drainage, Storm Water Flows, and Runoff. The proposed project and development throughout the Vandenberg Village area would have the potential to contribute to drainage, storm water flows, and runoff impacts. The proposed project would implement LID features and adhere to the required County SWQMP as required by MM WQ-3. In addition, implementation of mitigation measure MM WQ-2 requiring a Final Drainage Plan and Drainage Study would reduce potential impacts related to drainage, storm water flows, and runoff on the project site to less than significant. The proposed project's off-site mitigation on APN 097-371-067 would not introduce structures and would not impair cumulative drainage, storm water flows, and runoff impacts in the off-site mitigation area. All other development projects in the region would be subject to similar requirements to minimize post-construction impacts, thereby reducing the potential for cumulative drainage-related impacts. Therefore, cumulative impacts related to drainage, storm water flows, and runoff would be less than significant (Class III impact).

Impervious Surfaces & Water Quality. The proposed project and cumulative development throughout the Vandenberg Village area would increase impervious surface in the region. An increase in impervious surfaces and urban uses introduced by cumulative development both decreases the quality and increases the quantity of storm water runoff from impervious surfaces. Runoff from driveways and parking lots could introduce oil and other hydrocarbons and urban pollutants into drainage facilities, thus resulting in potentially significant cumulative water quality impacts.

Runoff from the proposed project site would be directed to vegetated roadside swales, which discharge to adjoining storm water basins for each of the three project site drainage subareas. Additionally, implementation of the mitigation measure MM WQ-3 for a SWQMP would further ensure that adequate BMPs are in place to minimize surface water pollution from the proposed project. Implementation of restoration on the off-site restoration parcel would implement BMPs during planting, would not introduce impervious surfaces, and would therefore not affect water quality in the off-site area. Therefore, the proposed project's incremental contribution to a potentially significant cumulative impact would not be cumulatively considerable. Cumulative impacts related to impervious surface and water quality would be less than significant (Class III impact).

Flooding. Although the proposed project and off-site mitigation parcel is not within a 100-year flood zone, other future developments within the Vandenberg Village area could include components located within a 100-year flood zone. Future development would be subject to review by the County Flood Control District for compliance with County floodplain development standards. Additional development proposed within a 100-year flood zone, is evaluated on a case-by-case basis and is required to ensure that all structures would not cause increased flooding elsewhere. Therefore, the project's cumulative impacts related to flooding would be less than significant (Class III impact).

Mitigation Measures

Cumulative impacts would be less than significant or the proposed project's incremental contribution to a cumulative impact would not be cumulatively considerable following implementation of project-specific mitigation measures detailed above Therefore, no additional mitigation would be required.

Significance After Mitigation

Cumulative residual impacts would be less than significant with mitigation (Class II impact).

4.8 Land Use

This section addresses potential impacts associated with land use compatibility and County of Santa Barbara (County) Comprehensive Plan consistency that would result with buildout of the proposed Oak Hills Estate project (project). More specifically, it evaluates potential impacts that the rezoning of the project site and the resulting physical changes from buildout of the project would have on existing land uses, short-term impacts associated with construction, impacts, and cumulative impacts related to land use issues. A detailed discussion of the project's consistency with applicable County of Santa Barbara Comprehensive Plan (Comprehensive Plan) policies, goals and policies is provided in Chapter 5, Consistency with Plans and Policies.

4.8.1 Setting

The project site located on the north side of Oak Hill Road which provides access to the northernmost perimeter of the residential subdivision surrounding the Village Country Club Golf Course. The project site is located adjacent to the Burton Mesa Ecological Reserve (Reserve), a habitat and wildlife reserve managed by the California Department of Fish and Wildlife (CDFW). The project site is currently undeveloped and is crossed by several informal trails. The remnants of concrete drainage improvements associated with oil development to the north of the project site are located along the two ephemeral drainages that cross the property.

4.8.1.1 Regional Land Use

The project is located within the northern portion of the unincorporated community of Vandenberg Village and approximately 2.5 miles north of the City of Lompoc in northwestern Santa Barbara County. Vandenberg Village is located north of the Santa Ynez River and south of the San Antonio Creek watershed and on the Burton Mesa.

Vandenberg Village is an unincorporated community that is designated as an Urban Area in the County of Santa Barbara Comprehensive Plan. The Vandenberg Village community was developed in the decades after expansion at Vandenberg Air Force Base (VAFB) in the 1950s primarily to house and provide services to employees at VAFB.

4.8.1.2 Project Site Setting

The project site is bounded by higher density residential development (condominiums) to the southwest, the privately owned Village Country Club golf course to the south across Oak Hill Drive, and is adjacent to the Reserve to the north and west (see Figure 2-3).

Single-family residences are located to the east of the project site. An ephemeral drainage bisects the central portion of the parcel from the north to south, and a second shorter ephemeral drainage occurs on the eastern portion of the site (see Figure 4.1-~~1~~2).

The 16.88-acre project site is generally a triangular parcel located in a gently to moderately sloped area that slopes approximately south–southeast toward Oak Hill Drive. Elevations range from approximately 425 feet above mean sea level (MSL) in the southwest corner to 490 feet above MSL in the northern portion of the site. The project site is currently undeveloped; however, the site shows evidence of previous construction related disturbance where linear swales and berms are present (Rincon 2017a~~2015a~~).

The Burton Mesa Ecological Reserve is located adjacent to the project site to the north and west. The Reserve consists of 5,368 acres between the Purisima Hills and Santa Ynez Mountains and encompasses stands of maritime chaparral. The Reserve is owned by the State Lands Commission and leased to the CDFW for management, operation, and maintenance.

The proposed project includes the Offsite Mitigation Area Baseline Biological Report and Conceptual Mitigation Plan (Rincon 2016a, 2016b, and 2017c) (see Appendix D-3 and D-4) that details the potential for proposed off-site restoration on ~~a 28-acre portion of a~~ 123-acre open space parcel owned by the Vandenberg Village Community Services District (VVCSD)(APN 097-371-067). The oak and chaparral mitigation site is located approximately 1 mile southeast of the project site (see Figure 2-11~~2-12~~). The off-site restoration parcel is bounded by Clubhouse Road to the west, Burton Mesa Boulevard and open space to the south, Burnham Drive to the north, and open space to the east. The future Club House Estates project which includes 52 residential units is currently under construction and is located immediately to north of the proposed off-site restoration parcel. The proposed off-site restoration parcel is located in a gently to moderately sloped area of the Burton Mesa that slopes approximately south-southwest toward Burton Mesa Boulevard (Rincon 2016a). Elevations range from approximately 370 feet above MSL in the northeast corner to 255 feet above MSL to the south (Rincon 2016a).

4.8.1.3 Regulatory Setting

The County's Comprehensive Plan describes the land use pattern for future development in the County. The County Land Use and Development Code (LUDC) regulates development. Over the years, various elements of the Comprehensive Plan have been added and/or amended, including the Land Use Element, which was last amended in 2011.

a. Land Use Element

The Land Use Element has four fundamental goals, which are listed verbatim below. These overarching goals set the direction for all County community plans:

- **Environment**. Environmental constraints on development shall be respected. Economic and population growth shall proceed at a rate that can be sustained by available resources.

- **Urbanization**. In order for the County to sustain a healthy economy in the urbanized areas and to allow for growth within its resources and within its ability to pay for necessary services, the County shall encourage infill, prevent scattered urban development, and encourage a balance between housing and jobs.

- **Agriculture**. In rural areas, cultivated agriculture shall be preserved and where conditions allow, expansion and intensification should be supported. Lands with both prime and non-prime soils shall be reserved for agricultural uses.

- **Open Lands**. Certain areas may be unsuited for agricultural uses due to poor or unstable soil conditions, steep slopes, flooding or lack of adequate water. These open lands have importance as grazing, watershed, wildlife habitat, mineral resources, recreation, and scenic qualities. These lands are usually located so that they are not necessary or desirable for urban uses. There is no basis for the proposition that all land, no matter where situated or whatever the need, must be planned for urban purposes if they cannot be put to some other profitable economic use.

Comprehensive Plan land use policies also provide guidance for future development. In summary, policies relevant to the proposed project require protection of watersheds and associated hillsides, streams, and floodplains, sensitive biological resources, and cultural resources. Policies addressing parks and recreational facilities support creation of quality recreational experiences, while preserving and protecting valuable natural resources.

b. Lompoc Area Land Use Element Interpretive Guidelines

The Lompoc Area Land Use Element Goals and Interpretive Guidelines (1999) pertain to proposals for development in the Vandenberg Village-Mesa Oaks-Lompoc Wye area. The Guidelines include additional special goals and measures for this area related to fire protection, biology, multi-purpose trails and transit linkages, and open space.

c. County Zoning Code

The LUDC (Chapter 35-1) of the County Code of Ordinances carries out the policies of the Santa Barbara County Comprehensive Plan in the Inland Area (outside the Coastal Zone) by classifying and regulating the allowable uses of land and structures consistent with the Comprehensive Plan. Pursuant to LUDC Section 35.10.040, Applicability of the Development Code, the LUDC applies to all land uses, subdivisions, and development within the County, except for the Montecito Community Plan area.

d. County Code Chapter 46A - Inclusionary Housing Ordinance

The Santa Barbara County Code, Chapter 46A, Inclusionary Housing Ordinance (Ordinance 4855) implements the County Comprehensive Plan Housing Element Program 1.2. The inclusionary housing ordinance requires a portion of the total housing units in a project to be provided as inclusionary price-restricted affordable housing.

The purpose and intent of the County of Santa Barbara Inclusionary Housing Ordinance is:

1. To increase the supply of affordable housing units by requiring specific types of projects to provide a portion of the development as price-restricted affordable housing units;

2. To retain the long-term affordability of these affordable housing units with in the County; and

3. To implement policies of the Housing Element of the Comprehensive Plan to:

    a. Enhance the diversity, quantity, and quality of the housing supply

    b. Promote new housing opportunities adjacent to employment centers and the revitalization of existing housing to meet the needs of all economic segments of the community including extremely low-income households, while bolstering the County's rural heritage and supporting each unincorporated community's unique character.

    c. Increase the effectiveness of the Inclusionary Housing Program.

The inclusionary housing requirements may be satisfied through payment of fees—in lieu of construction of the required price-restricted affordable housing units—as a charge imposed as a condition of property development. The fees are used to fund programs that fund and maintain affordable housing in the County.

e. Burton Mesa Ecological Reserve Management Plan

The approximately 5,200-acre Reserve abuts the project site on its western and northern sides. The Reserve is zoned Unlimited Agriculture (U). The Reserve is owned by the State of California, administered by the State Lands Commission and is managed under a 49-year lease by the CDFW. In 1995, the Burton Mesa Ecological Reserve Management Plan (Management Plan) was prepared for the Reserve. The Land Management Plan guides management of habitats, species, and programs to achieve the CDFW's mission to protect and enhance wildlife values. It serves as a guide for appropriate public uses of the property, and provides a descriptive inventory of fish, wildlife, plants, and habitats the Reserve supports. It provides an overview of the property's operation and maintenance, and personnel requirements to implement management goals. It provides a description of potential and actual environmental impacts and subsequent mitigation that may occur during management, and contains environmental documentation to comply with state and federal statutes and regulations.

The Management Plan includes a fuel management plan for areas of the Reserve adjacent to the communities of Vandenberg Village, Mesa Oaks, and Mission Hills. Within the fuel management areas, vegetation will be reduced, transitioning from sparse vegetative cover of shrubs adjacent to the urban edge to that of naturally occurring density. The Management Plan also addresses access for wildfire response; retention of approximately

28 miles of trails; boundary fencing; interpretive signs; enforcement of regulations that prohibit bee keeping, unauthorized vehicles, and equestrian use; phasing out farming and livestock grazing; habitat restoration; and protection of biological and cultural resources.

f. Santa Barbara County Airport Land Use Plan

The project site is located within the adopted 1993 Airport Land Use Plan Airport Influence Area of Vandenberg Airforce Base (VAFB). The basic function of the Airport Land Use Plan is to promote compatibility between airports and the land uses that surround them "to the extent that these areas are not already devoted to incompatible uses" (Pub. Util. Code §21674(a)). In addition, the airport influence area for the Lompoc Airport extends into the southern half of Vandenberg Village. The project site is outside the Lompoc Airport influence zone.

4.8.2 Impact Analysis

4.8.2.1 Methodology and Thresholds of Significance

The analysis in this section evaluates the potential for the project to introduce incompatible land uses relative to existing surrounding land uses, and evaluates potential project-related environmental impacts that can result in land use compatibility impacts. These land use impacts have been assessed based upon the level of physical impact anticipated in the various issue areas that can affect land use compatibility (air quality, biological resources, noise, human health and safety, aesthetics, and traffic). These impacts are assessed under Impact LU-2 below. Cumulative land use impacts resulting from the project in conjunction with other foreseeable past, present, or future projects are included in Section 4.8.2.3.

a. CEQA Guidelines Appendix G

According to California Environmental Quality Act (CEQA) Guidelines Appendix G, implementation of the project would have significant environmental impacts on land use if it would:

- Physically divide an established community;
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the General Plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; and/or
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

The project's consistency with applicable land use plans, policies, and regulations are addressed in detail in Chapter 5, Consistency with Plans and Policies.

CEQA Guidelines Appendix G thresholds are augmented by those contained in Sections 4.1, 4.2, 4.3, 4.4, 4.9, 4.11, and 4.12, (Aesthetics, Air Quality, Biological Resources (as relates to the Burton Mesa Ecological Reserve), Cultural Resources, Noise, Transportation and Circulation, and Fire Protection, respectively), which include issues that relate directly to land use compatibility. The project would cause a significant impact related to land use compatibility in each of these issue areas if a project impact would result in one of the aforementioned conflicts.

b. County of Santa Barbara Environmental Thresholds and Guidelines

The County of Santa Barbara Environmental Thresholds and Guidelines Manual (County Guidelines) (July 2015) do not contain specific land use thresholds. Rather, the issue of land use compatibility is addressed through consideration of three quality of life issue areas (mental health and well-being, social structure, and community well-being. These issues areas are addressed on a case-by-case basis. In other words, where a substantial physical impact to the quality of the human environment is demonstrated, the project's effect on quality of life shall be considered significant. Quality of life issues, while hard to quantify, are often primary concerns to the community affected by a project.

Examples of such issues include the following:

- Loss of privacy;
- Neighborhood incompatibility or a change to character;
- Nuisance noise levels (not exceeding noise thresholds);
- Increased traffic in quiet neighborhoods (not exceeding traffic thresholds);
- Loss of sunlight/solar access.

4.8.2.2 Project Impacts and Mitigation Measures

Impact LU-1: Conflict with Plans

Santa Barbara County Comprehensive Plan

The project site is located within the Vandenberg Village, designated as an Urban Area and RES-12.3 in the Comprehensive Plan. The current land use designation theoretically would allow development of 207 residential units on the 16.88-acre site. In contrast, the current zoning designation of Residential Ranchette, 10-acre minimum (RR-10), restricts the allowable residential development of the subject parcel to one single-family dwelling. The project does not include a General Plan amendment proposal, and therefore, the Comprehensive Plan RES-12.3 land use for the site would remain unchanged. The proposed project is consistent with the residential land use applied to the site.

Inclusionary Housing Ordinance

The project proposal includes payment of the County's affordable housing in-lieu fee instead of seeking to provide for affordable housing options on-site as part of the project. These fees

are assessed on developers and project owners in lieu of building affordable units on-site. The affordable housing inclusionary requirement for developments in Santa Barbara County is generally 20 percent for developments of five (5) or more units. In some cases, developers opt to pay an in lieu fee rather than construct affordable units. The funds support the production and maintenance of affordable housing in the County of Santa Barbara. Payment of the in lieu fee would ensure the project is consistent with the County requirement to include affordable housing in each project.

Land Use and Development Code (Chapter 35)

The proposed rezone would change the current zone district applied to the project property from RR-10 to DR-1.8. The purpose of both the existing and proposed zone districts are defined as follows, according to the LUDC Section 35.23.020 – Purposes of the Residential Zones, Subsection C*:*

1. **RR (Residential Ranchette) Inland area.** The RR zone is applied within the Inland area within Urban, Inner-Rural and Existing Developed Rural Neighborhood area as designated on the Comprehensive Plan maps where low density residential and agricultural uses are appropriate. This zone is intended to preserve the character of an area and to minimize the services required by providing for low density residential development.
2. **DR (Design Residential) zone.** The DR zone is applied to areas appropriate for one-family, two-family, and multi-family dwellings. This zone is intended to ensure comprehensively planned and well-designed residential development, while allowing flexibility and encouraging innovation and diverse design, and requiring that substantial open space be maintained within new residential developments.

According to LUDC Section 35.23.030 – Residential Zones Allowable Land Uses, Final Development Plan approval is required for development ~~all primary permitted land uses~~ in the RR zone that exceeds 20,000 square feet in gross floor area. Final Development Plan approval is also required for all development within the DR zone, including grading.

The site currently is undeveloped and the proposed zoning change would result in an increase in the allowable development on the site from one residential unit to 29 residential units with approval of a Final Development Plan. The project would subdivide the site to allow for future development of the residential lots.

The rezone would increase the allowable development from one residential unit under the existing zoning to the proposed 29 units under the proposed zoning. As noted above, the proposed project would be consistent with the land use designation shown for the property in the Comprehensive Plan, and the rezoning would result in densities similar to the surrounding developments. The proposed rezoning would implement the goals and objectives of the LUDC and would not create significant impacts. Therefore, the project would not result in an impact by causing a conflict with the County Comprehensive Plan, Inclusionary Housing Ordinance, and Land Use and Development Code (Class III impact).

Airport Land Use Plan Consistency

As discussed in Section 4.9, Noise, the adopted 1993 Airport Land Use Plan (ALUP) noise compatibility contours indicate that the all of Vandenberg Village, including the project site, are exposed to noise levels below 60 dB(A) CNEL. All of Vandenberg Village, including the project site, is located outside the policy protection zones established for crash protection at VAFB runways The ALUP is currently being updated by the Santa Barbara County Association of Governments (SBCAG) and the project site remains outside the noise and safety zones in the draft Airport Land Use Compatibility Plan (ALUCP) (SBCAG 2012a). As a result, the project will not have an impact due to consistency with either the 1993 ALUP or the Draft ALUCP update as currently drafted (Class III impact).

Sustainable Communities Strategy

The Sustainable Communities Strategy (SCS) is a component of the SBCAG Regional Transportation Plan (RTP), required by Senate Bill 375 that sets forth a forecasted development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, will reduce greenhouse gas (GHG) emissions from passenger vehicles and light trucks to achieve the GHG reduction targets set by the California Air Resources Board. The future land use and transportation scenario presented in the RTP/SCS must accommodate forecast population, employment, and housing sufficient to meet the needs of all economic segments of population, including the state-mandated Regional Housing Needs Assessment, when considering state housing goals. The SCS encourages infill- and transit-oriented development.

The RTP/SCS was based on the land uses prescribed in the various City of Lompoc General Plans and the County Comprehensive Plan. As the proposed project would develop the property at a density less than what would be allowed in the Comprehensive Plan, the project would be consistent with the goals and policy objectives in the RTP and would not result in a significant impact (Class III impact).

Mitigation Measures

The proposed project would be compatible with the County Comprehensive Plan land use designation and LUDC zoning with approval of the proposed rezone from RR-10 to DR-1.8. Compliance with LUDC Development Plan requirements would ensure that the project would be consistent with the County zoning regulations and development standards. The project includes proposed design guidelines, and proposed Mitigation Measure MM-AES-1 identifies suggested modifications to those guidelines. In addition, future residences would be subject to review by the North County Board of Architectural Review. With these requirements, the proposed residential uses would be consistent with applicable Comprehensive Plan land use requirements and LUDC regulations. As such, the project would not have a significant impact by creating an inconsistency with an adopted land use plan (Class III impact).

Significance after Mitigation

The project would be consistent with state and local plans; therefore, no mitigation is required.

Impact LU-2: Land Use Compatibility

As noted above, the project site is located on the north side of Oak Hill Road, and the surrounding land uses include the Village Country Club Golf Course, Burton Mesa Ecological Reserve, and residential (both single-family and condominium) development. The proposed project would undergo review by North County Board of Architectural Review Board that considers the project's compatibility with surrounding residences. Design review along with the project's design guidelines would result in the project having a less than significant land use compatibility impact to surrounding residential land uses (Class III impact).

The proposed rezone would change the current zone district applied to the project property from RR-10 to DR-1.8. The proposed rezone would increase the number of residences that could be developed on the project site from 1 to the proposed 29 residences. Land use compatibility impacts could result from project-related changes in existing environmental conditions, such as traffic generation, noise, interface with adjacent open space, and community character/project features. Development of the project site with 29 single-family residences would not create significant land use compatibility impacts given the features incorporated into the project design and with the noise, aesthetics, biology, and traffic characteristics of the project. Specifically:

1. Nuisance Noise. As detailed in Section 4.9, Noise, project construction would result in temporary short-term noise impacts. Hours of construction would be limited to the hours of 7:00 A.M. to 4:00 P.M. Monday through Friday, and would not be permitted on weekends or state holidays. In addition, project trip generation would not significantly contribute to project-specific or cumulative off-site noise impacts along Oak Hill Drive (see Section 4.9, Noise). As such, noise levels with the potential to cause a nuisance and affect quality of life would be temporary in nature and would be limited to standard workday and school hours. Temporary and long-term noise generated by future single-family residences developed on the project site would not be substantial or out of character with nearby residential areas and would not result in compatibility conflicts with existing residential uses located near the project site.

2. Increased Traffic in Quiet Neighborhoods. The project would generate approximately 276 average daily vehicle trips. Traffic resulting from the project would not add a substantial amount of traffic to Oak Hills Drive, and the traffic that would be added would not substantially increase existing traffic noise levels. In addition, the project would not generate traffic exceeding any County-adopted thresholds and would not adversely affect access to adjacent residences or otherwise reach levels where the proposed land use would conflict with surrounding uses.

3. Adjacent Open Space. The proposed project and the proposed *Oak Hills Estate Design Guidelines* include design features and development requirements that would minimize or avoid habitat adjacency impacts at the Burton Mesa Ecological Reserve. These features include:

   a. Required fuel management zones and a native habitat buffer would be established on the project site and would provide a buffer between proposed residential building envelopes and the Reserve boundary. In addition, on-site vegetation management consistent with regulatory requirements would minimize potential wildfire related land use conflicts.

   b. The project site is located east of an existing public trail entrance into the Reserve. Residents of the 29 residences that would be developed on the project site would be expected to use the Reserve trail system consistent with the public access purposes of the Reserve. The use of the trail by project site residents would not substantially increase the use of the Reserve by the public. ~~The proposed trail that would be located on the project site would not provide direct access into the Reserve and thereby limits the potential for impacts such as the creation of unauthorized trails, pet intrusion, and unauthorized bicycle and motorized vehicle trespass.~~

   c. The project design incorporates approximately 40 percent of the site as open space, most of which would be adjacent to the Reserve to the north and west. This, combined with the fuel management zones, accommodates a buffer between the residential building sites and the habitat in the Reserve and reduces the potential for impacts from trespass, lighting, glare, privacy, noise, and indirect biological impacts.

   d. The project does not involve land uses that would interfere with the ongoing maintenance of the Reserve; therefore, the project would not hinder implementation of the Reserve Management Plan.

   e. Future development on the project site would be limited to one-story residences, which would minimize adverse effects from increased nighttime lighting.

4. Neighborhood Incompatibility/Change of Character. The project does not propose or introduce any new commercial or industrial land uses that would cause neighborhood incompatibility, and does not require a Comprehensive Plan amendment to change the project site's land use designation. The project site has been designated in the County's Comprehensive Plan with a residential land use since the 1970s and would be consistent with the adjacent residential neighborhood. Future development on the project site would be similar to the scale and size of the adjacent residential uses, and the appearance of the future residences would not result in land use or community character incompatibility issue with adjacent residential uses.

5. Aesthetics and Privacy. The proposed project and the future development of residences on the project site would be designed to meet the requirements of the LUDC (Section 35.23.060) for the Design Residential (DR) Zone District, and would be designed to meet or exceed all applicable setbacks in this zone. The project includes Design Guidelines (Appendix C-1) that would undergo North County Board of Architectural Review (NBAR) prior to approval to ensure each lot would meet conditions of the DR zone and is aesthetically compatible with surrounding residences. The NBAR would ensure each lot's lighting is dark sky compliant. Residences developed on the project site would all be one story, which would minimize the potential for views into adjoining properties and privacy concerns. Therefore, individual lot development would be compatible with the DR zone and surrounding neighborhood and would not result in the loss of privacy.

6. Air Quality. The proposed residential uses are not anticipated to result in objectionable odors to sensitive receptors in the neighborhood. During construction and grading, impacts from short-term diesel exhaust and diesel particulate emissions may occur from construction equipment as a perceptible odor. However, project construction is temporary and anticipated to last approximately 17 months, excluding weekends and holidays. Additionally, air pollutant emissions from construction and operations were found to be below adopted thresholds and less than significant (see Section 4.2, Air Quality).

7. Loss of Sunlight/Solar Access. Proposed residences would cast shadows. However, based on the single-story height of the proposed structures and distance to structures on existing adjacent residential properties south and east of the project site, the project would have no impact upon solar access on adjacent sites.

Based on the discussion above, the proposed project would not result in significant land use compatibility impacts and impacts would be less than significant (Class III impact).

Mitigation Measures

Adoption of the project with a rezone to DR-1.8 will not result in significant land use compatibility impacts that would require mitigation. As impacts would be less than significant, no mitigation is required (Class III impact).

Significance after Mitigation

As the project will not result in significant land use compatibility impacts, no significant residual impacts are anticipated.

Impact LU-3: Off-site Restoration Area

The proposed off-site restoration on APN 097-371-067 would not cause land use compatibility conflicts related to the adopted plans discussed in Impact LU-1 or land use issue areas discussed in Impact LU-2 above. Implementation of the off-site restoration would be limited to habitat restoration and enhancement to mitigate for on-site oak and

maritime chaparral removal required by the proposed project. No permanent or habitable structures would be built at the proposed off-site restoration parcel, and use of the VVCSD-owned parcel for habitat and oak tree restoration would not require a rezone or comprehensive plan amendment that would cause a land use incompatibility.

Based on similar scale oak tree and chaparral restorations, the off-site restoration is expected to last between 3 and 6 years, depending on the success of the effort. The initial short-term restoration activities at the proposed off-site restoration parcel is anticipated to employ a crew of 6 to 8 persons using a small fleet of vehicles (automobiles and trucks) to transport staff, materials, and equipment to the site. It is expected that the initial restoration effort would last approximately 1 year. Thereafter and for the remainder of the 3- to 6-year restoration period, the activity on the site would be reduced and limited to routine maintenance by a smaller crew of 1 to 3 persons using a small fleet of vehicles similar to the initial restoration period. Equipment used for the restoration (other than vehicles) would be limited to handtools. The small-scale vehicles and equipment used during restoration activities would be sources of temporary noise and traffic land use impacts. The only sensitive receptors in the immediate area are located in the single-family residences north of the proposed off-site restoration parcel. Heavy-duty and large-scale construction vehicles or trucks typically used for residential, commercial, or industrial construction and demolition would not be required for the off-site restoration efforts. Therefore, potential land use compatibility impacts associated with off-site restoration on the VVCSD-owned parcel would be less than significant (Class III impact).

Mitigation Measures

Impacts are less than significant. No mitigation measures are required.

Significance After Mitigation

Impacts would be less than significant (Class III).

4.8.2.3 Cumulative Impacts

The proposed project would be compatible with the development in the Vandenberg Village Urban Area and consistent with the anticipated land uses for the site as shown in the County Comprehensive Plan. Significant land use-related impacts would not result from the proposed project. Development of each of the proposed lots, as well as future development projects in the project region would be required to undergo a separate application and review process on a case-by-case basis to ensure consistency and compliance with applicable land use requirements. As such, the project's impacts would not be cumulatively considerable and would be less than significant from a cumulative perspective as well (Class III impact).

4.9 Noise

This section evaluates the potential for the proposed project to result in adverse impacts related to noise. Noise and vibration sources associated with the project were assessed for the potential to result in temporary or permanent noise level increases or to exceed applicable standards established by the County of Santa Barbara (County). Additionally, the compatibility of proposed land uses with the existing noise environment was assessed. Appendix H contains the noise measurement data collected for the project.

4.9.1 Setting

4.9.1.1 Noise Terminology

The unit of measurement used to describe a noise level is the decibel (dB). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used for earthquake magnitudes. A 10 dB increase represents a 10-fold increase in sound intensity, a 20 dB change is a 100-fold difference, 30 dB is a 1,000-fold increase, etc. Thus, a doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; a halving of the energy would result in a 3 dB decrease. However, human perception of noise has no simple correlation with acoustical energy. The perception of noise is not linear in terms of dB or in terms of acoustical energy. Two equivalent noise sources do not sound twice as loud as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dB, increase or decrease; that a change of 5 dB is readily perceptible; and that an increase (or decrease) of 10 dB sounds twice (or half) as loud (California Department of Transportation 2013).

The human ear is not equally sensitive to all frequencies within the sound spectrum. Therefore, a method called "A-weighting" is used to filter noise frequencies that are not audible to the human ear. A-weighting approximates the frequency response of the average young ear when listening to most ordinary everyday sounds. When people make relative judgments of the loudness or annoyance of a sound, their judgments correlate well with the A-weighted levels of those sounds. Therefore, the A-weighted noise scale is used for measurements and standards involving the human perception of noise. In this report, all noise levels are A-weighted and dB(A) is understood to identify the A-weighted decibel.

In addition to the level of noise, the duration or exceedance of noise over time is also important for the assessment of potential noise disturbance. Noise levels over a period of minutes or hours are usually expressed as an equivalent noise level (L_{eq}), i.e., the equivalent constant noise level for that period. The period of time averaged may be

specified, $L_{eq(3)}$ would be a 3-hour average; when no period is specified, a 1-hour average is assumed.

The timing of noise is also an important factor to consider in assessing potential noise impacts, as noise levels that may be acceptable during the day may create disturbance during evening or nighttime hours. Two noise metrics used in this analysis are the Community Noise Equivalent Level (CNEL) and the day–night average noise level (L_{dn}). The CNEL is the energy average of the A-weighted sound levels occurring during a 24-hour period, with a 5 dB(A) penalty added to the sound levels occurring between 7:00 p.m. and 10:00 p.m. and 10 dB(A) added to the sound levels occurring between 10:00 p.m. and 7:00 a.m. The day–night average noise level (Ldn) is a 24-hour dB(A) Leq from midnight to midnight obtained after the addition of 10 dB(A) to the sound levels occurring between 10:00 p.m. and 7:00 a.m. Adding penalties to the evening and nighttime hours, is intended to account for the added sensitivity of humans to noise during this period.

Table 4.9-1 provides examples of common activities and the sound levels associated with those activities.

Table 4.9-1
Typical Noise Levels

Common Outdoor Activities	Noise Level [dB(A)]	Common Indoor Activity
Rock Band	110	--
Jet Fly-over at 300 meters (1,000 feet)	100	--
Gas Lawn Mower at 1 meter (3 feet)	90	--
Diesel Truck at 15 meters (50 feet), at 80 kilometers/hour (50 miles per hour)	80	Food Blender at 1 meter (3 feet) Garbage Disposal at 1 meter (3 feet)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 meters (100 feet)	70	Vacuum Cleaner at 3 meters (10 feet)
Commercial Area Heavy Traffic at 90 meters (300 feet)	60	Normal Speech at 1 meter (3 feet)
Quiet Urban Daytime	50	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	30	Library
Quiet Rural Nighttime	20	Bedroom at Night, Concert Hall (Background)
--	10	Broadcast/Recording Studio
--	0	Lowest Threshold of Human Hearing

SOURCE: California Department of Transportation 2013

From the source to the receiver, noise changes both in level and frequency spectrum. The most obvious change is the decrease in noise as the distance from the source increases. The manner in which noise reduces with distance depends on the following important factors: ground absorption, atmospheric effects, refraction, shielding by natural and man-made features, noise barriers, diffraction, and reflection. For a point or stationary noise source, such as construction equipment, the attenuation or drop-off in noise level would be at least -6 dB(A) for each doubling of unobstructed distance between source and the receiver and

could increase to -7.5 dB(A) depending on the acoustic characteristics of the intervening ground. For a linear noise source, such as vehicles traveling on a roadway, the attenuation or drop-off in noise level would be approximately -3 dB(A) for each doubling of unobstructed distance between source and the receiver and could increase to -4.5 dB(A) depending on the acoustic characteristics of the intervening ground.

A large object in the path between a noise source and a receiver can significantly attenuate noise levels at that receiver. The amount of attenuation provided by this "shielding" depends on the size of the object and the frequencies of the noise levels. Natural terrain features, such as hills and dense woods, as well as man-made features, such as buildings and walls, can significantly alter noise levels. Walls or berms are often specifically used to reduce or attenuate noise.

Noise-sensitive receivers are generally considered humans engaged in activities, or occupying land uses, that may be subject to the stress of significant interference from noise. Human activities usually associated with noise-sensitive receivers include, but are not limited to, talking, reading, and sleeping. Land uses associated with noise-sensitive human receptors include residential dwellings including mobile homes, hotels/motels, hospitals, nursing homes, educational facilities, and libraries.

4.9.1.2 Existing Noise Environment

a. Traffic Noise

There are no major roads in the vicinity of the project site or in the ~~off-site mitigation on portion of a~~ 123-acre off-site mitigation ~~open space~~ parcel owned by the Vandenberg Community Services District (APN 097-371-067) located approximately 1 mile southeast of the project site. The nearest roads, Oak Hill Drive for the project site and Clubhouse Road for the off-site mitigation area, are residential collector roads with a speed limit of 25 miles per hour (mph). As indicated by the 2014 Circulation Element of the County Comprehensive Plan (Comprehensive Plan), the County Policy Capacity (Section III. Roadway Classification System) establishes a policy capacity for collector streets of 5,000 average daily trips (ADT).

b. Aircraft Noise

The project site and off-site mitigation on APN 097-371-067 are within the airport influence area for Vandenberg Air Force Base. Noise compatibility contours, which identify airport noise as low as 60 CNEL, indicate that the all of Vandenberg Village, including the project site and off-site mitigation area are exposed to noise levels below 60 CNEL (Santa Barbara County Association of Governments 2012b).

The airport influence area for the Lompoc Airport extends into the southern half of Vandenberg Village. The project site is outside the airport influence zone and the off-site mitigation area on APN 097-371-067 is inside the airport influence zone. The mitigation area is outside the 60 CNEL noise contour for the Lompoc Airport and therefore aircraft

noise levels would be less than 60 CNEL (Santa Barbara County Association of Governments 2012).

4.9.1.3 Overview of Sound Measurement

Existing noise levels at the project site were measured on Tuesday, April 19, 2016, using a Larson-Davis LxT Sound Expert Sound Level Meter, serial number 3897. The following parameters were used:

Filter:	A-weighted
Response:	Slow
Time History Period:	5 seconds
Height of Instrument:	5 feet above ground level

The meter was calibrated before and after each measurement. Two 30-minute measurements were made in the vicinity of the project site, as described below. The locations of the measurements are shown on Figure 4.9-1, and the noise measurement data are contained in Appendix H.

Measurement 1 was taken April 19, 2016, between 9:42 am and 10:12 am, and was located at east of the project site, approximately 50 feet east of the intersection of Oak Hill Drive and Doral Road. For the initial 20 minutes of this measurement, the main source of noise at this location was vehicle traffic on Oak Hill Drive. For the remaining 11 minutes of this measurement, a lawnmower contributed to ambient noise levels. Traffic volumes on Oak Hill Drive were counted during Measurement 1 and the results are shown in Table 4.9-2. The average measured noise level during Measurement 1 was 54.3 dB(A) L_{eq}.

Measurement 2 was taken April 19, 2016, between 10:56 am and 11:26 am, and was located across from the western boundary of the project site, approximately 20 feet south of the intersection of Oak Hill Drive and an unnamed private cul-de-sac for 154–164 Oak Hill Drive. The main source of noise at this location was vehicle traffic on Oak Hill Drive. Other noise sources included a single plane flyover and conversation from passing pedestrians. Traffic volumes on Oak Hill Drive were counted during Measurement 2 and the results are shown in Table 4.9-2. The average measured noise level during Measurement 2 was 51.5 dB(A) L_{eq}.

Table 4.9-2
30-minute Traffic Counts

Measurement	Roadway	Direction	Autos	Medium Trucks	Heavy Trucks	Buses	Motorcycles
1	Oak Hill Drive	Northbound	3	0	0	0	0
		Southbound	3	0	0	0	0
2	Oak Hill Drive	Eastbound	3	1	0	0	0
		Westbound	5	0	0	0	0

Image source: USDA FSA NAIP (flown June 2014)

0 Feet 250

Project Area

Noise Measurement Locations

RECON

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FIGURE 4.9-1

Noise Measurement Locations

4.9.1.4 Regulatory Setting

a. Santa Barbara County Comprehensive Plan

The purpose of the Noise Element within the County's Comprehensive Plan is to protect the public from noise that could jeopardize their health and welfare. The Noise Element identifies major noise sources, estimates the extent of their impact, and discusses potential methods of noise abatement. Specifically, the Noise Element identifies maximum levels of noise exposure that are considered acceptable for sensitive land uses (e.g., residences, schools, and hospitals). The Comprehensive Plan contains policies and development standards that seek to restrict noise exposure of noise-sensitive receivers to acceptable levels. The Comprehensive Plan concludes that:

> In the planning of land use, 65 dB Ldn should be regarded as the maximum exterior noise exposure compatible with noise sensitive uses unless noise mitigation features are included in project designs.

b. Santa Barbara County ~~Municipal~~ Code

The Santa Barbara County ~~Municipal~~ Code ~~(Municipal Code)~~ does not include general daytime noise level limits. As identified in Section 40-2, during nighttime hours, which are defined as between 10:00 p.m. and 7:00 a.m. on Sunday through Thursday and 12:00 a.m. and 7:00 a.m. on Friday and Saturday, noise levels in excess of 60 dB at the edge of the property line of the property upon which the sound is broadcast, and are clearly discernable at one hundred feet, are prohibited.

4.9.2 Impact Analysis

4.9.2.1 Thresholds of Significance

a. California Environmental Quality Act Guidelines Appendix G

California Environmental Quality Act (CEQA) Guidelines Appendix G provides sample criteria for environmental review of projects. As stated in the Guidelines, these questions are "intended to encourage thoughtful assessment of impacts and do not necessarily represent thresholds of significance" (Title 14, Division 6, Chapter 3 Guidelines for Implementation of the CEQA, Appendix G, Environmental Checklist Form). Lead agencies may tailor the criteria to address individual agency needs or project circumstances. Sample criteria indicate a project may result in significant noise impacts if it would:

- 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;
- Expose persons to or generation of excessive groundborne vibration or groundborne noise levels;

- Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;

- Result in a substantial temporary or period increase in ambient noise levels in the project vicinity above levels existing without the project;

- 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, expose people residing or working in the project area to excessive noise levels; and/or

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

b. Santa Barbara County Significance Thresholds

The County's Environmental Thresholds and Guidelines Manual states that a significant noise impacts may occur if (County of Santa Barbara 2015a):

- A proposed development that would generate noise levels in excess of 65 dB(A) CNEL and could affect sensitive receptors [a.k.a. noise-sensitive receivers] would generally be presumed to have a significant impact;

- Outdoor living areas of noise sensitive uses that are subject to noise levels in excess of 65 dB(A) CNEL would generally be presumed to be significantly impacted by ambient noise. A significant impact would also generally occur where interior noise levels cannot be reduced to 45 dB(A) CNEL or less.

- A project will increase substantially the ambient noise levels for noise-sensitive receptors [a.k.a. noise-sensitive receivers] adjoining areas. This may generally be presumed when ambient noise levels affecting sensitive receptors are increased to 65 dB(A) CNEL or more. However, a significant effect may also occur when ambient noise levels affecting sensitive receptors [a.k.a. noise-sensitive receivers] increase substantially but remain less than 65 dB(A) CNEL, as determined on a case-by-case level.

- Noise from grading and construction activity proposed within 1,600 feet of sensitive receptors [a.k.a. noise-sensitive receivers], including schools, residential development, commercial lodging facilities, hospitals or care facilities, would generally result in a potentially significant impact. According to EPA guidelines average construction noise is 95 dB(A) at a 50 feet distance from the source. A 6 dB drop occurs with a doubling of the distance from the source. Therefore, locations within 1,600 feet of the construction site would be affected by noise levels over 65 dB(A). To mitigate this impact, construction within 1,600 feet of sensitive receptors [a.k.a. noise-sensitive receivers] shall be limited to weekdays between the hours of 8 A.M. to 5 P.M. only. Noise attenuation barriers and muffling of grading equipment may also be required. Construction equipment generating noise levels above 95 dB(A) may require additional mitigation.

4.9.2.2 Methodology

The proposed project would have different noise sources during construction, project-generated traffic and other noise sources associated with project operations.

a. Construction Noise

Project construction noise would be generated by diesel engine-driven construction equipment used for site preparation and grading, loading, unloading, and placing materials and paving. Diesel engine-driven trucks also would bring materials to the site and remove the soils from excavation. Noise generated by project construction activities were estimated using reference levels from the Federal Transit Authority's (FTA) guidance manual (FTA 2006) and standard noise propagation algorithms. Table 4.9-3 summarizes typical construction equipment noise levels.

Table 4.9-3
Typical Construction Equipment Noise Levels

Equipment	L_{eq} at 50 feet [dB(A)]
Air Compressor	76
Backhoe	76
Compactor	73
Concrete Mixer Truck	81
Crane	77
Dozer	81
Dump Truck	80
Front End Loader	76
Grader	81
Jack Hammer	78
Paver	82
Pump	74
Roller	78
Scraper	81

SOURCE: FTA 2006.
Notes:
Noise Levels are adapted from maximum noise level and acoustical use factors.
This is an abbreviated list of common equipment.

b. Traffic Noise

Noise generated by future traffic was modeled using the Federal Highway Administration's Traffic Noise Model algorithms and reference levels. Traffic noise levels were calculated based on the peak traffic hour volumes, which were estimated to be 10 percent of ADT volumes. Typically, the predicted peak daytime L_{eq} and overall L_{dn} are approximately equal. Noise levels conservatively modeled assuming flat topography with no features that may obstruct noise propagation.

c. Operations Noise

On-site noise sources associated with the project operations are anticipated to be those that would be typical of any residential development, such as vehicles arriving at and leaving from the parking garage, children at play, and landscape maintenance machinery.

4.9.2.3 Project Impacts and Mitigation Measures

Impact N-1: Noise Standards

Construction Noise

Project construction would include the use of common construction equipment such as graders, dozers, excavators, etc., which may generate a substantial amount of noise. The habitat restoration and enhancement occurring at the off-site mitigation area on APN 097-371-067 would not require the use of heavy-duty construction equipment and therefore would not generate a substantial noise levels. Impacts associated with construction noise are discussed under Impact N-4, Temporary Noise Level Increases.

On-site Noise Sources

Noise level limits applicable to long-term activities conducted on the project site include the daily average noise level of 65 CNEL established by the County Environmental Thresholds and Guidelines Manual and a nighttime hourly noise level of 60 dB(A) L_{eq} established in Section 40-2 of the Santa Barbara County ~~Ordinance~~ Code.

The project proposes single-family residences in a residential neighborhood. Project noise sources after completion of construction are anticipated to be those that would be typical of residential uses in the vicinity of the project, such as vehicles arriving and leaving, children at play, and landscape maintenance machinery. The proposed project's off-site mitigation area on APN 097-371-067 would be limited to habitat restoration and enhancement and would not result in on-site noise sources. These types of noise sources would not violate the noise level limits of the County ~~Ordinance~~ Code or result in a substantial permanent increase in existing noise levels.

Heating, ventilation, and air conditioning (HVAC) units with exterior condensers have the potential to produce noise in excess of ~~Ordinance~~ County Code limits. Based on review of various manufacturer specifications, a representative sound power level of 72 dB(A) unit for each residence was selected for analysis (Carrier 2015). This sound power level corresponds to the Carrier 25HHA4 Series, with sizes ranging from 1.5 to 5 nominal tons, which is typical for use for single-family residential uses. The exact location of the HVAC units that may be used on the project site is not known at this time; however, if used it is likely that they would be placed in side yards adjacent to the building façades. The proposed lots would have required setbacks, including 10-foot side yards. Given the 10-foot side yard setbacks, it is not anticipated that the HVAC units would be located closer than six feet from the property line. Noise from representative HVAC units would attenuate to below the County's night-time noise level limit of 60 dB(A) L_{eq} within 6 feet. As HVAC units are not

anticipated to be placed within 6 feet of a property line, impacts would be less than significant.

Traffic

Land Use Compatibility

On-site Traffic Noise

Traffic noise sources in the vicinity of the project site include Oak Hill Drive, a residential street with a speed limit of 25 mph. As indicated by the Circulation Element of the Comprehensive Plan, Oak Hill Drive as a collector roadway will not accommodate traffic volumes of more than 5,000 ADT based on Circulation Element policy capacity requirements. Using the policy capacity traffic level of 5,000 ADT, traffic noise levels would attenuate to 58 L_{dn} or below within the right-of-way of Oak Hill Drive. As the project would not be exposed to traffic noise levels in excess of the exterior noise compatibility threshold of 65 dB L_{dn} established in the Santa Barbara County Comprehensive Plan, the project would be compatible with the existing and future noise environment. Impacts would be less than significant.

Off-site Traffic Noise

The project would increase traffic volumes on local roadways and thereby increase noise levels associated with those roadways. Noise level increases would be greatest nearest the project site, as this location would subject to the greatest concentration of project-related traffic. A significant impact would occur if the project resulted in or created a significant increase in the existing ambient noise levels. As discussed in Section 4.9.1.1, studies have shown that the average human ear can barely perceive a change in sound level of 3 dB(A). Doubling the traffic volume on a roadway would result in a 3 dB(A) increase. A change of at least 5 dB(A) is considered a readily perceivable change in a normal environment. According to the County's Environmental Thresholds and Guidelines Manual, a substantial increase the ambient noise levels for noise-sensitive receptors in adjoining areas is considered to be an increase of 5 dB(A).

Based upon the Traffic & Circulation Study for the proposed project (Penfield & Smith 2015; see Appendix I-1), the project would generate approximately 276 trips per weekday, with approximately 29 trips occurring in the PM peak hour (see Section 4.11, Traffic). However, traffic volumes were found to remain at a level of service (LOS) A with development of the proposed project. The addition of 276 trips to roadways in the project area would not result in a noise increase of 3 dB(A) or greater. Off-site mitigation on APN 097-371-067 would be limited to habitat restoration and enhancement and would not result in a permanent increase in traffic volumes on local roadways. Thus, potential noise level increases would also not result in high permanent noise levels that could impact off-site noise sensitive receivers. Impacts would, therefore, be less than significant.

Mitigation Measures

Impacts would be less than significant and no mitigation is required (Class III Impact).

Impact N-2: Groundborne Noise and Vibration

Noise and vibrations can propagate through the ground. Depending on the location and intensity, impacts from groundborne noise and vibration may result in human annoyance or building damage. Construction activities with substantial potential to result in groundborne noise and vibration impacts include pile driving or blasting. Other pieces of equipment such as jackhammers, dozers, and heavy trucks generate substantially lesser amounts of groundborne noise and vibration.

Although it is possible for vibrations from construction projects to cause building damage, the vibrations from standard construction activities are almost never of sufficient amplitude to cause more than minor cosmetic damage to buildings (FTA 2006). As the project and off-site mitigation would not require blasting or pile driving, the project construction is not anticipated to expose persons to excessive ground-borne noise or vibration.

The proposed project is a residential development. Project operations and habitat restoration at the off-site mitigation area on APN 097-371-067 would not include any substantial sources of groundborne noise and vibration. Impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant and no mitigation is required (Class III Impact).

Impact N-3: Permanent Noise Level Increases

On-site Noise Sources and Traffic Noise

As discussed previously in Impact N-1 above, the project would result in new residential land uses and associated noise sources that are similar to existing nearby uses and would not result in a substantial increase in the ambient noise levels. The project would increase traffic volumes on local roadways and thereby increase noise levels associated with those roadways. However, the addition of a maximum of 276 trips to roadways in the project area would not result in a noise increase of 3 dB(A) or greater. Off-site mitigation on APN 097-371-067 would be limited to habitat restoration and enhancement and would not increase traffic volumes on local roadways or result in new on-site noise sources. Therefore, the increase in noise levels would not be perceptible and would not result in a substantial increase in ambient noise levels. Impacts would be less than significant.

Mitigation Measures

Impacts would be less than significant and no mitigation is required (Class III impact).

Impact N-4: Temporary Noise Level Increases

Implementation of the Offsite Mitigation Area Baseline Biological Report and Conceptual Mitigation Plan (Rincon 2016a) would not require the use of heavy-duty construction equipment. On-site project construction would include the use of common construction equipment such as graders, dozers, excavators, etc., which may generate substantial noise levels. According to the County's Environmental Thresholds and Guidelines Manual, projects that propose grading or construction activity within 1,600 feet of noise-sensitive receivers, including schools, residential development, commercial lodging facilities, hospitals or care facilities, would generally result in a potentially significant impact. There are residential uses within 100 feet of the eastern and southern edge of the project disturbance area (i.e. where grading and construction will occur). Therefore, without mitigation construction activities would result in potentially significant temporary noise level increases.

Mitigation Measures

The standard mitigation measures for construction noise as identified in Santa Barbara County Environmental Thresholds and Guidelines Manual and staff reports shall be incorporated (County of Santa Barbara 2015a).

MM N-1: Construction Hours

The Owner /Applicant, including all contractors and subcontractors shall limit construction activity, including equipment maintenance and site preparation, to the hours between 7:00 a.m. and 4:00 p.m. Monday through Friday. No construction shall occur on weekends or state holidays. Non-noise-generating interior construction activities such as plumbing, electrical, drywall and painting (which do not include the use of compressors, tile saws, or other noise-generating equipment) are not subject to these restrictions. Any subsequent amendment to the Comprehensive General Plan, applicable Community or Specific Plan, or Zoning Code noise standard upon which these construction hours are based, shall supersede the hours stated herein.

Plan Requirements and Timing: The Owner/Applicant shall provide and post a sign stating these restrictions at all construction site entries. Signs shall be posted prior to commencement of construction and maintained throughout construction.

Monitoring: The Owner/Applicant shall demonstrate that required signs are posted prior to grading/building permit issuance and pre-construction meeting. Building inspectors and permit compliance staff shall spot-check and respond to complaints.

Significance After Mitigation

Project construction would not include blasting or pile driving, which are commonly considered to be two of the loudest construction activities. With incorporation of MM N-1, construction activities would be limited to daytime hours and potential contractors would

be aware of County requirements. Therefore, impacts would be less than significant (Class II impact).

Impact N-5: Aircraft Noise Level Increases

The project site is approximately 3.7 miles north of Lompoc Airport and 6.4 miles from the Vandenberg Air Force Base. As discussed in Section 4.9.1.2, the project site is outside the 60 CNEL compatibility contour for both airports.

Mitigation Measures

Impacts would be less than significant and no mitigation is required (Class III impact).

4.9.2.4 Cumulative Impacts

Construction Noise

Noise is a localized issue and attenuates rapidly with distance. Therefore, only future development projects in the vicinity of the project site could add to construction noise generated by the project and result in a cumulative noise impact. The only cumulative development project identified on EIR Table 3-1 located in the vicinity of the project site is the Village Country Club project, which would result in the development of 14 residential units. The Clubhouse Estates project currently under construction is located immediately north of the off-site mitigation area on APN 097-371-067 and would result in the development of 52 residential units. Mitigation measure **MM N-1** would ensure that construction noise associated with the proposed project would be limited to daytime hours, consistent with County standards. Similarly, construction noise from other cumulative projects would be mitigated by limiting construction to daytime hours on weekdays. The habitat restoration and enhancement occurring at the off-site mitigation area on APN 097-371-067 would not require the use of heavy-duty construction equipment and, therefore, would not generate a substantial noise levels. Therefore, cumulative noise impacts would be less than significant (Class III impact).

On-site Noise Sources

The areas surrounding the project site include developed residential areas, a golf course, and dedicated open space areas. The areas surrounding the off-site mitigation area located approximately 1 mile southeast of the project site include open space and roadways with single-family residences to the north. Based on noise measurements taken near the project site, ambient daytime noise conditions in the project area (51–54 dB(A) L_{eq}) are relatively low. One cumulative development project identified on EIR Table 3-1 located in the vicinity of the project site is the Village Country Club project, which would result in the development of 14 residential units. Another cumulative development project currently under construction located immediately north of the off-site mitigation area on APN 097-371-067 is the Clubhouse Estates project with 52 residential units. The off-site mitigation area would not result in new on-site noise sources. The additional residential uses that may be developed in the project area and by the off-site mitigation area could result in

additional noise sources that are similar to other residential uses in the project area, and are not expected to be substantial long-term source of noise. Given the surrounding residential and open space characteristics of the project and off-site mitigation area, it is unlikely that future cumulative development would result in a significant long-term increase in existing ambient noise levels in the vicinity of the project site. As such, cumulative noise impacts would be less than significant.

Traffic

As discussed under Impact N-1 and N-3, the addition of a maximum of 276 trips to roadways in the project area would not result in a noise increase of 3 dB(A) or greater. Additionally, for roadways included in the traffic study area, when comparing existing traffic volumes to cumulative plus project volumes, there would not be a doubling in traffic volumes. Therefore, cumulative plus project traffic conditions would not result in a noise increase of 3 dB(A) or greater. In addition, off-site mitigation on APN 097-371-067 would be limited to habitat restoration and enhancement. Off-site mitigation would result in a limited short-term increase in traffic volumes during restoration and no permanent increase in traffic volumes on local roadways. The increase in traffic noise levels resulting from cumulative traffic conditions would not be perceptible and would not result in a substantial increase in ambient noise levels. Cumulative noise impacts would be less than significant.

4.10 Public Services and Utilities

This section describes existing public services and utilities in the vicinity of the project site, including public schools, water supply, wastewater, solid waste, libraries, natural gas and electricity, police services, and the potential impacts of the proposed project on these public services and utilities. Fire protection and wildfire impacts are addressed in Section 4.12, Fire Protection.

4.10.1 Setting

4.10.1.1 Public Schools

The Lompoc Unified School District (LUSD) would provide educational services for residents of the project site. LUSD serves K-12 students in the City of Lompoc (City) and communities of Santa Barbara County, including Vandenberg Village, Mesa Oaks, Mission Hills, Vandenberg Air Force Base, and rural areas adjacent to these communities. The District's 2015–2016 total K-12 enrollment was 9,802 students (LUSD 2016). Currently, there are nine elementary schools, two middle schools, three high schools, one adult education facility, and one home school (independent study) facility. The schools located within the Vandenberg Village area that would primarily serve the project area include Cabrillo High School, Maple High (Continuation) School, Vandenberg Middle School, and Buena Vista Elementary. Table 4.10-1 shows the current student enrollment for these schools. Students or families interested in attending other schools in the LUSD may apply through completing a School of Choice Form, available at LUSD schools or online. LUSD data was obtained from the California Department of Education, School Accountability Report Cards, published in 2015–2016 for the 2014–2015 school year.

Table 4.10-1
Public School Student Enrollment
Vandenberg Village Area

School	Student Enrollment
Elementary (Grades K-6)	
Buena Vista Elementary	665
Junior High (Grades 7-8)	
Vandenberg Middle School	788
High (Grades 9-12)	
Cabrillo High School	1,447
Maple High School (Continuation)	172
SOURCE: California Department of Education 2016a-d.	

Image source: USDA FSA NAIP (flown June 2014)

Project Boundary

School

Library

Fire Station

POLICE Police

RECON

M:\JOBS5\8147\common_gis\fig4.10-1.mxd 6/17/2016 sab

FIGURE 4.10-1

Public Service Facilities

4.10.1.2 Water Supply

Vandenberg Village Community Services District (VVCSD) was established in 1983 and is a public water and wastewater provider that serves the Vandenberg Village area with approximately 2,6002~~,400~~ connections. VVCSD and the Mission Hills community rely on groundwater from the Lompoc Uplands sub-basin of the Lompoc Groundwater Basin for municipal supply. The Lompoc Uplands sub-basin is bordered on the west by the Burton Mesa Ecological Reserve, on the north by the Purisima Hills, on the east by a topographical divide, which separates it from the Buellton Uplands Basin, and on the south by the Lompoc Plain Alluvial Basin and the Santa Rita Hills.

VVCSD currently operates 32 miles of water distribution system, three groundwater wells, one 500,000-gallon tank reservoir, one 300,000-gallon tank reservoir, two 1,000,000-gallon steel tank reservoirs, three booster stations, two pressure-reducing stations, and a pressure filter treatment system. According to VVCSD's latest Strategic Plan in 2005, this storage capacity is greater than most small to medium sized water systems in California (VVCSD 2005). VVCSD also operates standby diesel generators to maintain normal operations during power outages.

The proposed project would be served by an existing 10-inch water main along Oak Hill Road. Based on the Santa Barbara County 2015–2023 Housing Element, VVCSD has a current water service capacity of 1,800 acre-feet per year (AFY) with a current (2015) usage level of 1,480 AFY. It is estimated that VVCSD can accommodate 617 new additional units (County of Santa Barbara 2015c).

4.10.1.3 Wastewater

Wastewater from the Vandenberg Village area is collected ~~, treated, and disposed of~~ by the VVCSD. Since 1978, wastewater has been ~~connected and~~ treated at the City of Lompoc Regional Wastewater Reclamation Plant (LRWRP) ~~for treatment and disposal,~~ located at 1801 West Central Avenue in Lompoc, California. This plant also serves the Vandenberg Air Force Base (VAFB) area. The LRWRP was constructed in the mid-1970s~~, finished with significant~~and substantially upgradesd in 2009. ~~The City of Lompoc Wastewater Division completed~~VVCSD prepared a the LRWRP Sewer System Management Plan in ~~2014~~ 2010 to comply with the State and Regional Water Quality Control Board regulations.

VVCSD has a contractual entitlement to 16.14 percent of the LRWRP capacity, which has a design flow of 5.5 million gallons per day (MGD) and a permitted flow of 5.0 MGD (VVCSD 2016). According to the Santa Barbara County 2015–2023 Housing Element, VVCSD has a current wastewater service capacity of 0.89 MGD and a current usage level of 0.5 MGD, and it is anticipated that VVCSD can serve an additional 2,600 residential units (County of Santa Barbara 2015c).

4.10.1.4 Solid Waste

The Resource Recovery and Waste Management Division, part of the Santa Barbara County Public Works Department, is responsible for the management of solid waste in the County. The Division's program for the management of solid waste includes the collection, recycling, and disposal of solid waste, as well as the abatement of illegal dumping of waste. Solid waste collection service in Vandenberg Village is provided by Waste Management's Health Sanitation Service, a private refuse collection, recycling, green waste, and disposal company.

Solid waste would be transported to the Lompoc Sanitary Landfill, owned by the City and regulated by the County Public Health Department. The landfill is inspected monthly and is located at 700 South Avalon Road in Lompoc, encompassing approximately 115 acres (California Department of Resources Recycling and Recovery [CalRecycle] 2016). The maximum permitted throughput at the Lompoc Sanitary Landfill is 400 tons per day. The Lompoc Sanitary Landfill's most recent capacity examination on January 1, 2006 measured a remaining capacity of approximately 2,146,779 cubic yards (approximately 27 percent total capacity remaining) (CalRecycle 2016). The Lompoc Sanitary Landfill is estimated to reach full capacity and cease operations January 2045.

4.10.1.5 Health Care and Emergency Services

The Santa Barbara County Emergency Medical Service Agency (SBCEMSA) is responsible for the planning, implementation, and evaluation of emergency medical services (EMS) within the County. This system, as defined in Division 2.5 of the California Health and Safety Code, consists of "an organized pattern of readiness and response services based on public and private agreements and operational procedures."

The response is a collective effort comprising law enforcement officers, fire first responders, and ambulance providers and emergency department staff. Fire paramedics (employed by Station 51) and the Santa Barbara County Fire Department (SBCFD) ambulance service are under the authority of SBCEMSA and dispatched during emergency situations. Per the Santa Barbara County Emergency Medical Services Plan (2015), the County is divided into three ambulance service zones; the Vandenberg Village community falls within Zone 2. The SBCFD provides ambulance services to the majority of the Vandenberg Village area and a portion of unincorporated Mission Hills. American Medical Response provides ambulance service to the remaining area of Zone 2, including the City of Lompoc and the Vandenberg Air Force Base. Zone 2 is a non-exclusive operating area and SBCFD Station 51 is a dedicated Advanced Life Support station.

4.10.1.6 Libraries

Although the project site is located in the unincorporated area of Santa Barbara County, the City of Lompoc Public Library system provides the nearest library services to the project site. The Lompoc Public Library includes two branches in Buellton and Vandenberg villages. The County provides funding for both libraries.

4.10.1.7 Natural Gas and Electricity

The Southern California Gas Company (SCGC) provides natural gas service throughout the County and Vandenberg Village. SCGC's service territory encompasses approximately 20,000 square miles from central and southern California to the Mexican border. SCGC provides natural gas to 21.6 million consumers through 5.9 million meters in more than 500 communities (SCGC 2016).

Pacific Gas & Electric (PG&E) provides electrical service to the Vandenberg Village area. PG&E utilizes a variety of energy sources to generate electricity including natural gas, nuclear, renewable, and hydroelectric plants. PG&E maintains a large network of transmission and distribution infrastructure throughout the area, which provides electrical power and service to its customers.

4.10.1.8 Law Enforcement

The County Sheriff's Office (Sheriff's Office) provides law enforcement services to the project area. The Sheriff's Office has established a service goal of one officer per 1,200 people. However, it has not adopted response time standards, because deputies respond to calls for service while they are already out on patrol, and response times vary depending on the deputies' current locations.

The Lompoc Valley Substation serves the unincorporated areas of the Lompoc Valley including Vandenberg Village and Mission Hills. The station is located at 3500 Harris Grade Road in Lompoc. The Lompoc Valley Substation is staffed by two deputies during the day shift and one floating supervisor who works between Lompoc and the Santa Ynez Valley. During the night shift, two deputies patrol the area as well as one floating supervisor between Lompoc and the Santa Ynez Valley (pers. comm., Shawn O'Grady, Lieutenant, Santa Barbara County Sheriff's Office).

Additional sworn peace officers, who serve as administrative staff or detectives assigned to the stations, do not routinely handle calls for service; however, they would be mobilized to respond to a major emergency. In all, the total deputies working during the day shift Countywide could range from 22 to 33, while the night shift could be 25 to 39.

The proposed project includes the Offsite Mitigation Area Baseline Biological Report and Conceptual Mitigation Plan (Rincon 2016a, 2016b, and 2017c) (see Appendix D-3 and D-4) that details the potential for off-site mitigation on ~~a 28-acre portion of~~ the 123-acre open space property owned by the VVCSD (APN 097-371-067). The proposed off-site restoration parcel is located along the east side of Club House Road approximately 1 mile southeast of the project site (Figure 2-11~~2-12~~). The off-site mitigation area is bounded by Clubhouse Road to the west, Burton Mesa Boulevard and open space to the south, Burnham Drive to the north, and open space to the east. The same public service agencies and utility companies discussed above provide services in the urban area surrounding this dedicated open space parcel.

4.10.1.9 Regulatory Setting

a. Public Schools

California Senate Bill 50 (SB 50)

Senate Bill (SB) 50 and Proposition 1A (1998) provide a comprehensive school funding program for facilities. This program requires developers to pay fees to mitigate the impact of projects on school facilities. According to Government Code Section 65996, the development fees authorized by SB 50 are deemed to be "full and complete school facilities mitigation". These provisions were to remain in effect until 2006 and then remain in place as long as subsequent state bonds are approved and available.

Under the provisions of SB 50, school districts may collect what they termed "Level 2" and "Level 3" fees to offset the cost associated with increasing school capacity in response to student enrollment increases associated with residential developments. Level 2 fees require the developer to provide one-half of the costs of accommodating students in new schools, with the state providing the other half. Level 3 fees require the developer to pay the full cost of accommodating the students in new schools and would be implemented at the time funds were available and expended from Proposition 1A. In order to qualify for this source of funding, school districts must demonstrate to the state their long-term facilities' needs and costs based on long-term population growth. The ability of a school district to impose fees is limited to the statutory and potential additional charges authorized under the act and SB 50. However, school districts may impose fees in excess of the Level 1 limits described above, as long as the district satisfies the requirement for a school fee justification needs analysis that would permit fees greater than the statutory fee for residential, commercial, and industrial construction.

b. Water

Urban Water Management Act (California Water Code Sections 10610-10656)

In 1983, the California State Legislature enacted the Urban Water Management Planning Act (California Water Code Sections 10610 through 10656), which requires every urban water supplier that provides water to 3,000 or more customers, or provides over 3,000 acre-feet of water annually, to make every effort to ensure the appropriate level of reliability in its water service to meet the needs of its customers. The act describes the contents of Urban Water Management Plans (UWMPs) as well as how urban water suppliers should adopt and implement the plans. It was the Legislature's intent to permit levels of water management planning commensurate with the number of customers served and the volume of water supplied.

c. Solid Waste

State

In September 1989, the California Integrated Solid Waste Management Act (also known as Assembly Bill [AB] 939) was enacted into law. It required each municipality in the state to divert at least 50 percent of its solid waste from landfill disposal through source reduction, recycling, and composting by 2000. This 50 percent requirement also includes the waste stream that comes exclusively through construction and demolition of buildings and homes in the County. In 2012, AB 341 was enacted establishing a goal of 75 percent diversion by the year 2020.

County of Santa Barbara Comprehensive Plan

The County Comprehensive Plan includes several policies and programs that promote landfill diversion. This includes recycling or reuse of construction waste, and the provision of adequate areas for recycling bins and recycling collection activities.

Source Reduction and Recycling Element (SRRE)

This element was adopted by the County in February 1992 by the County Board of Supervisors, consistent with the 1989 California Integrated Solid Waste Management Act. The goal of this element is to reduce the amount of solid waste entering landfills by implementing, in order of priority, source reduction, recycling and composting, and environmental transformation (incineration, pyrolysis, or biological conversion), with the final option of land disposal of waste.

d. Emergency Services

Emergency response plans include elements to maintain continuity of government, emergency functions of governmental agencies, mobilization and application of resources, mutual aid, and public information. Emergency response plans are maintained at the federal, state, and local level for all types of disasters. It is the responsibility of government to undertake an ongoing comprehensive approach to emergency management in order to avoid or minimize the effects of hazardous events.

Santa Barbara County Emergency Medical Services Plan (2015)

Division 2.5 of the California Health and Safety Code, Section 1797.254 states "Local EMS agencies shall annually submit an emergency medical services plan for the EMS area to the authority, according to the EMS Systems, Standards, and Guidelines established by the authority." A requirement as well as a strategic planning document, an EMS Plan is an opportunity for Santa Barbara County to demonstrate its compliance to state minimum standards. The main body of this plan contains 121 evaluation points for Santa Barbara County to benchmark its system. This plan confirms that Santa Barbara County is meeting the minimum standards and in many cases exceeding recommended guidelines.

Santa Barbara County Operational Area Multi-jurisdictional Hazard Mitigation Plan

The impact of expected yet often unpredictable natural and human-caused events can be reduced through planning. The County's Multi-jurisdictional Hazard Mitigation Plan (MJHMP) is intended to be used as a tool for all stakeholders to increase public awareness of local hazards and risks, while at the same time providing information about options and resources available to reduce those risks.

The MJHMP for the County (County of Santa Barbara et al. 2011) includes input from each incorporated city, interested public, responsible officials, and the California Emergency Management Agency and the Federal Emergency Management Agency.

The County's MJHMP includes the following goals and objectives:

- Objective 1.A: Facilitate the development or updating of the County's Comprehensive Plan, City General Plans and zoning ordinances to limit (or ensure safe) development in hazard areas.
- Objective 2.E: Protect existing structures with the highest relative vulnerability to the effects of identified hazards through structural mitigation projects.
- Objective 3.A: Educate the public to increase awareness of hazards, potential impact, and opportunities for mitigation actions.

4.10.2 Impact Analysis

4.10.2.1 Methodology and Significance Thresholds

a. CEQA Guidelines Appendix G

Appendix G of the California Environmental Quality Act (CEQA) Guidelines states that a project is considered to have a significant impact on public facilities if it would result in an impact on any of the listed criteria:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities;
- Result in a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts; and/or
- Result in a need for new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public facilities:
  1) Police protection
  2) Schools
  3) Other public facilities.

Additionally, Appendix G of the CEQA Guidelines states that a project is considered to have a significant impact on utilities and service systems if it would result in an impact on any of the listed criteria:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed;
- 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;
- Served by a landfill with sufficient permitted capacity to accommodate the project's waste disposal needs; and/or
- Comply with federal, state, and local statutes and regulations related to solid waste.

b. County of Santa Barbara Environmental Thresholds and Guidelines

The County Environmental Thresholds and Guidelines (County of Santa Barbara 2015a) provides following thresholds of significance guidance for public facilities:

- A need for new or altered police protection and/or health care facilities?
- A need for new or altered sewer system facilities (sewer lines, lift-stations, etc.)?
- The construction of new storm water drainage or water quality control facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Schools Thresholds (Interim, Approved by the County Board of Supervisors, August 1993)

- A significant level of school impacts is generally considered to occur when a project would generate sufficient students to require an additional classroom. This assumes 29 students per classroom for elementary/junior high students, and 28 students per classroom for high school students, based on the lowest student per classroom loading standards of the state school building program. This threshold is to be applied in those school districts which are currently approaching, at, or exceeding their current capacity.
- A project's contribution to cumulative schools impacts will be considered significant if the project specific impact as described above is considered significant.

Solid Waste Thresholds – Construction and Demolition

Construction and demolition waste accounts for 31 percent of all waste generated by residents of Santa Barbara County. In order to comply with AB 939 requiring a minimum of 50 percent of all waste to be diverted from landfills, the particular source of waste has been targeted

Any construction, demolition or remodeling project of a commercial, industrial, or residential development that is projected to create more than 350 tons of construction and demolition debris is considered to have a significant impact on public services.

Although amounts of waste generated vary project to project, the County uses the following estimates of projects that will reach the threshold of significance:

- Remodeling projects over 7,000 square feet for residential projects and 17,500 square feet for commercial/industrial projects.
- Demolition projects over 11,600 square feet for residential buildings and 7,000 square feet for commercial/industrial buildings.
- New construction projects over 47,000 square feet for residential buildings and 28,000 square feet for commercial/industrial buildings.

Solid Waste Thresholds – Operations/Occupancy

Project Specific: The following thresholds are based on the projected average solid waste generation for Santa Barbara County in 1990–2005. The goals outlined in the SRRE assume a 1.2 percent annual increase, which equates to approximately 4,000 tons per year increase in solid waste generation over the 15 year period. A project would be considered to result in a significant impact to landfill capacity if it generated 5 percent or more of the expected annual increase in waste generation thereby using a significant portion of the remaining landfill capacity. The numerical value associated with the 5 percent increase is 196 tons per year. As indicated above, source reduction, recycling, and composting can reduce a project's waste stream (generated during operations) by as much as 50 percent. If a proposed project generates 196 or more tons per year after reduction and recycling efforts, impacts would be considered significant and unavoidable (Class I). Project approval would then require the adoption of overriding considerations. A typical single-family residential project of 68 units or less would not trigger the threshold of significance.

Solid Waste Thresholds – Cumulative

Projects with a specific impact as identified above (196 tons/year or more) would also be considered cumulatively significant, as the project-specific threshold of significance is based on a cumulative growth scenario. However, as landfill space is already extremely limited, any increase of one percent or more of the estimated increase accounted for in the SRRE would be considered an adverse contribution (Class III) to regional cumulative solid waste impacts. One percent of the SRRE projected increase in solid waste equates to 40 tons per

year (in operational impacts). To reduce adverse cumulative impacts and to be consistent with the SRRE, mitigation should be recommended for projects that generate between 40 and 196 tons of solid waste per year. Projects that generate less than 40 tons per year of solid waste would not be considered to have an adverse effect due to the small amount of solid waste generated by these projects and the existing waste reduction provisions in the SRRE. A typical single-family residential project of 14 units or less would not trigger this adverse impact level.

4.10.2.2 Project Impacts and Mitigation Measures

Impact PSU-1: Public Schools

At the present time, LUSD has limited district-wide information regarding individual school capacity status. However, LUSD produced a 2016 Developer Fee Justification Study, containing existing school site capacity information by grade levels (LUSD 2016). LUSD's 2015–2016 K-12 enrollment was 9,802 students. The Developer Fee Justification Study determined that LUSD is justified in collecting Statutory Level 1 residential and statutory commercial/industrial developer fees on future development based on the following:

- Approximately 728 homes are projected to be constructed in the City of Lompoc and Santa Barbara County within the LUSD service area over the next 5 years, which is estimated to generate 341 K-12 students.

- LUSD is eligible to collect Statutory commercial/industrial developer fees and Statutory Level 1 residential fees to fund construction, modernization, renovation, and replacement of existing school facilities to house incoming students from new residential development.

Table 4.10-2 represents the justified Statutory Level 1 fees for LUSD, and Table 4.10-3 presents the LUSD available projected capacity for grade segments per SB 50.

Table 4.10-2
LUSD Statutory Level 1 Fees

K-12 Residential Statutory (Level 1) Fees	Commercial/Industrial Statutory (Level 1) Fees
$3.48	$0.56
SOURCE: LUSD 2016.	

Table 4.10-3
LUSD Available Projected Capacity per SB 50

Grade Level	2015-16 Enrollments	Existing Capacity (per State)	Available Projected Capacity (per State)
K-6	5,295	5,169	–(126)
7-8	1,486	2,447	961
9-12	3,021	3,910	889
Total K-12	9,802	11,526	1,724
SOURCE: LUSD 2016.			

As shown in Table 4.10-3, LUSD has insufficient capacity for students in grade K-6 and sufficient capacity for incoming students in grades 7-8 and 9-12. Nevertheless, LUSD schools will need reconstruction, renovation, and modernization to ensure that incoming students from new residential development are accommodated.

The Developer Fee Justification Study analyzed a 5-year projection of new residential development within LUSD, and predicted an estimated 728 additional housing units in the City of Lompoc and unincorporated Santa Barbara County within the LUSD service area. Table 4.10-4 presents the predicted residential development information. LUSD student yield rates were then multiplied by the number of predicted housing units to estimate student generation rates from new residential development within LUSD over the next 5 years.

Table 4.10-4
5-Year Projection of New Residential Development

Jurisdiction	Single-Family Detached	Single-Family Attached	Multi-Family Attached
City of Lompoc	442	65	187
County of Santa Barbara	34	0	0
Total Projected Units	**476**	**65**	**187**

SOURCE: LUSD 2016.

The Developer Fee Justification Study also projects new future students at each grade from new residential development LUSD areawide using a multiplier based on historical residential student generation rates. Table 4.10-5, shows the project number of students generated areawide from new residential development within the LUSD area over the next 5 years for a total of 372~~341~~ projected students. The study indicated a need for additional K-6 capacity to accommodate the projected additional students from new development.

Table 4.10-5
Projection of Students per Grade Level from Areawide Residential Development

Grade Level	Projected Units (Single Family)	Projected Units (Multi-Family)	Student Yield Rates		Projected Students
			Single-Family	Multi-Family	
K-6	541	187	0.228	0.327	184
7-8			0.060	0.073	46
9-12			0.212	0.146	142
K-12			**0.500**	**0.546**	**372**

SOURCE: LUSD 2016.

As shown in Table 4.10-3, the LUSD is projected to have a deficit in capacity for grade levels K-6 and is anticipated to have available capacity for all other grade levels based on State guidelines. As detailed in Table 4.10-6, the project is projected to yield approximately 7 students in grades K-6, 2 students in grades 7–8, and 6 students in grades 9–12, for a total of 15 students in grades K-12. As such, the proposed project would not generate the number of students to necessitate funding of an additional school room based on the County Interim School Threshold of 29 students for elementary/middle school and 28 for high school students. This County threshold is applied in those school districts which are currently approaching, at, or exceeding their current capacity. Therefore, the proposed

project would be required to pay the LUSD Statutory Level 1 fees for new residential development and would not exceed the County Interim School Threshold triggering the additional school facilities requirement. As such, the project would be consistent with applicable state and County policies related to school capacities and facilities and therefore, impacts to school facilities would be less than significant (Class III impact).

Table 4.10-6
Projected Students at Each Grade Level from the Proposed Project

Grade Level	Proposed Project Units (Single-Family Detached)	LUSD Student Yield Rates (Single-Family Detached)	Projected Students Resulting from Proposed Project
K-6	29	0.228	6.6
7-8		0.060	1.7
9-12		0.212	6.1
K-12		0.500	14.5
SOURCE: LUSD 2016.			

Mitigation Measures

Impacts would be less than significant and no mitigation is required.

Significance after Mitigation

Impacts would be less than significant (Class III).

Impact PSU-2: Water Supply

See Section 4.7, Hydrology and Water Quality, for the water supply analysis.

Impact PSU-3: Wastewater

The project would be served by the VVCSD's existing wastewater collection system. The system connects to and wastewater is treated at the City of Lompoc Regional Wastewater Reclamation Plant.

According to the Santa Barbara County 2015–2023 Housing Element, VVCSD has a current wastewater service capacity of 0.89 MGD and a current usage level of 0.5 MGD. Based on current capacity and wastewater generation characteristics, it is anticipated that the VVCSD can serve an additional 2,600 residential units (County of Santa Barbara 2015c). The project proposes the construction of 29 new single-family residences and would not cause impairment on the existing wastewater treatment facilities. Therefore, no expansion of existing wastewater treatment facilities is required, as there is currently surplus capacity to accommodate the proposed development and associated wastewater flows. Therefore, project impacts to existing wastewater facilities and capacity would be less than significant (Class III impact).

A Can and Will Serve letter must be issued by the VVCSD Board of Directors after the VVCSD and developer agree on the terms and conditions of a Development Agreement and prior to the County's clearance of the final map.

Mitigation Measures

Impacts would be less than significant and no mitigation is required.

Significance after Mitigation

Impacts would be less than significant (Class III).

Impact PSU-4: Solid Waste

To preserve the County's limited landfill resources, the County must maintain its high levels of solid waste diversion. New construction represents the greatest difficulty in maintaining diversion rates (County of Santa Barbara 2015c). Solid waste impacts can be divided into two categories: (1) short-term waste generated from construction and demolition projects and (2) long-term waste generated during occupancy/construction.

Short-Term Waste from Construction

The proposed project has the potential to generate a substantial amount of solid waste. The project includes the new construction of 29 single-family residences, ranging in size from approximately 2,400 square feet to 3,200 square feet. As such, the total square footage of new residential development would range from 69,600 to 92,800 square feet. The County's Environmental Thresholds and Guidelines Manual (2015a) provides estimates of the waste generated by demolition and construction activities, and those estimates are based on the amount (pounds) of waste generated per square foot of residential project area. The estimated demolition and construction waste generation rates are listed in Table 4.10-7 below.

Table 4.10-7
Waste Generated by Demolition and Construction Activities

Residential Development	Amount of Waste per Square Foot (pounds)
Remodel	100
Demolition	60
New construction	15

SOURCE: County of Santa Barbara, Environmental Thresholds and Guidelines Manual 2015a.

Based on the County waste generation rates for new residential construction multiplied by the range of square footage of new residential development on the project site, the project would generate an estimated 1,044,000 to 1,392,000 pounds (522 to 696 tons) of construction-related waste. This exceeds the County threshold of 350 tons of construction and demolition debris that is considered to have a significant impact on County public services and landfills. Impacts would be significant but mitigable with implementation of a solid waste management plan and construction management requiring that construction

activities recycle at least 50 percent of construction waste and divert it from the landfill (Class II impact). With the implementation of a construction waste recycling/diversion plan that reduces waste disposal by at least 50 percent, the project would dispose of approximately 261 to 348 tons of construction waste.

Long-Term Waste Generation during Occupancy

Waste generation during occupancy/operations is based upon the following County generation rates for residential projects. The annual per capita waste generation rate for the County is currently 2.11 tons (County of Santa Barbara 2015c). Of this 2.11 tons, the residential per capita waste generation rate is 0.95 tons (1,900 pounds), including interior and exterior waste.

The average household occupancy rate in Vandenberg Village is 2.58 people (U.S. Census 2010). Following the County Environmental Thresholds and Guidelines Manual formula for waste generated from project occupancy, the project's solid waste generation is calculated from 2.58 people/unit x 29 units x 0.95 tons/year = 71 tons/year of long-term generated waste. The long-term generation of solid waste by the project would not exceed the County's significance threshold of 196 tons per year. The amount of solid waste generated by the project that would require landfill disposal is calculated below, and is based upon source reduction, recycling, and composting requirements under state law (California Integrated Solid Waste Management Act – AB 939) and the County Comprehensive Plan Source Reduction and Recycling Element efforts.

Residual Impact Calculation

The solid waste estimated to be generated, diverted, and disposed of at the landfill by the proposed project is summarized in Table 4.10-8. In total, the project would generate an estimated 71 tons of solid waste per year, which would be reduced to approximately 36 tons per year with state and local policies and implementation measures in place. Therefore, the project would not exceed the County solid waste disposal significance threshold of 196 tons per year.

Table 4.10-8
Estimated Solid Waste Generation

Land Use	Solid Waste Generation Rate	Tons Generated Per Year
Oak Hills Estate (29 single-family residential lots)[1]	0.95 tons/person/year	71.0
Total Waste Generated		71.0
Total Waste Diverted		35.5
Total Waste Diverted at Landfill		**35.5**

[1] The proposed project would add approximately 75 persons, based on the 2010 U.S. Census Bureau's County average household unit data (2.58 persons/unit)
[2]Based on a 50% diversion rate, as required by the California Integrated Waste Management Act.
Note: The Open Space use was not included in these calculations, as this use does not generate substantial solid waste.

While the long-term operational solid waste impacts from the project would be less than significant, construction impacts would exceed the County thresholds. Therefore, the solid

waste impact would result in a less than significant impact with mitigation (Class II impact).

Mitigation Measures

The following mitigation measures would reduce the project's short-term, construction-related solid waste impacts to a less than significant level:

MM PSU-1: Solid Waste – Recycle

The Owner/Applicant and their contractors and subcontractors shall separate demolition and excess construction materials on-site for reuse/recycling or proper disposal (e.g., concrete, asphalt, wood, brush). The Owner/Applicant shall provide separate on-site bins as needed for recycling.

Plan Requirements and Timing. The Owner/Applicant shall print this requirement on all grading and construction plans. Owner shall provide P&D with receipts for recycled materials or for separate bins. Materials shall be recycled as necessary throughout construction. All materials shall be recycled prior to Final Building Inspection Clearance.

Monitoring. The Owner/Applicant shall provide P&D compliance staff with receipts prior to Final Building Inspection Clearance.

MM PSU-2: Solid Waste – Construction Site

The applicant shall provide an adequate number of covered receptacles for construction and employee trash to prevent trash and debris from blowing off-site, shall ensure waste is picked up weekly or more frequently as needed, and shall ensure site is free of trash and debris when construction is complete.

Plan Requirements. All plans shall contain notes that the site is to remain trash-free throughout construction.

Timing. Prior to building permit issuance, the applicant shall designate and provide Planning and Development (P&D) with the name and phone number of a contact person(s) responsible for trash prevention and site clean-up. Additional covered receptacles shall be provided as determined necessary by P&D.

Monitoring. Permit compliance monitoring staff shall inspect periodically throughout grading and construction activities and prior to Final Building Inspection Clearance to ensure the construction site is free of all trash and debris.

Significance after Mitigation

Short-term construction waste disposal impacts would be less than significant with MM PSU-1 and MM PSU-2 above (Class II impact).

Impact PSU-5: Police Protection, Emergency Services, and Other Facilities

The proposed project would result in the net increase of 29 single-family residences and would accommodate approximately 75 residents. This new development and increase in population would not have a significant impact on existing police protection or other public facilities. Existing levels of service for police protection and fire protection (see Section 4.12) are adequate to serve the additional demand. As discussed in Section 4.10.1.9, Regulatory Setting, the state and County have plans and policies in place for adequate police and healthcare facility planning, including the County Emergency Medical Services Plan and the MJHMP, which are all regularly updated. Additionally, the proposed project would not interfere with emergency and evacuation routes, as associated streets would be constructed with the proper widths and turnarounds, and the project would comply with the appropriate vegetation clearance and signage standards to facilitate emergency access. Emergency access and evacuation is further detailed in Section 4.12, Fire Protection. Because the proposed project would result in a negligible increase in demand on police, health, emergency, and other services, impacts would be less than significant (Class III impact).

Mitigation Measures

Impacts would be less than significant and no mitigation is required.

Significance after Mitigation

Impacts would be less than significant (Class III).

4.10.2.3 Cumulative Impacts

a. Public Schools

Cumulative projects could potentially result in a need for additional schools to serve the development in the project area. The proposed project plus cumulative residential development include a total of 699~~655~~ residential units, 179 of which are located in County of Santa Barbara and 520~~476~~ units in City of Lompoc). Eighty of these units would be senior housing that would not generate a demand on K-12 schools. Table 4.10-9 lists the projected students resulting from the proposed project and cumulative residential projects. Under the County Interim School Threshold, the project's student generation would not be cumulatively considerable, because its contribution to school impacts would not be significant. Additionally, all new development would be required to pay proportional development impact fees to the County and City of Lompoc for schools. Therefore, cumulative impacts to schools would be less than significant (Class III impact).

Table 4.10-9 Projected Students Resulting from Proposed Project Plus Cumulative Projects			
Grade Level	Proposed Project and Cumulative Residential Units* (Single-Family)	LUSD Student Yield Rates (Single-Family)	Projected Students Resulting from Proposed Project plus Cumulative Projects*
K-6	619~~575~~	0.228	141~~131~~
7-8		0.060	37~~35~~
9-12		0.212	131~~122~~
K-12		**0.500**	**309~~288~~**
SOURCE: LUSD 2016. *Senior housing units were not included.			

b. Water Supply

See Section 4.7, Hydrology and Water Quality for the cumulative water supply analysis.

c. Wastewater Facilities

The proposed project in conjunction with other projects occurring in the service area of the VVCSD could result in a cumulative increase in the demand for wastewater services if they cause the VVCSD to exceed its contractual entitlement to the LRWRP capacity, thus requiring the construction of additional wastewater facilities. However, VVCSD has indicated that adequate facilities and capacity exist to serve the proposed project and regularly updates long-range management plans to prepare for future facility upgrades. Specifically, as discussed in Section 4.10.1, the VVCSD had a wastewater service capacity for an additional 2,600 residential units in 2015. Therefore, the 179 new residential units resulting from the proposed and cumulative projects located in the VVCSD service area identified previously in Table 3-1 would not result in an exceedance of the available wastewater service capacity of the VVCSD. Because no new wastewater facilities are required for the project, cumulative impacts to wastewater treatment facilities would be less than significant (Class III impact).

d. Solid Waste Management

Cumulative projects would increase solid waste disposal and management needs within the region both in the short term through construction debris and in the long term through project occupancy or operation. Either new landfill facilities and/or recycling facilities could be needed to meet the anticipated disposal needs of the cumulative projects. The construction and operation of new waste management facilities would have the potential to result in significant environmental impacts. However, the County Environmental Thresholds and Guidelines states that projects that generate less than 40 tons per year of solid waste would not be considered to have an adverse effect due to the small amount of solid waste generated and the existing waste reduction provisions in the SRRE. As discussed previously, development of the Oak Hills Estate project would not exceed the County's 40-ton per year cumulative threshold for long-term solid waste disposal. Therefore, the project's incremental contribution to cumulative solid waste management

impacts would not be cumulatively considerable, and a less than significant impact would result (Class III impact).

e. Police Protection, Emergency Services, and Other Facilities

Cumulative projects could result in a need for additional law enforcement, healthcare, emergency, and other services due to increased demand. The projects listed in Table 3-1, Cumulative Projects List, include four residential projects in the Vandenberg Village area, which when combined with the proposed project would have a cumulative total of 179 residential units. This increase in residences would consequently increase demand on public services. However, the proposed project would not exceed the Sheriff's established service goal of one officer per 1,200 people, and the proposed project's incremental increase on the demand for police services would not be cumulatively considerable. Additionally, the County of Santa Barbara Emergency Medical Services Plan confirms that Santa Barbara County is meeting the minimum standards and in many cases exceeding recommended guidelines. Therefore, the existing emergency medical services are anticipated to be adequate to meet the needs of the cumulative projects.

Cumulative projects would also have the potential to impair emergency response capabilities and evacuation plans. This could occur from an increase in population that emergency response teams are unable to service adequately in the event of a disaster; or evacuation route impairment if multiple development projects concurrently block multiple evacuation or access roads. However, each of the cumulative projects would be reviewed to ensure that sites are designed with appropriate access. Compliance with existing regulations would ensure that impacts related to emergency response relative to the proposed project are less than significant. Similarly, cumulative projects would be required to comply with applicable emergency response and evacuation policies outlined in regulations such as the California Emergency Services Act and local fire codes. Regardless, the proposed project's incremental contribution to impacts on emergency and evacuation plans would not be cumulatively considerable due to its relatively small scale (29 single-family residential units). Therefore, less than significant impacts would result (Class III impact).

Because no new school or public services/facilities are required to serve the project's off-site mitigation in conjunction with other potential off-site mitigation efforts in the cumulative study area, cumulative impacts to public services and facilities from the proposed off-site mitigation would be less than significant (Class III impact).

f. Off-site Restoration

The proposed project's off-site mitigation on APN 097-371-067 is strictly limited to habitat restoration and enhancement activities and would not develop any residential, commercial, or industrial land uses on the off-site mitigation parcel. No irrigation or permanent structures would be installed at the site as part of the off-site mitigation plan. As such, implementation of the Offsite Mitigation Area Baseline Biological Report and Conceptual Mitigation Plan (Rincon 2016a) would not necessitate or require additional infrastructure

to be built on the off-site mitigation area. Additionally, there would be no potential for the off-site mitigation parcel to result in additional student growth for local school districts, dependence on local water supply, wastewater, and solid waste providers, and would not require additional police and emergency services or facilities. Therefore, the off-site mitigation plan would not induce population growth or require additional infrastructure, and impacts and cumulative impacts associated with public services and utilities with the off-site mitigation plan would be less than significant (Class III impact).

Mitigation Measures

Cumulative impacts would be less than significant. No mitigation is required (Class III impact).

4.11 Transportation and Circulation

This section evaluates transportation- and circulation-related impacts that have the potential to result from the construction and operation of the project. The analysis in this section is based on information provided in a traffic report titled: Oak Hills Estates, Traffic and Circulation Study, Vandenberg Village, County of Santa Barbara (Penfield & Smith 2015), included as Appendix I-1 to this Environmental Impact Report (EIR). The County of Santa Barbara California Environmental Quality Act (CEQA) Thresholds were applied in the traffic report and the report was peer reviewed by Associated Transportation Engineers on April 6, 2016 (Appendix I-2). A Supplemental Traffic Analysis (Appendix I-3) was prepared by Stantec on April 25, 2016 and incorporates Association Transportation Engineers' peer review letter into the Traffic and Circulation Study.

4.11.1 Setting

4.11.1.1 Project Setting

The project site is located in the northern section of the Vandenberg Village area in unincorporated County of Santa Barbara (County). As shown in Figure 4.11-1, the project site is located east of State Route 1 and Constellation Road, north of the Burton Mesa Road; the access to the site is from Oak Hill Drive. The project site is vacant and is served by a network of highways, arterial streets, and collector roads. The following text provides a brief discussion of major components of the study area street network.

State Route 1 is a four-lane freeway and highway in the vicinity of Vandenberg Village that serves as the principal north–south route through the Lompoc Valley. It provides a connection to Vandenberg Air Force Base (VAFB), Orcutt, and Santa Maria to the north and to Lompoc and State Route 246 to the south.

Constellation Road is a four-lane major road that extends north–south through Vandenberg Village. Its interchange with State Route 1 is signalized, and the Constellation Road/Burton Mesa intersection is controlled by an all-way stop.

Burton Mesa Boulevard is a two-lane major road that extends east–west from Constellation Road to Rucker Road to the east. The roadway connects Vandenberg Village with the Mission Hills area.

Oak Hill Drive is a two-lane roadway serving less than approximately 90 units located in the northern portion of Vandenberg Village, north of the Village Country Club.

Map Source: Penfield & Smith

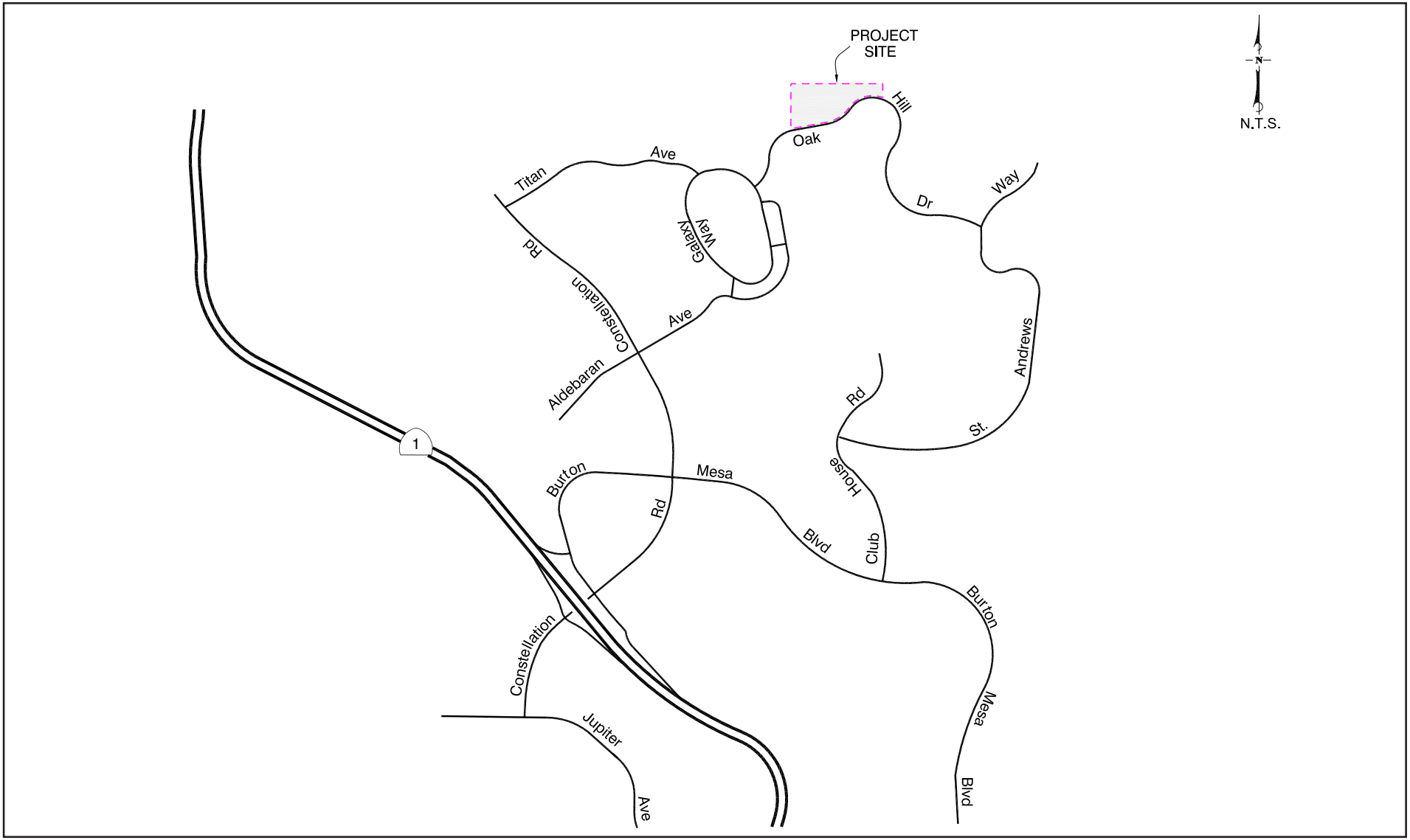

FIGURE 4.11-1

Existing Street Network and Project Location

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The proposed project also includes the Offsite Mitigation Area Baseline Biological Report and Conceptual Mitigation Plan (Rincon 2016a) (see Appendix D-3) that details the potential for off-site mitigation on a ~~at a 28-acre portion of a~~ 123-acre open space parcel owned by the Vandenberg Village Community Services District (VVCSD) (APN 097-371-067). The VVCSD-owned parcel is located approximately 1 mile southeast of the project site. Based on similar scale oak tree and chaparral restorations, the off-site restoration is expected to last a minimum of 5 years, depending on the success of the effort. It would also be anticipated that initial short-term restoration installation for the off-site restoration project to employ a crew of 6 to 8 persons using a small fleet of vehicles (autos and trucks) to transport staff, materials, and equipment to the site. These vehicles and equipment would be sources of air pollutant emissions. It is expected that the initial restoration effort would last approximately 1 year. Thereafter, the activity on the site would be reduced and limited to routine maintenance by a smaller crew of 1 to 3 persons using fleet vehicles. Equipment used for the restoration would be limited and much of the work completed with hand tools.

Study roadways and intersections were selected based on the potential for the project to impact the existing network. In total, four roadways and three intersections were analyzed:

Roadways:

- State Route 1 n/o Constellation Road
- State Route 1 s/o Constellation Road
- Constellation Road n/o State Route 1
- Constellation Road s/o State Route 1

Intersections:

- State Route 1 Southbound Ramps/Constellation Road
- State Route 1 Northbound Ramps/Constellation Road
- Burton Mesa Boulevard/Constellation Road

Roadway operations. The operational characteristics of the County roadway segments within the study were analyzed based on the County's standard engineering roadway capacities, which are listed in Appendix I-1 for reference. In rating a roadway's operating condition, "Levels of Service" (LOS) A through F are used, with LOS A indicating a very good operation and LOS F indicating poor operation (Table 4.11-1). The County of Santa Barbara has established LOS C as the minimum acceptable LOS for roadway operations.

Table 4.11-1
Level of Service Definitions

LOS	Signalized Intersections (V/C Ratio)*	Un-signalized Intersections (sec. of delay)	Definition
A	<0.60	≤ 10	Conditions of free unobstructed flow, no delays and all signal phases sufficient in duration to clear all approaching vehicles.
B	0.61-0.70	> 10 and ≤ 15	Conditions of stable flow, very little delay, a few phases are unable to handle all approaching vehicles.
C	0.71-0.80	> 15 and ≤ 25	Conditions of stable flow, delays are low to moderate; full use of peak direction signal phases is experienced.
D	0.81-0.90	> 25 and ≤ 35	Conditions approaching unstable flow, delays are moderate to heavy, significant signal time deficiencies are experienced for short durations during the peak traffic period.
E	0.91-1.00	> 35 and ≤ 50	Conditions of unstable flow, delays are significant, signal phase timing is generally insufficient, congestion exists for extended duration throughout the peak period.
F	>100	> 50	Conditions of forced flow, travel speeds are low and volumes are well above capacity. This condition is often caused when vehicles released by an upstream signal are unable to proceed because of back-ups from a downstream signal.

SOURCE: Transportation Research Board, Highway Capacity Manual 2010 Edition.
*V/C Ratio = volume to capacity ratio.

Existing average daily traffic (ADT) volumes were developed for the segments of Constellation Road and State Route 1 within the study area based on the peak hour traffic volumes at intersections within the vicinity of the site. A comparison of the ADT volumes with the County's design capacities indicate that the roadway segments in the study area currently operate at LOS A. The roadway classification and design capacities for Constellation Road and State Route 1 are summarized in Table 4.11-2.

Table 4.11-2
Existing Roadway Levels of Service

Roadway Segment	Classification	Number of Lanes	Existing ADT	LOS C Threshold[1]	Existing LOS
State Route 1 n/o Constellation Road	Expressway	4 lanes	14,300 ADT	N/A	LOS A
State Route 1 s/o Constellation Road	Expressway	4 lanes	18,300 ADT	N/A	LOS A
Constellation Road n/o State Route 1	Major Road	4 lanes	7,100 ADT	30,100 ADT	LOS A
Constellation Road n/o State Route 1	Major Road	4 lanes	6,600 ADT	30,100 ADT	LOS A

[1] County threshold not applicable; level of service based on Transportation Research Board (2010) operational analysis. The LOS C threshold for a 4-lane roadway is 34,000 ADT.

Intersection operations. Because traffic flow on street networks is most constrained at intersections, the traffic analysis focuses on the operating conditions of critical intersections during peak travel periods. The level of service rating system discussed above for roadway segments is also used to rate intersection operations. The County has established LOS C as the minimum acceptable level for intersection operations.

Turning volume counts at the existing study intersections were collected by Penfield & Smith for the AM and (7 A.M. to 9 A.M.) and PM peak commute periods (4 P.M. to 6 P.M.). The intersection geometry and AM and PM peak hour volumes collected by Penfield & Smith are illustrated in Figures 4.11-2 and 4.11-3.

Levels of service for the study area were calculated based on the existing peak hour traffic volumes, intersection geometries and level of service methodology outlined previously. Table 4.11-3 shows the existing AM and PM peak hour levels of service for the study area intersections. As shown, all study area intersections currently operate in the LOS A-B range during both AM and PM peak hours, which is considered acceptable based on the County's LOS C standard.

Table 4.11-3
Existing Peak Hour Intersection Levels of Service

Intersection	Traffic Control	AM Peak Hour V/C Ratio or Delay	PM Peak Hour V/C Ratio or Delay
State Route 1 Southbound Ramps/Constellation Road	Signal	0.56/LOS A	0.49/LOS A
State Route 1 Northbound Ramps/Constellation Road	Signal	0.50/LOS A	0.54/LOS A
Burton Mesa Road/Constellation Road	All-Way Stop	11.0 sec/LOS B	10.4 sec/LOS B

SOURCE: Penfield & Smith 2015.

4.11.2 Impact Analysis

4.11.2.1 Methodology and Thresholds of Significance

The following section describes the thresholds of significance and impact methodologies used for the traffic and circulation analyses.

CEQA Guidelines Appendix G

Pursuant to State CEQA Guidelines, traffic impacts related to the proposed project would be significant if impacts related to the proposed project would:

- 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.

Map Source: Penfield & Smith

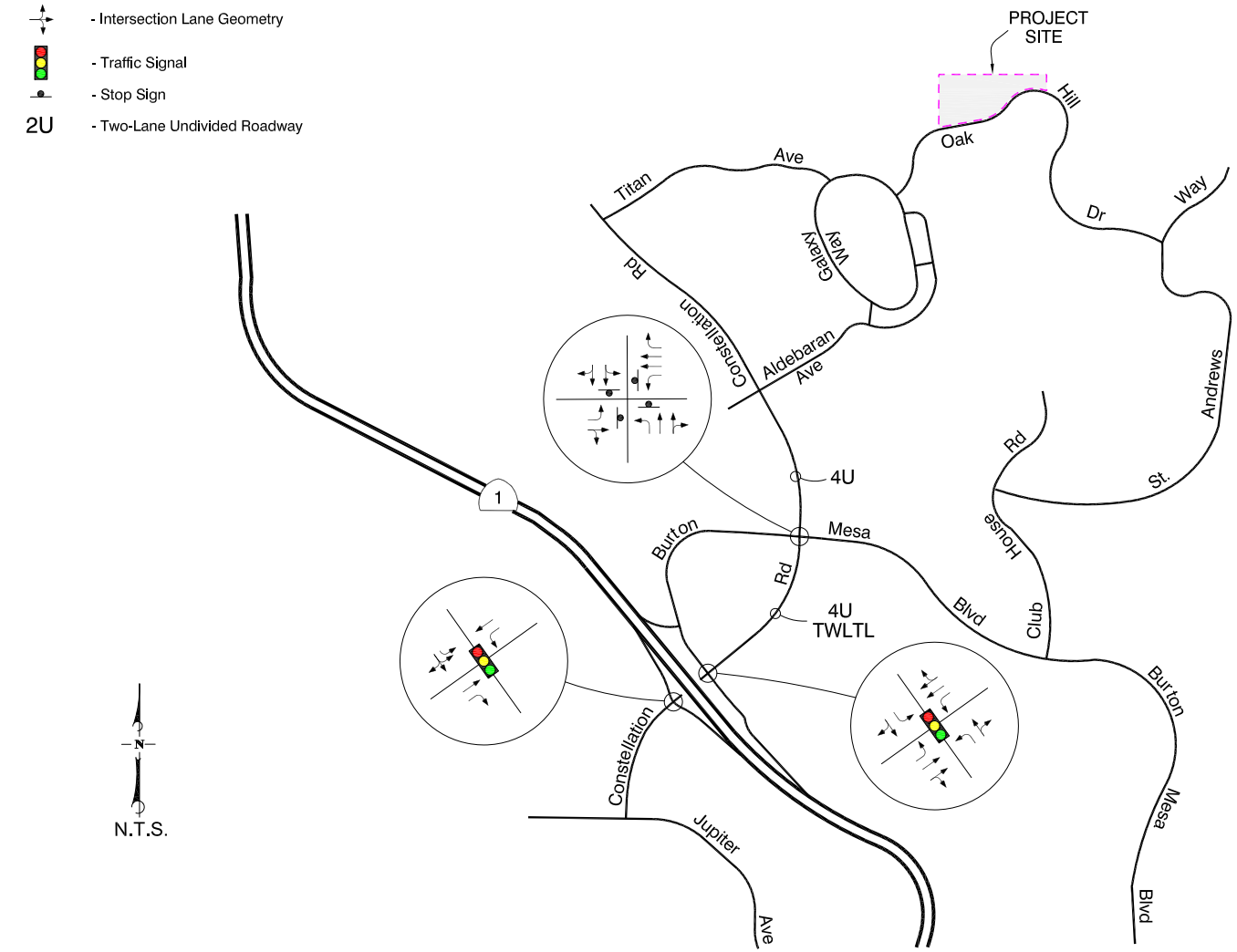

FIGURE 4.11-2

Existing Roadway and Intersection Geometry

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Map Source: Penfield & Smith

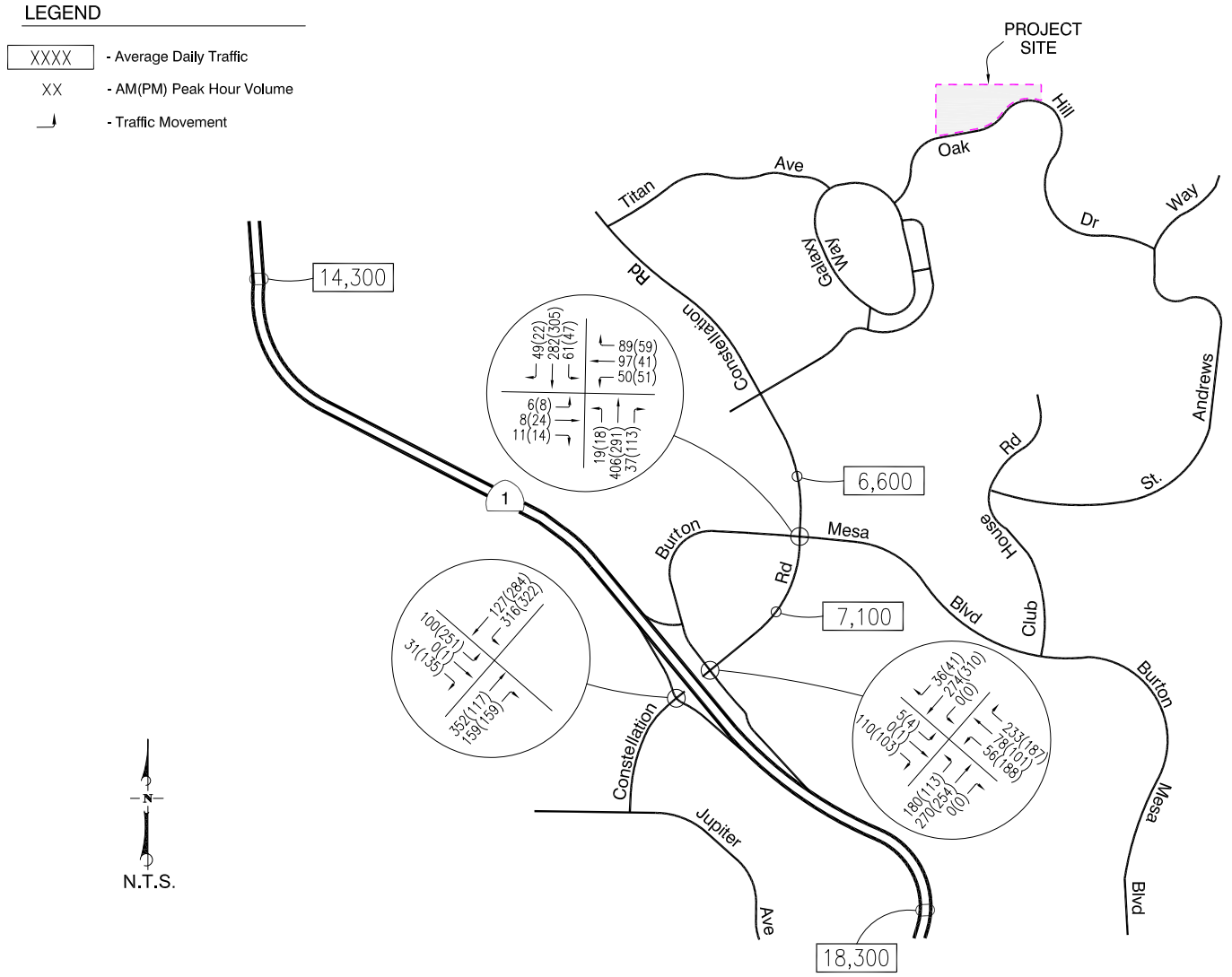

FIGURE 4.11-3

Existing ADT and Peak Hour Traffic Volumes

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

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

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

- Result in inadequate emergency access.

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

County of Santa Barbara Environmental Thresholds and Guidelines

The County uses the Intersection Capacity Utilization methodology for calculating LOS for signalized intersections. Furthermore, the County's CEQA thresholds are based on volume to capacity (V/C) ratios and changes to the V/C ratios based on the Intersection Capacity Utilization calculations. Based on the County's Environmental Thresholds and Guidelines Manual, traffic impacts are considered significant in the following instances:

1. If the addition of project traffic to an intersection increases the volume to capacity (V/C) ratio by the values listed in Table 4.11-4 or sends at least 5, 10, or 15 trips to intersections operating at LOS F, E, or D, then it is considered a significant impact.

Table 4.11-4
Significant Changes in Levels of Service

Level of Service (including project)	Increase in V/C Greater than
A	0.20
B	0.15
C	0.10
	Or the addition of
D	15 trips
E	10 trips
F	5 trips

2. The project's access to a major road or arterial road would require access that would create an unsafe condition, a new traffic signal, or major revisions to an existing traffic signal.

3. The project adds traffic to a roadway that has design features (e.g. narrow width, roadside ditches, sharp curves, poor sight distance, inadequate pavement structure)

or receives use that would be incompatible with substantial increase in traffic (e.g., rural roads with use by farm equipment, livestock, horseback riding, or residential roads with heavy pedestrian or recreational use, etc.) that will become potential safety problems with the addition of project or cumulative traffic. Exceedance of the roadway's designated Circulation Element Capacity may indicate the potential for the occurrence of the above impacts.

4. Project traffic would utilize a substantial portion of an intersection(s) capacity where the intersection is currently operating at acceptable levels of service (A-C) but with cumulative traffic would degrade to or approach LOS D (V/C 0.81) or lower. Substantial is defined as a minimum charge of 0.03 for intersections which would operate from 0.80 to 0.85, a change of 0.02 for intersections which would operate from 0.86 to 0.90, and 0.01 for intersections operating at anything lower.

Congestion Management Program. The Santa Barbara County Association of Governments (SBCAG) has developed a set of traffic impact guidelines to assess impacts of land use decisions made by local jurisdictions on regional transportation facilities located within the Congestion Management Program (CMP) roadway system. SBCAG has selected a minimum acceptable level of service of LOS D for intersections and roadways. If any facilities are found to be operating below LOS D, a deficiency plan must be prepared. SBCAG requires that local agencies submit counts for its annual conformance assessment according to the following count update frequency:

- Every year for intersections operating at LOS D
- Every two years for intersections operating at LOS C
- Every five years for intersections operating at LOS A or B

The following guidelines were developed by SBCAG to determine the significance of potential traffic impacts on the CMP system:

- For any roadway or intersection operating at LOS A or B, a decrease of two levels of service from project added traffic;

- For any roadway or intersection operating at LOS C, project-added traffic that results in a LOS D or worse;

- For intersections with existing congestion, the following project-added trips constitute a significant impact
  - 20 peak hour critical movement trips for LOS D
  - 10 peak hour critical movement trips for LOS E or F

- For freeway or highway segments with existing congestion, the following project-added trips constitute a significant impact:
  - 100 peak hour critical movement trips for LOS D
  - 50 peak hour critical movement trips for LOS E or F

Trip Generation and Distribution

In order to properly evaluate the potential project impacts to the local street system, it is necessary to develop estimates of future traffic conditions both with and without the proposed project. Future traffic volumes are first estimated for the study area without the project. Project trip generation estimates were determined for the project using trip generation rates contained in the Institute of Transportation Engineers (ITE) Trip Generation Manual for Single-Family Detached Housing (Land Use #210). The trip generation rates are shown in Table 4.11-5, and the trip generation estimates are summarized in Table 4.11-6. Based on these trip generation rates, the proposed development of 29 single-family residential units is expected to generate 276 daily trips under project-specific conditions, with 22 trips occurring in the AM peak hour and 29 trips occurring in the PM peak hour.

Table 4.11-5
Project Trip Generation Rates

Land Use	ITE Code	Daily Rate	AM Peak Hour Rate			PM Peak Hour Rate		
			In	Out	Total	In	Out	Total
Single-Family Residential	210	9.52	0.187	0.563	0.75	0.630	0.370	1.00

SOURCE: Penfield & Smith 2015.

Table 4.11-6
Project Trip Generation Estimates

Land Use	Size	Daily Trips	AM Peak Hour Rate			PM Peak Hour Rate		
			In	Out	Total	In	Out	Total
Single-Family Residential	29 Units	276	5	17	22	18	11	29

SOURCE: Penfield & Smith 2015.

The trips generated for the project for the AM peak hour (22 trips) and the PM peak hour (29 trips) were distributed and assigned to the street network based on existing traffic patterns, project trip commute destinations and local and regional land uses. The distribution percentages are listed in Table 4.11-7. The project distribution percentages and project-added traffic volumes are illustrated in Figure 4.11-4.

Table 4.11-7
Project Trip Distribution

Street	Direction	Trip Distribution Percentage
State Route 1	North	23%
State Route 1	South	60%
Burton Mesa Boulevard	East	5%
Local	South	12%
Total		**100%**

SOURCE: Penfield & Smith 2015.

4.11.2.2 Project Impacts and Mitigation Measures

Impact T-1: Impacts on Roadways

Roadway analysis and traffic counts of Oak Hill Drive were not included as part of the Traffic Study (Penfield & Smith 2015) given the low existing traffic volumes on the roadway (i.e., estimated to be approximately 900 ADT based on an estimate of the number of residences served by the roadway). As shown in Table 4.11-6, the proposed project with the development of 29 single-family units would generate an estimated 276 daily trips, including 22 trips during the AM peak hours and 29 trips during PM peak hours and would not exceed the 5,000 ADT roadway policy capacity to require analysis. Instead, the traffic analysis analyzed traffic volumes for the nearest major network roadways. Figure 4.11-4 shows the estimated ADT volumes on major roadways near the project site after adding project-generated traffic to existing traffic.

Table 4.11-8 presents the Existing + Project roadway volumes and identifies the potential impacts of the project's traffic additions based on the County's LOS capacity thresholds.

Table 4.11-8
Existing + Project Levels of Service

Roadway Segment	Classification	Existing ADT	Existing + Project ADT	LOS C Threshold	Existing + Project LOS
State Route 1 n/o Constellation Rd	Expressway	14,300 ADT	14,363 ADT	N/A	LOS A
State Route 1 s/o Constellation Road	Expressway	18,300 ADT	18,466 ADT	N/A	LOS A
Constellation Road n/o State Route 1	Major Road	7,100 ADT	7,330 ADT	30,100 ADT	LOS A
Constellation Road s/o State Route 1	Major Road	6,600 ADT	6,876 ADT	30,100 ADT	LOS A
SOURCE: Penfield & Smith 2015. n/o = north of; s/o = south of					

As shown in Table 4.11-8, roadway segments in the Vandenberg Village area would continue to operate at LOS A with the addition of project-generated traffic. The project is estimated to add approximately 63–166 ADT to State Route 1 north and south of Constellation Road, and would add approximately 276–230 ADT to Constellation Road north and south of State Route 1. The proposed off-site restoration would require a small number of staff (six to eight maximum) to be transported daily to and from the off-site mitigation parcel, resulting in approximately six roundtrips per day. Although based on similar restoration efforts, after the first year, monitoring and maintenance would employ a crew of one to three persons, trips to the off-site mitigation parcel would often occur as infrequently as once a week or once a month. Worker commute assumes a maximum of six roundtrips per day. Considering the limited trip generation of the proposed project and off-site restoration, traffic impacts including impacts to Oak Hill Drive would be less than significant. The project would not add a substantial amount of project-generated traffic

Map Source: Penfield & Smith

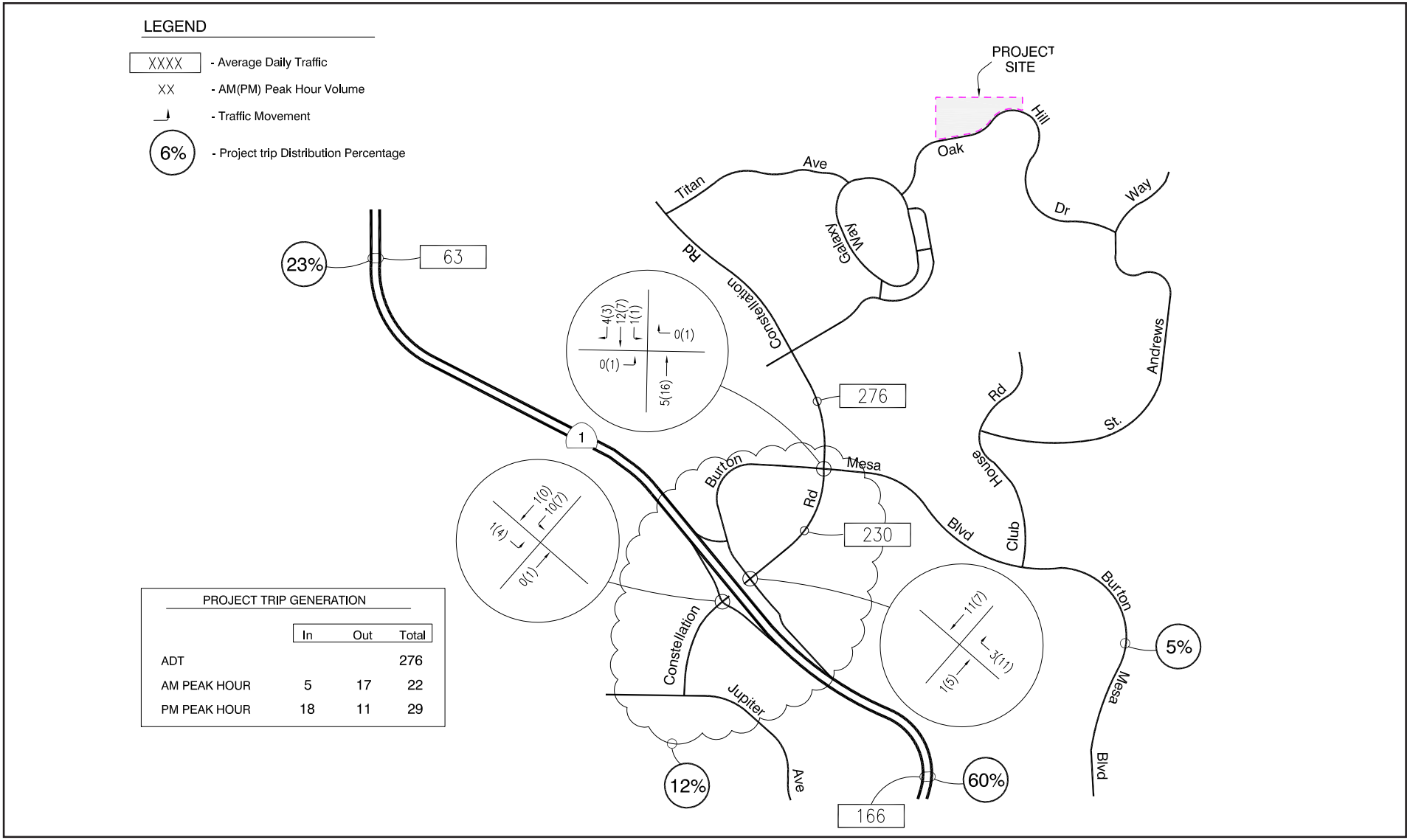

FIGURE 4.11-4

Project Trip Distribution and Project-Added Traffic Volumes

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volumes and would not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system for roadways. Therefore, project impacts to the operation of roadways would be less than significant (Class III impact).

Mitigation Measures

Impacts would be less than significant. No mitigation would be required.

Significance after Mitigation

Residual impacts would be less than significant (Class III impact).

Impact T-2: Impacts on Intersections

Intersection level of service was calculated assuming existing and project conditions. The existing plus project peak hour volumes are illustrated in Figure 4.11-5, and Table 4.11-9 summarizes the LOS calculations. Off-site restoration would temporarily result in an estimated six daily roundtrips to the off-site restoration parcel that use area intersections. This small increase in traffic would not contribute to substantial delays or otherwise significantly impact area intersections system. As shown, the study area intersections would continue to operate at LOS B or better during the AM and PM peak hours with the addition of project-generated traffic, which is acceptable based on the County's LOS C standard. Thus, the project would also not conflict with an applicable plan, policy, or ordinance establishing measures of effectiveness for the performance of the circulation system for intersections. Therefore, project impacts to the operation of local intersections would be less than significant (Class III impact).

Table 4.11-9
Existing + Project AM and PM Peak Hour Intersection Levels of Service

Intersection	AM Peak Hour		PM Peak Hour		Impact?
	Existing LOS	Existing + Project LOS	Existing LOS	Existing + Project LOS	
State Route 1 Southbound Ramps/Constellation Road	0.56/LOS A	0.56/LOS A	0.49/LOS A	0.50/LOS B	No
State Route 1 Northbound Ramps/Constellation Road	0.50/LOS A	0.51/LOS A	0.54/LOS A	0.54/LOS A	No
Burton Mesa Road/Constellation Road	11.0/LOS B	11.2/LOS B	10.4/LOS B	10.5/LOS B	No

SOURCE: Penfield & Smith 2015.
Levels of service for unsignalized intersections based on average delay per vehicle.

Mitigation Measures

Impacts would be less than significant. No mitigation would be required.

Significance after Mitigation

Residual impacts would be less than significant (Class III impact).

Map Source: Penfield & Smith

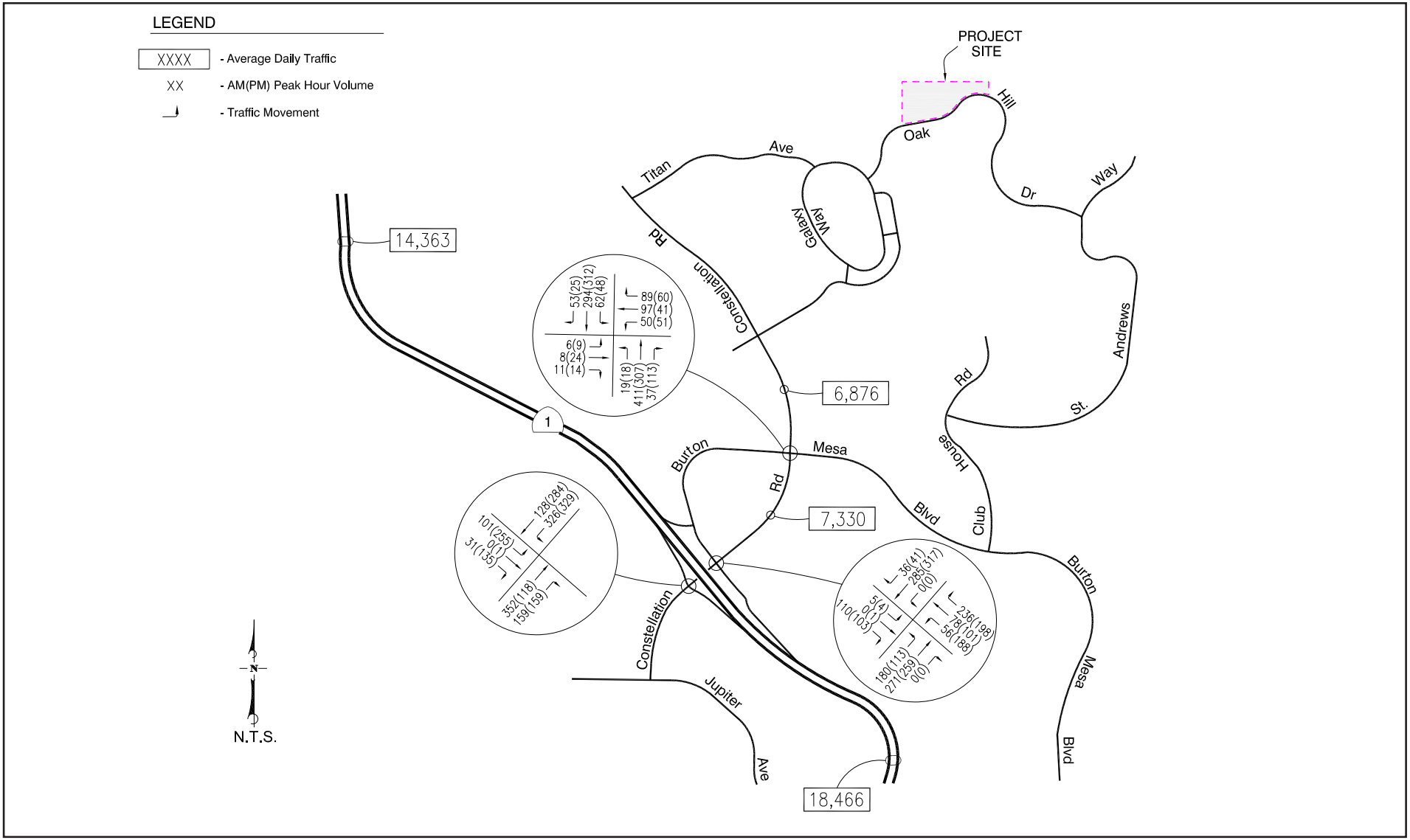

FIGURE 4.11-5

Existing + Project ADT and Peak Hour Traffic Volumes

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Impact T-3: Conflicts with Existing Plans (CMP)

Buildout of the proposed project would result in the development of 29 single-family residences and restoration of the off-site VVCSD-owned parcel APN 097-371-067. The project does not propose new residential land uses beyond what could currently be developed under the project site's existing Comprehensive Plan land use designation RES-12.3. As shown above in Table 4.11-6, the project would add an average of approximately 276 average daily trips throughout the project area. In addition, the project would be located on a parcel with access to existing County roads, and State Route 1.

The Purisima Road– State Route 1/Harris Grade Road intersection is the only intersection in the vicinity of the project site that is included in the County's CMP network. The intersection currently operates in the LOS C range and is forecast to operate at LOS C under the cumulative conditions after improvements from the Burton Ranch project in the City of Lompoc are implemented (Penfield & Smith 2015). The proposed project would not result in a CMP impact at this location, as the LOS would remain unchanged. Thus, the project would not conflict with the CMP. As such, no impact would occur. Impacts would be less than significant (Class III impact).

Mitigation Measures

No impact would occur. No mitigation is required.

Significance after Mitigation

Residual impacts would be less than significant (Class III impact).

Impact T-4: Traffic Hazards, Emergency Access, and Parking

The project would be subject to the County's roadway design standards, County Code, and California Fire Code emergency access requirements, as well as the County Comprehensive Plan goals and policies related to traffic safety and parking.

a. Traffic Hazards and Emergency Access. The County of Santa Barbara Department of Public Works Transportation Division Engineering Design Standards (2011b) identifies design specifications for curves, sight distance, slopes, and other roadway features. The County's roadway standards are discussed in Section 4 of the County Department of Public Works Transportation Division Engineering Design Standards and are intended to provide "an acceptable baseline minimum guide for design and construction, to exercise sound judgment in applying standards taking into account costs, traffic volumes, traffic and safety benefits, right of ways, socioeconomic and environmental impacts" (County of Santa Barbara 2011b).

The County has adopted the California Fire Code emergency access requirements as part of their County Code. This includes emergency access road dimensions, design, grades, gates, and other fire safety features. Additionally, more stringent State Building Standards Code access measures have been adopted by the County to address the potential emergency

access issues associated with earthquakes, flooding, climate/strong winds, topography, and water shortages. Site access and circulation were evaluated in the project's Traffic and Circulation Study (Penfield & Smith 2015). The preliminary site plan (refer to Figure 2-4) indicates that access to the project site is proposed via three driveway connections to Oak Hill Drive and three residential units (Lots 27-29) having direct access from Oak Hill Drive.

The Traffic and Circulation Study determined that both the stopping and corner sight distance requirements (275 feet for 25 miles per hour [mph]) appear to be satisfied for all proposed project driveway connections, with the exception of the center driveway connection to Oak Hill Drive which is located on a sag curve and may restrict sight distance to the east depending on roadway shoulder slope and vegetation height (Penfield & Smith 2015). As such, implementation of MM TRAF-1 would ensure impacts associated with traffic hazards are less than significant with mitigation (Class II impact).

b. Airport Traffic Hazards. The project site is located approximately 3.85 miles north of the Lompoc Airport and 6.5 miles east of the Vandenberg Air Force Base. However, based upon the Santa Barbara County Airport Land Use Compatibility Plan (2012), the project site is not located within the Lompoc Airport or Vandenberg Air Force Base safety zone areas. As such, the project would not result in impacts related to air traffic patterns or safety risks. Therefore, project impacts to air safety would be less than significant (Class III impact).

c. Parking. The County Land Use and Development Code (Chapter 35.36) specifies parking standards for the residential uses. For one-family dwelling units, the number of parking spaces required under Section 35.36.050 of the County Code is two spaces per dwelling unit. Thus, the County's parking requirements for the project's 29 units would be 58 parking spaces.

The Oak Hills Estates Design Guidelines (design guidelines) (June 2015; Appendix C-1) provides the details of the project's proposed off-street parking design standards. The design guidelines indicate each residence will require a minimum of four off-street parking spaces, with a minimum of two of the four off-street parking spaces to be located within a garage. The remaining spaces can be uncovered or covered. Uncovered spaces may be accommodated in the driveway~~ or a separate off-street guest parking area~~. The project would provide double the County Code requirements for residential off-street parking from the requirement of two spaces per dwelling unit to four, resulting in a total of 116 parking spaces. In addition, as discussed in detail in Chapter 2, Project Description, and as shown in Figure 2-4, project Development Site Plan, the number of proposed on-street guest parking spaces consists of 21 spaces on "Road A" and eight spaces on "Road B". No street parking is proposed on Oak Hill Drive. Therefore, the proposed project would exceed the amount of on-site parking required according to the County Code for residential parking. No significant impacts related to parking would occur as the project provides sufficient parking and guest parking spaces (Class III impact).

d. Need for New Roads or Road Maintenance. As detailed under Impact T-1 and T-2, a limited amount of traffic would be generated by the project and off-site restoration that would use local roadways and intersections. The proposed project would not result in

significant impacts to public streets that would require the construction of additional new roads or a significant amount of increased roadway maintenance. The project proposes three private driveways to provide on-site access. Road A serving lots 1–29 would consist of a two-way entry road loop from the western and central area of the project site from Oak Hill Drive. Road B is proposed as a cul-de-sac on the east half of the project site and would provide entry to lots 22–26. Lots 27–29 would be accessed directly from the existing Oak Hill Drive roadway. As such, impacts would be less than significant (Class III impact).

Mitigation Measures

MM TRAF-1 Sight Distance Study

Sight distance requirements at the center project driveway connection to Oak Hill Drive shall be reevaluated in a study prepared by a County-approved consultant or engineer once a more detailed site plan is developed to ensure traffic safety.

Plan Requirements and Timing: The line of sight analysis shall be conducted when detailed site plans are available and shall be submitted to the County Planning & Development Department (P&D) and County Public Works Transportation Division for approval. The study shall demonstrate that adequate site distance for the center driveway can be provided.

Monitoring: The County P&D processing planner and Public Works transportation engineer shall check sight analysis prior to approval of map recordation, and P&D Compliance Monitoring Staff shall spot check in the field throughout grading and roadway construction.

Significance after Mitigation

Impacts would be less than significant after mitigation (Class II impact).

Impact T-5: Alternative Transportation Modes

The existing roadways in the vicinity of the project site provide pedestrian opportunities; however, sidewalks are intermittent along the majority of the north side of Oak Hill Drive along the project site boundary. Sidewalks are present primarily along the southern side of Oak Hill Drive adjacent to existing residential development. The project proposes to construct curbs, gutters, and sidewalk paths along the north side of Oak Hill Drive along the project site and on Roads A and B to increase pedestrian access and safety along the roadway.

The City of Lompoc (City) provides public transit bus services to the project area through its "COLT" routes. COLT Route 4 provides direct bus stop route services to the Vandenberg Village and Mission Hills area from the City, and COLT Routes 1–3 provide public bus transit around the main areas of the City. The nearest bus stop is located within 0.50 mile to the east of the project site, located at the intersection of Titan Avenue and Vanguard

Drive. The proposed project would not impair or interfere with existing public transit routes.

No designated bike routes are located in the immediate vicinity of the project site. The nearest bike route is the Caltrans Pacific Coast Bike Route, which runs along State Route 1 southwest of the project site along Lompoc–Casmalia Road as a Class II bike lane. The Class II bike lane connects from the Pacific Coast Bike Route to Burton Mesa Boulevard located approximately 1 mile south of the project site. The proposed project would not affect these aforementioned alternative transportation modes during construction or post-construction. In addition, the project would improve pedestrian access with the sidewalks designed along Oak Hill Drive and Roads A and B. As such, impacts related to alternative transportation modes would be less than significant (Class III impact).

Mitigation Measures

Impacts are less than significant. No mitigation measures are required.

Significance after Mitigation

Impacts would be less than significant (Class III impact).

Mitigation Measures

Impacts would be less than significant. No mitigation would be required.

Significance after Mitigation

Residual impacts would be less than significant (Class III impact).

4.11.2.3 Cumulative Impacts

Cumulative Traffic Forecasts

Cumulative Traffic Volumes. Cumulative traffic forecasts produced for the Oaks Hills Estate Traffic and Circulation Study were derived from the Santa Barbara County Housing Element Focused Rezone Program and verified using cumulative traffic data contained in the updated traffic analysis for the Burton Ranch Project (Penfield & Smith 2015). The cumulative forecasts assume development of the approved and pending projects in the region, including buildout of the Providence Landing project at the southern end of Vandenberg Village and the Burton Ranch project in the City of Lompoc. Stantec provided the project's supplemental traffic analysis for the AM peak hour cumulative and project intersection levels of service (Stantec 2016). The cumulative ADT and peak hour traffic volumes are shown in Figure 4.11-6.

Map Source: Stantec

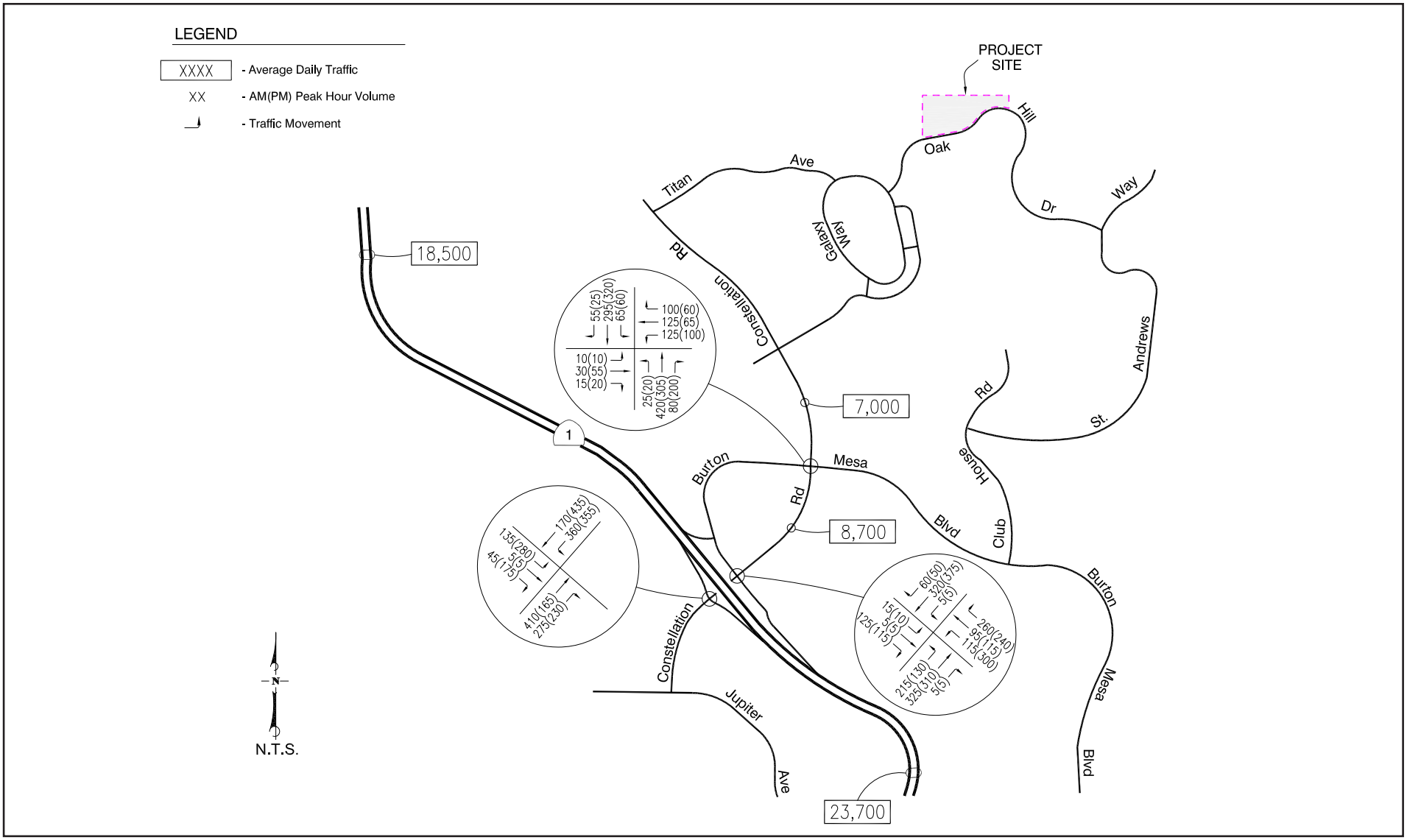

FIGURE 4.11-6

Cumulative ADT and Peak Hour Traffic Volumes

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Cumulative Roadway and Intersection Operations

Project-generated traffic was added to the cumulative traffic volumes and levels of service were recalculated for cumulative and cumulative plus project conditions. Figure 4.11-7 shows the cumulative plus project ADT for the AM peak hour and Figure 4.11-8 shows the cumulative plus project ADT and PM peak hour traffic volumes. Tables 4.11-10 through 4.11-12 show the cumulative and cumulative plus project level of service calculation for the study area roadways and intersections, respectively.

Table 4.11-10
Cumulative + Project Roadway Levels of Service

Roadway Segment	Classification	Cumulative ADT	Cumulative + Project ADT	LOS C Threshold	Cumulative+ Project LOS
State Route 1 n/o Constellation Rd	Expressway	18,500 ADT	18,563 ADT	N/A[1]	LOS A
State Route 1 s/o Constellation Road	Expressway	23,700 ADT	23,866 ADT	N/A[1]	LOS A
Constellation Road n/o State Route 1	Major Road	8,700 ADT	8,930 ADT	30,100 ADT	LOS A
Constellation Road s/o State Route 1	Major Road	7,000 ADT	7,276 ADT	30,100 ADT	LOS A

SOURCE: Penfield & Smith 2015.
[1]County threshold not applicable; level of service based on Highway Capacity Manual operational analysis.
n/o = north of; s/o = south of

Table 4.11-11
AM Peak Hour Cumulative + Project Intersection Levels of Service

Intersection	Cumulative LOS	Cumulative + Project LOS	Impact?
State Route 1 Southbound Ramps/ Constellation Road	0.65/LOS A	0.65/LOS A	No
State Route 1 Northbound Ramps/ Constellation Road	0.59/LOS B	0.59/LOS B	No
Burton Mesa Road/Constellation Road	13.0 sec/LOS B	13.2 sec/LOS B	No

SOURCE: Stantec 2016.

Table 4.11-12
PM Peak Hour Cumulative + Project Intersection Levels of Service

Intersection	Cumulative LOS	Cumulative + Project LOS	Impact?
State Route 1 Southbound Ramps/ Constellation Road	0.56/LOS A	0.58/LOS A	No
State Route 1 Northbound Ramps/ Constellation Road	0.68/LOS B	0.68/LOS B	No
Burton Mesa Road/Constellation Road	12.7 sec/LOS B	13.0 sec/LOS B	No

SOURCE: Penfield & Smith 2015.

Map Source: Stantec

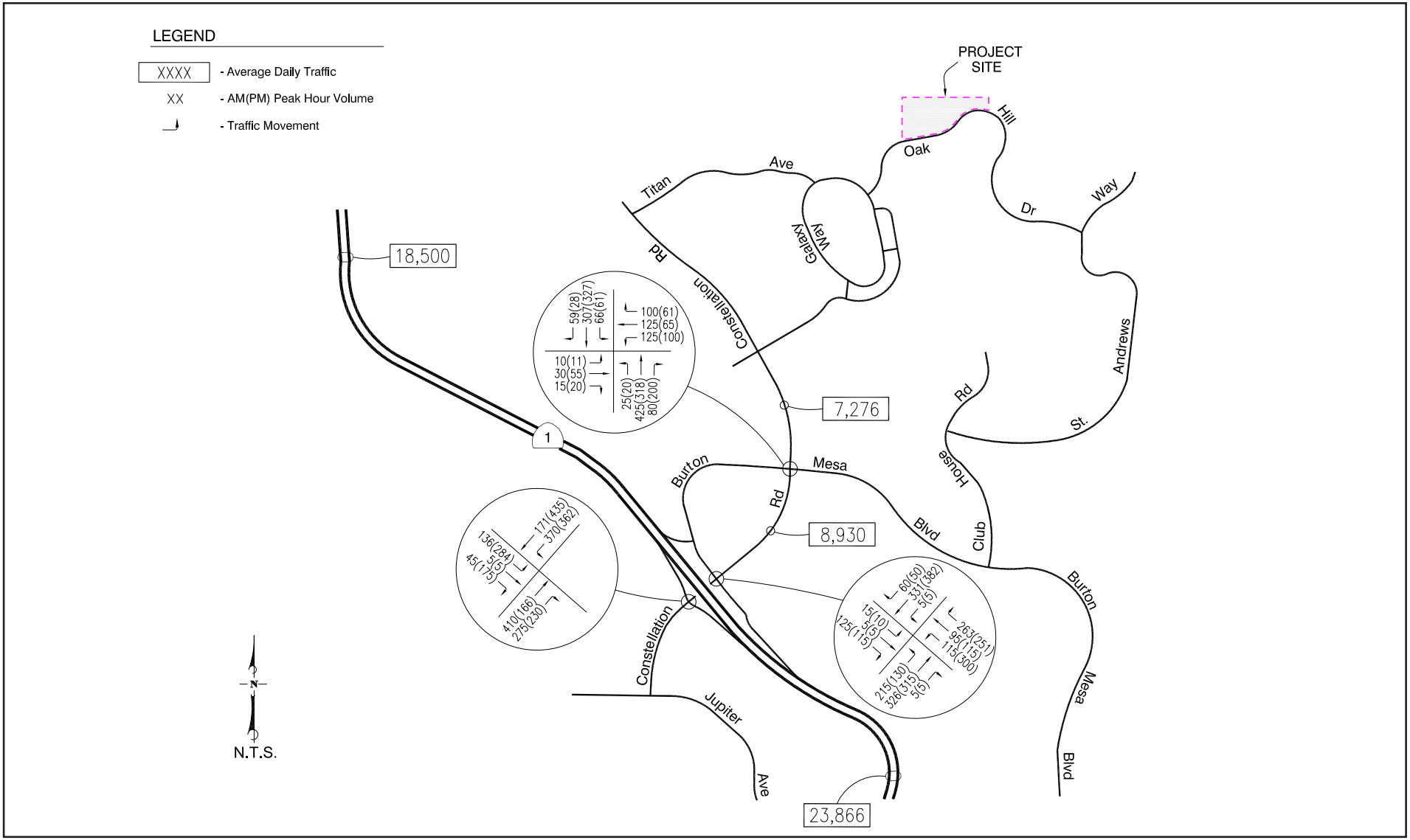

FIGURE 4.11-7

Cumulative + Project ADT and AM Peak Hour Traffic Volumes

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Map Source: Penfield & Smith

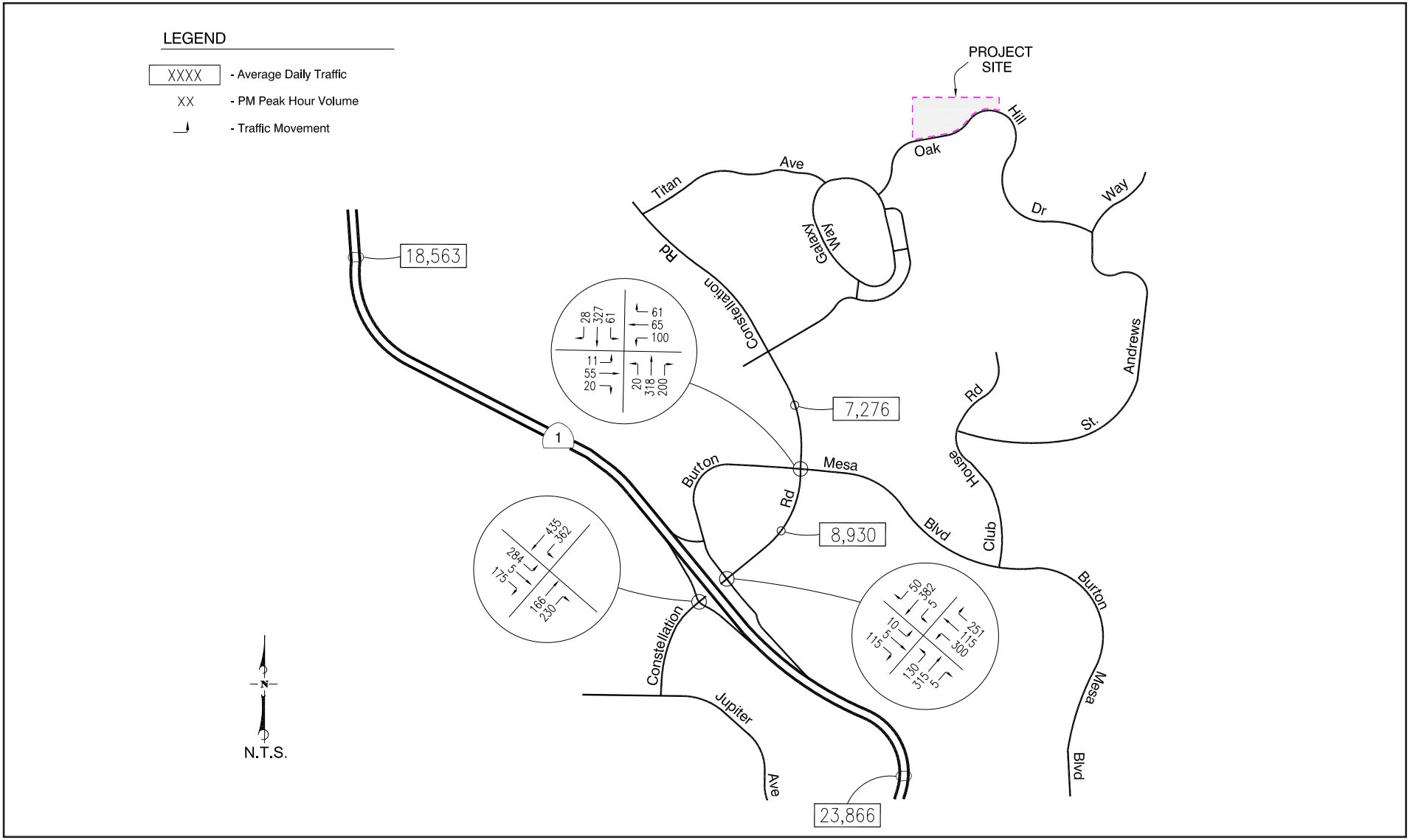

FIGURE 4.11-8

Cumulative + Project ADT and PM Peak Hour Traffic Volumes

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Tables 4.11-10 through 4.11-12 indicate that the study area roadways and intersections would operate in the LOS A-B range under AM and PM cumulative and cumulative plus project conditions. In addition, implementation of the off-site mitigation plan for restoration would not add any permanent additional traffic to the area on APN 097-371-067. Only temporary vehicle trips for initial restoration efforts, maintenance, and monitoring would add approximately six roundtrips daily but would not add any development that would add a permanent increase in traffic to the area roadways. Therefore, the project and proposed project's off-site mitigation plan would not exceed the County's LOS thresholds and cumulative impacts on project roadways and intersections would be less than significant (Class III impact).

Mitigation Measures

Cumulative impacts would be less than significant. No mitigation would be required.

Significance after Mitigation

Cumulative residual impacts would be less than significant. (Class III impact).

4.12 Fire Protection

This section describes existing fire conditions at the project site and in the surrounding vicinity, with an emphasis on wildland fire hazards, project-related on-site fire protection measures, regional wildfire response, and firefighting capabilities. In addition, this section evaluates the impacts of the proposed project on wildland fire protection resources, and the site conditions that contribute to or reduce the danger of fire and emergency evacuation.

4.12.1 Setting

4.12.1.1 Wildland Fire Risk

Wildland fires are part of the natural regeneration cycle of the native landscape within California and the County of Santa Barbara (County). The project site is situated on the Burton Mesa, which experiences long dry seasons where drought-tolerant maritime chaparral, coyote brush, and oak woodland habitat thrive. The normally dry conditions at the project site and vicinity have recently been further exacerbated by four years of regional drought conditions.

The project site is designated by the California Department of Forestry and Fire Protection (CAL FIRE) as located within a wildland–urban interface (WUI) that is vulnerable to wildland fires, as it is heavily vegetated and adjacent to the Burton Mesa Ecological Reserve to the north and west. Surrounding uses are shown in Table 4.12-1. The WUI is defined by the U.S. Forest Service as ". . . the area where houses meet or intermingle with undeveloped wildland vegetation (Radeloff et al. 2005). The WUI is thus a focal area for human–environment conflicts, such as the destruction of homes by wildfires, habitat fragmentation, introduction of exotic species, and biodiversity decline." Mature and dry vegetation and trees located on the proposed project site provide abundant habitat values. This growth is also an abundant supply of flammable vegetation (brush, high grasses, trees, and shrubs) that can quickly become the source of fuel for a wildland fire, which can pose a threat to structures, property, and life.

Table 4.12-1
Current Uses of Adjacent Properties

Area	Use
North	Burton Mesa Ecological Reserve
South	Multi-family/single-family residential land uses to the southwest and southeast adjacent to the Village Country Club golf course to the south
East	Single-family residential land uses
West	Burton Mesa Ecological Reserve

As shown in Figure 4.12-1, the project site is located within a High Fire Hazard Severity Zone (HFHSZ) identified by CAL FIRE, based on relevant factors such as fuels, terrain, weather, and new construction exposure to fire (CAL FIRE 2007). The County and CAL FIRE have designated the site as a high fire hazard area in the State Responsibility Area (SRA). Other data used by CAL FIRE to map high fire hazard areas include development patterns; estimated fire behavior characteristics based on potential fuels over a 30–50-year time horizon, and expected burn probabilities.

4.12.1.2 Project Site Conditions

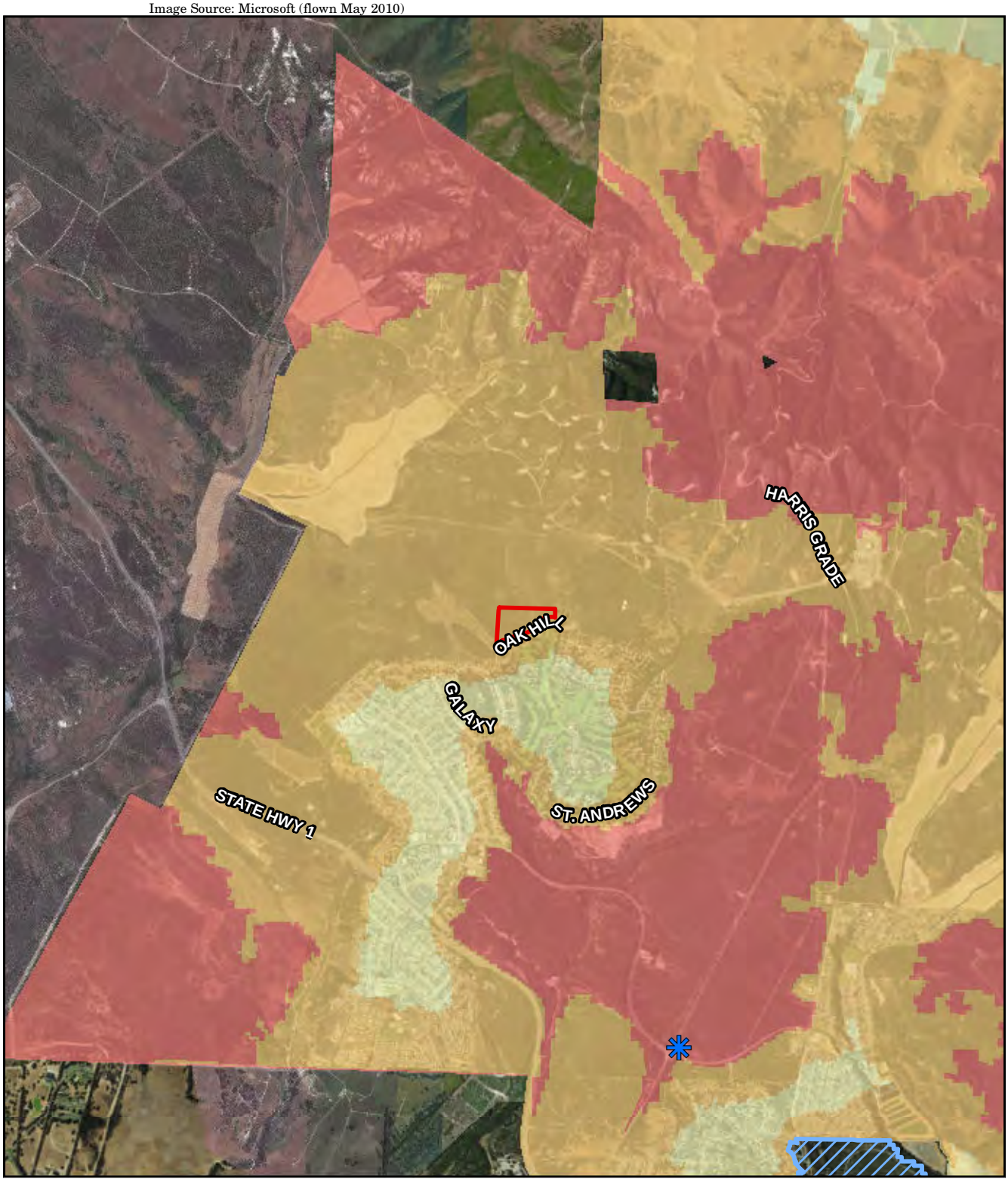
The entire project site is currently undeveloped, situated on a heavily vegetated landscape that is characterized by rolling hillsides with a mix of oak woodlands and chaparral habitat. The project site generally slopes to the south and west. Site elevations vary from 495 feet above mean sea level in the northwest portion of the site to 425 feet above mean sea level in the southwest corner. According to the Biological Resources Assessment, by Rincon Consultants, Inc. (2017a~~2015a~~) (see Appendix D-1), the vegetative communities that dominate the project site have chemical, physical, and physiological characteristics that can contribute to wildland fire risk.

Central maritime chaparral predominantly characterizes the western half of the project site, and coyote brush scrub comprises most of the land on the eastern half of the project site (see Figure 4.3-1). Currently, the flammable fuels on the project site consist primarily of large areas of intact maritime chaparral, coyote brush scrub, and tree canopies. The majority of existing trees, located along the western and northern portions of the project parcel, are in proximity to one another. Wildfire in these areas could spread through the neighboring tree canopies. In addition, trees present a fire danger to structures when canopies are located near rooflines.

4.12.1.3 Access and Egress

Primary access to and egress from the project site for evacuation and fire protection resources are provided by the two-lane Oak Hill Drive, which connects to Galaxy Way to the west and St. Andrews Way to the east. Oak Hill Drive is bordered on both sides mostly with residential development and ornamental vegetation. As described in Chapter 2.0, Project Description, the project includes two new roadways that would provide access to the proposed lots. A two-way road loop "Road A" and a cul-de-sac "Road B" would both be private roads that provide access to the project site from Oak Hill Drive. Road A would provide access for Lots 1–21. Road B, on the east half of the project site, would provide access to Lots 22–26, and end in a cul-de-sac. Lots 27–29 would be accessed directly from Oak Hill Drive.

Image Source: Microsoft (flown May 2010)



0 Feet 3,500

Project Boundary

County Fire Station 51

Fire Hazard Severity Zones in SRA

Very High

High

Moderate

Local Responsibility Area

FIGURE 4.12-1

County Fire Hazard Severity Zones in State Responsibility Area (SRA)

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4.12.1.4 Oak and Chaparral Mitigation Site

The proposed off-site mitigation for project-related impacts to native vegetation and habitat would occur over portions of a 123-acre open space parcel owned by the Vandenberg Village Community Services District (APN 097-371-067) that is located approximately 1 mile southeast of the project site and is located within a HFHSZ (see Figure 2-11~~12~~).

4.12.1.5 Local Fire Protection Agencies

a. California Department of Forestry and Fire Protection

CAL FIRE is a state agency responsible for protecting natural resources from fire on land designated by the State Board of Forestry as a SRA. CAL FIRE has mapped areas of significant fire hazards in the County through their Fire and Resource Assessment Program (FRAP). As discussed above, these maps designate areas of the County into different Fire Hazard Severity Zones (FHSZ) based upon fuels, terrain, weather, and other relevant factors. These areas are divided into Federal Responsibility Areas (FRAs), SRAs, and Local Responsibility Areas (LRAs). These designations determine which agency is financially responsible for the prevention and suppression of wildfires in an affected area. CAL FIRE has a legal responsibility to provide fire protection on all SRA lands, which are defined based on land ownership, population density, and land use. CAL FIRE does not have the responsibility for densely populated areas, agricultural lands, or land administered by the federal government.

CAL FIRE also manages the state forest system and has responsibility to enforce forest practice regulations, which govern forestry practices on private and other non-federal lands other than the FRA. The Santa Barbara County Fire Department (SBCFD) provides fire protection to the SRA within the project area under a contract with CAL FIRE. Under the California Master Mutual Aid Agreement, CAL FIRE assists fire departments within the state when resources are available, regardless of the type of disaster. CAL FIRE can access the local government fire departments through the same agreement for assistance in wildland fire suppression.

When resources are stretched thinly, agreements with the California Military Department provide California National Guard resources. These include activation of the C-130 aircraft (Modular Airborne Fire Fighting System), helicopters, support personnel, communications equipment, and other specialized resources.

The largest of CAL FIRE's cooperative programs involves an agreement for the exchange of fire protection services with federal wildland fire agencies, including the U.S. Forest Service, Bureau of Land Management, and National Park Service. The goal is to have the closest agency respond to a wildfire, regardless of jurisdiction. Through this cooperative relationship, California is able to access federal and state resources throughout the U.S. to help in times of disaster, when department resources are depleted. CAL FIRE provides assistance, through interstate compact agreements, to the federal and other state wildfire agencies throughout the nation.

Fire Hazard Severity Zones

To assist each fire agency in addressing its responsibility area, CAL FIRE uses a severity classification system to identify areas or zones of severity for fire hazards within the state. CAL FIRE is required to map these zones for SRAs and identify Very High Fire Hazard Severity Zones (VHFHSZ) for LRAs. In January 2008, CAL FIRE updated these FHSZ maps to reflect revised VHFHSZ for LRAs throughout the state. The County participated in this update to ensure the accuracy of mapped areas within the County's LRA. FHSZ maps identify moderate, high, and very high hazard severity zones using a science-based and field-tested computer model that assigns a hazard score based on the factors that influence fire likelihood and fire behavior. Factors considered include fire history, existing and potential fuel (natural vegetation), flame length, blowing embers, terrain, and typical weather for the area. The maps are used to:

- Implement wildland–urban interface building standards;
- Create property development standards such as road widths, water supply, and signage for use in city or County general plans.
- Establish defensible space clearance requirements around buildings; and
- Provide natural hazard real estate disclosure at time of sale.

The County FHSZ map is adopted through County Code Chapter 10 – Building Regulations and used by several County departments for hazard planning, mitigation and response, land use planning, and in the development review process. The project site is not under the County LRA; however, the project site lies under the SRA as a HFHSZ.

b. Santa Barbara County Fire Department

The SBCFD provides fire prevention, fire suppression, and life safety services to unincorporated Santa Barbara County, including the Vandenberg Village community. SBCFD has 16 fire stations throughout the County, staffed 24 hours a day, 365 days a year. SBCFD has a total of 210 full-time sworn personnel who respond to over 15,000 incidents on an annual basis.

Fire Station 51, located at 3500 Harris Grade Road near Lompoc, is the nearest fire station by the project site. Station 51 is a dedicated Advanced Life Support station, staffed by one captain, two engineers, and two firefighters/paramedics. Station 51's apparatus includes a Type 1 engine, rescue ambulance, Type 3 engine, and a Type 1 reserve engine.

Station 51 has a Paramedic Engine Company and a rescue ambulance (R/A) that also respond to the U.S. Space Command's Vandenberg Air Force Base. This station serves a large response area including Jalama Beach, State Highways 1 and 247, Vandenberg Village, and areas surrounding the City of Lompoc. Additionally, the engine and R/A both respond to the Lompoc City Fire Department for mutual-aid calls. The Vandenberg Fire Department, County Station 21 located in Orcutt, and the City of Lompoc Fire Department

Station 2 also provide back-up firefighting support on an as-needed basis (pers. comm. Michael Moore, SBCFD Engineer, June 2016).

The Fire Prevention Division is broken into three main sections: prevention, investigation, and vegetation management. This division provides development standards for driveways, private roads, and access roads. The SBCFD development standards are described below in section 4.12.1.5c. They address visibility of address markers and prescribe minimum widths, road surface treatment and materials, turnaround design, and access requirements for gates and other barriers. As these standards outline design standards, certain alternate access routes must be approved by the Fire Chief.

Evacuation Plans

The SBCFD does not prescribe fixed emergency evacuation routes for fire events due to the variability and transformative nature of fires. However, SBCFD does maintain Standard Operating Procedures, which outline the protocols for fire-induced evacuations based on individual emergency scenarios. During fire emergencies in LRAs, the SBCFD is responsible for assessing fire hazards to identify evacuation requirements. In SRAs, County agencies and departments cooperate with CAL FIRE to assure that residents are evacuated when necessary.

4.12.1.6 Regulatory Setting

a. National

National Fire Protection Association

The mission of the international nonprofit National Fire Protection Association (NFPA), established in 1896, is to reduce the worldwide burden of fire and other hazards on the quality of life by providing and advocating consensus codes and standards, research, training, and education. The NFPA develops, publishes, and disseminates more than 300 consensus codes and standards intended to minimize the possibility and effects of fire and other risks.

b. State

2016~~2013~~ California Building Code

Building standards for high fire hazard areas, including those pertaining to roof coverings, construction materials, and structural components are identified in the California Building Code (CBC), which is administered by the County Building and Safety Division. These requirements are intended to protect buildings from wildland fires. The CBC requires the use of ignition-resistant building methods and materials as a measure to reduce structure ignitability for new buildings located in any Fire Hazard Severity Zone within a SRA, any Local Agency Very High Hazard Severity Zone, or any wildland-urban interface. Maps depicting the boundaries of these areas are published by CAL FIRE for both SRAs and LRAs. SRA Fire Hazard Severity Zones are areas that are classified as Very High, High, or

Moderate in SRAs by CAL FIRE. Local Agency Very High Fire Hazard Severity Zones are designated by a local agency based on recommendations of the CDF Director within an area in which the local agency is responsible for fire protection. Wildland-Urban Interface Fire Areas identified by the state as a Fire Hazard Severity Zone or other areas designated by the enforcing agency to be at significant risk from wildfire.

2016~~2013~~ California Fire Code

The 2016 ~~2013~~ California Fire Code (CFC, Title 21 California Code of Regulations, Part 9) establishes the minimum requirements consistent with nationally recognized good practices to safeguard the public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises, and to provide safety and assistance to firefighters and emergency responders during emergency operations. The provisions of the CFC apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure or any appurtenances connected or attached to such building structures throughout the state.

Public Resources Code Section 4290 and 4291

The CAL FIRE has authority to develop and implement standards for defensible space around structures within SRAs, and establishes building standards for development in the wildland-urban interface. Public Resources Code Section 4291 requires that land covered with flammable material be maintained within 100 feet of each side of a structure. Fuels are required to be maintained so that a wildfire burning under average weather conditions would be unlikely to ignite an adjacent structure. An insurance company may require a greater distance if determined necessary by a fire expert (Public Resources Code § 4291[a][1]).

California Government Code Section 51175 et seq.

This code requires the Director of Forestry and Fire Protection to identify areas in the state of California that are considered Very High Fire Hazard Severity Zones. These fire zones are delineated on Fire Hazard Severity Zone Maps created for areas throughout the state.

California Department of Fish and Game – Land Management Plan for the Burton Mesa Ecological Reserve

The California Department of Fish and Wildlife's Land Management Plan for the Burton Mesa Ecological Preserve (2007) includes a Fire Management Element. The plan includes goals, tasks, opportunities and constraints for the preparation of an adequate strategy and coordination with landowners, the SBCFD, enforcement agencies, and local jurisdictions in the event of a wildfire by the Burton Mesa Ecological Reserve.

c. Local

Santa Barbara County Fire Protection Service Standards

The SBCFD employs the following two standards with respect to the provision of fire protection services:

1. A firefighter-to-population ratio of one firefighter on duty 24 hours a day for every 2,000 in population is considered "ideal," although a ratio (including rural areas) of one firefighter per 4,000 population is the maximum population that can be adequately served.
2. The second fire protection standard is a 5-minute response time in urban areas. This incorporates the following NFPA response-time objectives:
   a. One minute (60 seconds) for turnout time, and
   b. Four minutes (240 seconds) or less for the arrival of the first-arriving engine company.

Fire Department Development Impact Mitigation Fee

A fire facility impact fee is imposed on new development to mitigate impacts and finance fire facilities, apparatus, and equipment necessary to serve new development and to assure new development projects pay their fair share of the additional fire protection facilities, apparatus, and equipment necessary to maintain the Fire Department's existing level of service.

Building Code Construction Standards

A HFHSZ is an area of the County designated as having a high propensity for wildfire due to the existence of excessive vegetative fuel, lack of adequate water for fire suppression, or lack of adequate access for firefighting equipment. In accordance with the County's Building Code Construction Standards, residential development within designated high fire hazard areas must implement specific construction standards. Where appropriate, all of the required structural safeguards must be graphically depicted on building plans submitted prior to issuance of a building permit. Facilities must be installed prior to occupancy, and SBCFD inspectors must inspect and approve all structural safeguards.

Santa Barbara County Fire Department Development Standards

The SBCFD has adopted the California Fire Code and has seven development standards codified in County Code Chapter 15, Fire Prevention. The development standards cover a range of development topics required for new construction, including: private roads and driveways, fire hydrant spacing and flow rates, stored water fire protection systems, automatic fire sprinkler systems, automatic alarm systems, defensible space, and access gates. Compliance with SBCFD development standards is verified prior to issuance of

applicable permits or recordation of any future final tract maps. The development standards are updated by the SBCFD as needed to ensure compliance with state law.

Standard 1 – Private Road and Driveway

Fire engines and trucks must be able to adequately access parcels to respond to calls for service. The SBCFD private road and driveway development standards identify proper widths, turnarounds, gate access systems, vegetation clearance, street and building signage, and fire lane signage to allow adequate emergency access. Proper widths depend on the number of parcels the access road is serving and range from 12 feet for private driveways serving one residence to 24 feet (unobstructed) for roads serving 5 or more parcels.

Standard 2 – Fire Hydrant Spacing and Flow Rates

Adequate fire hydrant spacing and flow rates are required to provide firefighters the ability to quickly put out fires and are based on the use type. Urban and rural developed neighborhoods require 500-foot hydrant spacing and 750 gallons per minute minimum flow rate. Fire water service line sizes and hydrant specifications are also provided in this development standard.

Standard 3 – Stored Water Fire Protection Systems

Some areas in the County, such as areas that are not connected to the municipal water system, require water storage tanks to provide adequate water supply for fire protection. Storage tank development standards identify the proper tank and waterline capacity needed as well as tank design and protection measures.

Standard 4 – Automatic Fire Sprinkler System

Proposed automatic fire sprinkler systems are verified through plan review check and inspections. Design specifications for sprinklers are not identified in the standards, but design must be consistent with NFPA Standards.

Standard 5 – Automatic Alarm System

Alarm system plans are required to be checked and approved by the SBCFD prior to installation. Any system must be in compliance with current system standards and codes. All functions of the system must be tested and conducted in the presence of the SBCFD.

Standard 6 – Defensible Space

Depending on the site conditions, applicants for residential development may, at the direction of the SBCFD, be required to prepare fire/vegetation management plans that meet the SBCFD development standards. The vegetation management plan must describe all actions that will be taken to prevent fire from being carried toward structure(s). The plan must include: (1) a copy of the site plan that indicates topographic reference lines; (2) a copy of the landscape plan; (3) methods and timetables for controlling, changing, or modifying

areas on the property (elements of the plan shall include removal of dead vegetation, litter, vegetation that may grow into overhead electrical lines, certain ground fuels, and ladder fuels as well as the thinning of live trees); and (4) a maintenance schedule for the landscape/vegetation management plan.

A fire/vegetation management plan contains, at a minimum, the above-listed components and must be submitted to the SBCFD and Planning and Development for review and approval prior to the approval of grading permits for the development. Permit compliance and/or the SBCFD must inspect to verify that landscaping is in compliance with the plan once prior to issuance of occupancy permits, and once each year to monitor landscape maintenance.

In accordance with Public Resources Code 4291, the County's Defensible Space General Guidelines require:

- A total 100-foot clearance of flammable vegetation from all structures, including a 30-foot Zone 1 of no flammable vegetation, and a 70-foot Zone 2 with spaced vegetation.
- Single specimens of trees, ornamental shrubbery, or ground covers with adequate spacing and proper maintenance may be permissible provided that they do not form a means of rapidly transmitting fire to any structure;
- Roof surfaces shall be maintained free of accumulations of leaves, needles, twigs, or other combustible materials;
- Chimneys shall be provided a 10-foot clearance from trees;
- Access roads shall be maintained with a minimum 10-foot clearance on each side of the traveled section. Trees and shrubs protruding over the access roadway shall be trimmed to a minimum height of 13 feet 6 inches to allow proper access for emergency equipment. Refer below for additional information.

The SBCFD may adjust requirements based on the fire risk, environmentally sensitive habitats, and terrain conditions.

Standard 7 – Access Gates

Access gate plans must be submitted to the SBCFD, as it is required that gate access information be provided so firefighters can gain access to the property in the event of an emergency. For emergency access, a Knox system is required, a "fail safe" mode so gates can be unlocked during a power outage, and the gate must be identified on easements. Also, design requirements include setbacks from intersections, widths, gate types, and turnarounds.

Santa Barbara County Comprehensive Plan

The Santa Barbara County Comprehensive Plan addresses public safety, hazardous materials, and fire hazards. The County Comprehensive Plan Seismic Safety and Safety Element has established policies to protect the community from natural and manmade hazards, including fire hazards. The Seismic Safety and Safety Element (2015d) identifies the project parcel as being located in a "High Hazard Area" for wildfire. Policies require development to be accompanied by detailed plans for fire prevention and control, prepared in accordance with County regulations. The applicable fire protection and prevention goals and policies contained in the Seismic Safety and Safety Element and the Land Use Element – Lompoc Area Goals Interpretive Guidelines (County of Santa Barbara 1999) are listed below:

Seismic Safety & Safety Element: Fire Goals, Policies, and Implementation Measures

Goal 1 – Fire Protection and Prevention: Protect the community from unreasonable risks associated with the effects of wildland and urban fires pursuant to Government Code 65302 (g)(1).

- **Fire Policy 2:** The County shall use California Department of Forestry and Fire Protection-Fire Hazard Severity Zones to determine appropriate construction materials for new buildings in State Responsibility Areas (SRA), local agency Very High Fire Hazard Severity Zones and designated Wildland-Urban Interface areas pursuant to the California Code of Regulations Title 24, Part 2, California Building Code.
- **Fire Policy 3:** Fire Hazard Severity Zone Maps, as maintained by the California Department of Forestry and Fire Protection, shall be used to illustrate the official areas of Very High Fire Hazard Severity Zones (VHFHSZ) in the Local and State Responsibility Areas.
- **Fire Policy 4:** To reduce the potential for fire damage, the County shall continue to require consistency with County Fire Department Development Standards pursuant to the California Fire Code, Public Resource Code §4291, and Government Code §51175-51188.
- **Fire Policy 5:** The County shall continue to require defensible space clearance around all structures in unincorporated Local Responsibility Areas pursuant to Public Resource Code §4291, and Government Code §51175-51188.
- **Fire Policy 8:** The County Office of Emergency Services (OES) shall continue coordinating emergency planning for the Santa Barbara Operational Area pursuant to the California Emergency Services Act of 1970.
- **Fire Policy 9:** The County shall minimize the potential effects of fire hazards through the development review process pursuant to State law.

Land Use Element – Lompoc Area Goals Interpretive Guidelines

The purpose of these guidelines is to further implement the County Comprehensive Plan's Lompoc Area Goals of the Land Use Element by providing clear and consistent interpretation of the Comprehensive Plan (County of Santa Barbara 1999). These guidelines pertain to proposals for development in the Urban Area of the Vandenberg Village – Mesa Oaks – Lompoc Wye area as shown as the Northern Lompoc Unincorporated Urban Area. The fire protection goals provide guidance for providing appropriate space related to SBCFD setbacks, access, development standards, and fuel modification zones and maintenance by the Burton Mesa Ecological Preserve.

Santa Barbara County Unit Strategic Fire Plan

The Santa Barbara County Unit Strategic Fire Plan (2015e) incorporates elements of other important planning documents, including the County Seismic Safety and Safety Element of the County Comprehensive Plan, and the County's Multi-Jurisdictional Hazard Mitigation Plan. The County Unit Strategic Plan clarifies what the SBCFD can do as a result of assessing and planning for major issues and opportunities facing the region. The County is one of the six "contract counties" (Santa Barbara, Ventura, Los Angeles, Orange, Kern, and Marin) that have executed a contract with the state to provide wildland fire protection on SRAs. The County has the responsibility of a contract county to implement the 2010 State Strategic Fire Plan for California in the County. As such, the SBCFD functionally operates as a unit of CAL FIRE and is responsible for all Strategic Fire Plan activities within the County. The County's Unit Strategic Fire Plan is updated regularly, and CAL FIRE provides additional funding to the six counties for fire protection, infrastructure improvements, and expanded firefighting resources.

Santa Barbara Operational Area Mutual Aid Plan

A cornerstone of the fire protection system in Santa Barbara County is the Santa Barbara Operational Area Mutual Aid Plan, which is updated on a regular basis. In the County, no single local fire agency can gather all the resources necessary to mitigate large scale emergencies on an on-going basis, such as large wildfires, hazardous materials responses, and urban search and rescue responses. The California Fire Master Mutual Aid Agreement requires each county to have a mutual aid plan. Because several cities and unincorporated areas of the County provide their own fire protection services, the Santa Barbara Operational Area Mutual Aid Plan becomes an essential mechanism for coordinating fire protection resources.

Mutual aid takes on several different forms. For initial attack purposes, mutual aid and automatic aid facilitates the day-to-day responses where the closest resources are dispatched regardless of jurisdictional boundaries. Because several of the agencies maintain their own dispatch centers, any aid request must be relayed between dispatch centers. Within Santa Barbara County, agreements have been made between all agencies with regard to dispatch protocols and dispatch procedures (automatic aid and mutual aid). In addition, Santa Barbara County also has agreements with Kern County, San Luis Obispo County, and Ventura County.

If an incident requires reinforcement resources that cannot be met through local mutual aid agreements, the California Fire Service and Rescue Emergency Mutual Aid Plan is followed. All fire service entities in California are signatory to the California Fire Service and Rescue Emergency Mutual Aid System, Mutual Aid Plan.

4.12.2 Impact Analysis

4.12.2.1 Methodology and Thresholds of Significance

California Environmental Quality Act (CEQA) Guidelines

Thresholds for fire protection impacts are derived from Appendix G of the CEQA Guidelines. The County's Environmental Thresholds and Guidelines Manual does not include specific significance thresholds for fire protection services or wildland fires. However, SBCFD has established a standard for the maximum acceptable service ratio as one on-duty firefighter per 4,000 residents and a maximum response time to emergency calls in urbanized areas of 5 minutes.

The CEQA Guidelines states that a project is considered to have a significant impact related to wildland fires (hazards) and fire protection (public services) if it resulted in any of the following:

- 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; and/or
- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: fire protection.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

4.12.2.2 Project Impacts and Mitigation Measures

Impact FP-1: Wildland Fire Hazards

The potential for wildland fire hazards is present where development is adjacent to open space or in proximity to wildland fuels. The project site's adjacency to the Burton Mesa Ecological Reserve, existing on-site biological resources, and varied topography also contribute to the risk of wildland fires.

In addition to the potential loss of life and property, wildfires can result in degraded wildlands. Although wildfires are considered a natural process necessary to the functioning of many ecosystems, a wildfire's aftermath can leave land scorched and exposed. Until the

land recovers, the exposed soils may contribute to further adverse environmental impacts, such as air (dust particulates) and water pollution (sediment, fire suppression chemicals, or other human-made pollutants), or unstable soils that can lead to mudslides. The end result of uncontrolled wildfire also includes debris from burned homes, some of which can be toxic and can adversely impact the environment by polluting local waterbodies, including streams and rivers.

Although natural conditions can make wildfires common in portions of the County, locating residential land uses adjacent to or within a high fire hazard area can result in increased fire-related risk to people and structures. As shown in Figure 4.12-1, the project site is ranked through CAL FIRE's Fire and Resource Assessment Program (FRAP) as being located within a HFHSZ, categorized by dense vegetation and steep slopes. As discussed below, fire risk-related impacts can occur during project construction and following construction

Future development of new residential structures on the project site would expose approximately 75 additional people and structures to a significant risk of loss, injury, or death involving wildland fires. Occupancy of these homes would also introduce additional sources of wildland fire ignition due to the increase in human activities such as cooking with barbeques, fire pits, sparks from construction or yard maintenance, and accidental electrical sparks. The risk of fire ignition is also increased during critical fire weather conditions, such as low humidity, warm temperatures, and strong winds. Operation of construction equipment including heavy machinery and generators would temporarily introduce new ignition sources in the area during construction of individual homes. Construction of infrastructure would occur over time in phases and for each individual lot, and homes would undergo construction at varying times depending on demand. During construction of the project, potential for accidental ignition of a wildfire is possible due to sparks or heat from heavy equipment interacting with vegetation on-site. Construction during the dry season may be accompanied by high winds exacerbating the high fire hazard and is a potentially significant impact. Therefore, the risk of fire ignition from construction activities in a HFHSZ results in a potentially significant impact. Implementation of mitigation measure **MM FP-1** as part of the project will ensure that standard fire protection and avoidance procedures for projects located in HFHSZ are implemented during construction for each phase of development and each individual lot. Potential wildfire impacts from construction of the project would be adverse and mitigated (Class II impact).

Future residences and structures built on the proposed lots are subject to the 2016~~2013~~ CBC, 2013 CFC development standards, and Oak Hills Estate Design Guidelines (design guidelines; see Appendix C-1). The CBC and CFC are updated periodically by the state and adopted by local jurisdictions, requiring the use of the latest ignition-resistant building methods, practices, and materials for new buildings and remodels as a way to reduce structure ignitability. These codes are required to be listed on all submitted site plans that would be reviewed by the County Building and Safety Division prior to approval for construction. The design guidelines ~~Oak Hills Estate Design Guidelines~~ provide fire risk reduction landscaping standards, describes requirements for the establishment and maintenance of defensible areas around future homes, and states that areas outside of

individual residential lots would be maintained by the project's homeowners association (HOA). The project has been revised since the design guidelines were written so that the requisite Fuel Management Zone 1 (FMZ 1: 0–30 feet) is located completely within proposed private residential lots and define the minimum building setback for parcels located adjacent to the project's open space. FMZ 2: 30–100 feet extends from the property lines into the adjacent open space. Figure 4.12-2 shows proposed fuel management zones and vegetation communities impacts.

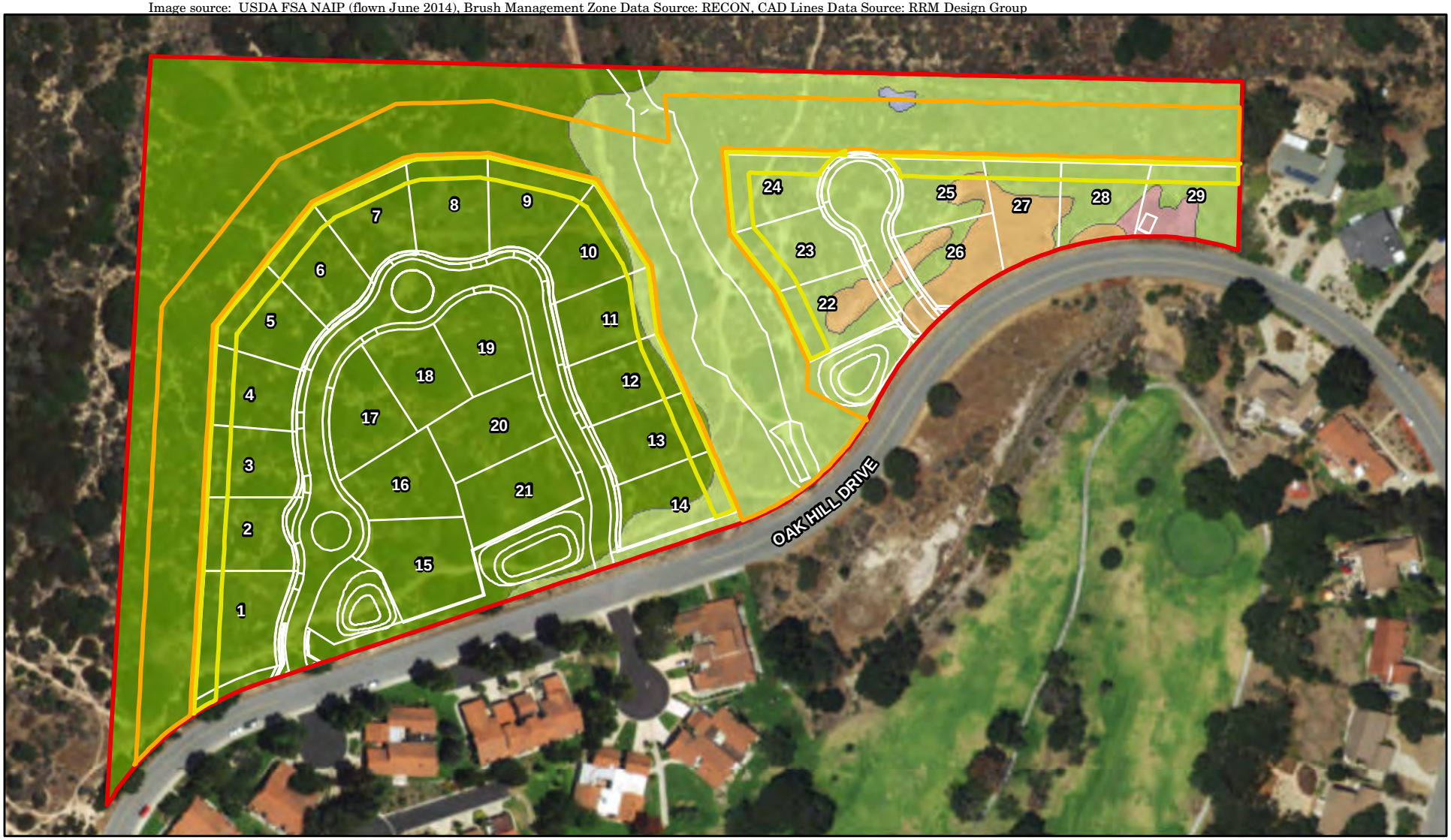
The SBCFD reviewed the project and issued conditions including road naming, street signs, and house numbering to help communicate fire locations to fire response crews; access and roadway design requirements; creation of 100 feet of defensible space around structures; identification of fire hydrant locations; a requirement for sprinkler systems to be installed in each future residence; and payment of development impact mitigation fees that are used to help pay for fire services to the site. The proposed project's fuel management strategies are included in Section 7.4 of the Oak Hills Estate Open Space Management Plan (OSMP) prepared by Rincon Consultants, Inc. (2017b~~2015c~~; see Appendix B) and in the design guidelines.

The OSMP and design guidelines include landscaping and fire safety design measures, propose fuel management zones and procedures that are to be implemented, identify defensible space areas to be managed by the project's HOA, and indicate that the first 0–30~~15~~ feet of defensible space adjacent to future residences are to be managed by property owners. However, inadequate maintenance of the first 30~~15~~ feet of defensible space by property owners could potentially result in an increased risk of structure or exterior fires that could lead to a wildfire and is a potentially significant impact of this project.

Implementation of mitigation measure **MM FP-2** below requiring adherence to SBCFD Development Standard 6 through development of a stand-alone fuel management plan and coordination with SBCFD pertaining to the adequacy of HOA maintenance, management, and implementation of fuel management strategies would ensure that the potential structural fire and wildfire impacts related to occupation of future homes at the project site WUI would be mitigated (Class II impact).

Implementation of **MM FP-3** requires revisions to the design guidelines for consistency with the fuel management provisions of **MM FP-1** and **MM FP-2** and to accurately reflect the revised project FMZ 1: 0–30 feet and FMZ 2: 30–100 feet will ensure that the design of residences including development envelope boundaries, landscaping, fuel management plan, and future design guidelines amendments by the HOA remain consistent throughout the life of the project.

Image source: USDA FSA NAIP (flown June 2014), Brush Management Zone Data Source: RECON, CAD Lines Data Source: RRM Design Group



Project Boundary

Fire Management Zone 1 (FMZ-1): 0 to 30 feet

Fire Management Zone 2 (FMZ-2): 30 to 100 feet

Vegetation Communities

- Coyote Brush Scrub
- Spikerush Wetland
- Maritime Chaparral
- Ruderal/Iceplant
- Ruderal/Non-native Grassland

0 Feet 180

RECON

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FIGURE 4.12-2
Proposed Fuel Management Zones
and Vegetation Communities Impacts

Mitigation Measures

MM FP-1 Construction Fire Protective Measures

To reduce the risk of fires from project construction and off-site restoration activities, the following measures shall be implemented to reduce the potential for vegetative fires resulting from the use of construction equipment, welding, vehicles with catalytic converters, etc. These requirements include but are not limited to:

1. On-site supervisor(s) shall have a cell phone or other means of initiating a 911 response time in a timely manner in the event of a medical emergency and/or fire;
2. Personnel shall be briefed on the dangers and causes of wildfire and be able to respond accordingly should the need arise;
3. All equipment with the potential to work off-road shall be equipped with appropriate mufflers and have extinguishers mounted on each vehicle;
4. All dead and decadent vegetation immediately surrounding the facility should be removed, and soil disturbance should be kept at a minimum;
5. A water tender will be available on each construction site during the entire phase of construction;
6. A knowledgeable water tender operator shall be available on-site during all construction and remain on-site a minimum of 30 minutes after all construction has concluded for the day;
7. Hot work permit is required when necessary;
8. Smoking shall be prohibited or limited to a designated area and/or enclosed off-site area only; and
9. Any additional requirements deemed applicable by the SBCFD or County Planning and Development Department.

Plan Requirements and Timing: The contractor shall include the provisions for construction of fire protection on all grading and building plans. The name and number(s) of on-site supervisor(s) shall be provided to the SBCFD and County Planning and Development (P&D) prior to commencement of any construction or grading activities. All fuel ignition protection measures shall be implemented throughout construction.

Monitoring: The County P&D and Building and Safety Division shall ensure that measures are on plans prior to issuance of any land use permits and grading permits. Designated monitoring staff shall spot check for compliance during construction for each phase of development and individual lot development.

MM FP-2 Fuel Management Plan

To mitigate the potential impact associated with residential development within the designated HFHSZ, the Owner/Applicant shall prepare a stand-alone fuel management

plan that meets all SBCFD Development Standards. The fuel management plan shall describe all actions that will be taken to reduce wildfire~~life~~ risks to the structures and lots on the project site. The plan shall incorporate the fuel management strategies proposed in the OSMP to be implemented by the HOA, including:

1. Impacts associated with fuel management shall be confined to the specified fuel management zones.
2. Vegetation within proposed fuel management zones shall be thinned by removing vegetation in a mosaic pattern, which would result in reduced plant density or aerial coverage rather than completely clearing the vegetation. This shall be implemented to the maximum extent possible.
3. Fuel management thinning shall focus on the removal of non-native, diseased, dying, or dead vegetation and on faster growing species (e.g., coyote brush and deerweed) rather than slower growing species (e.g., manzanitas).
4. Removal of sensitive plant species and oak trees shall be avoided to the extent feasible. Prior to the onset of vegetation clearing, highly visible orange construction fencing shall be installed at a buffer/extent radius of 10 feet from vegetation to be retained, wherever feasible, or otherwise marked in the field to protect them from inadvertent harm during vegetation thinning activities.
5. All such maintenance activities shall be completed using hand tools only.
6. One week prior to any fuel management activities located within the open space lot that will be selectively pruned and thinned (FMZ-2), a qualified biologist approved by the County shall demarcate coastal buckwheat avoidance areas.
7. Avoidance areas shall be demarcated in the field with protective fencing installed at an appropriate distance that would not disturb the plant or the underlying leaf litter.
8. The intent of the avoidance areas is to document the location(s) and number(s) of any and all host plants for the federally endangered El Segundo blue butterfly so that fuel management activities can successfully avoid impacts to the life cycle of this species.
9. Should avoidance prove infeasible, relocation and/or off-site restoration to an appropriate receiver site approved by the County shall be undertaken at the appropriate ratios only after take authorization has been secured from the U.S. Fish and Wildlife Service through Section 10 of the federal Endagered Species Act.
10. Mitigation measures and ratios for ~~P~~permanent impacts to the El Segundo blue butterfly's host plant shall be contingent upon U.S. Fish and Wildlife Service (USFWS) guidance and the final Habitat Conservation Plan measures. ~~that are authorized by the USFWS shall be salvaged (including underlying litter and soils) and relocated to an approved location. Mitigation for host plants shall be provided at a minimum ratio of 2:1.~~

11. Protective fencing and signage (stating to keep out of the area) would be placed between the spikerush emergent wetland and the proposed development (specifically located at a lower elevation on the development side of the topographical divide that separates the wetland from the adjoining areas of the project site). Also depict the type and location of protective fencing on the project site to prevent trespass onto the adjacent Burton Mesa Ecological Reserve.

In addition, the plan shall, at a minimum, include the following additional requirements:

~~6.~~1. Copy of the site plan that indicates topographic reference lines;

~~7.~~2. Copy of the landscape plan and areas where fuel management activities are to occur;

~~8.~~3. Methods to confine fuel management activities to the specified fuel management zones.

~~9.~~4. Methods and timetables for implementing the proposed fuel management activities on the residential lots and open space lot;

~~10.~~5. Description of water supply, defensible space, fuel modification/vegetation management, emergency ingress and egress, access, special event parking, and resident and visitor safety; and

~~11.~~6. Maintenance schedule for the landscape/vegetation management plan.

Plan Requirements and Timing: A fuel management plan that at a minimum contains the above-listed components shall be submitted to the SBCFD and the County P&D for review and approval prior to ~~building permit~~ zoning clearance approval for~~of~~ building permits. SBCFD shall review the HOA's implementation plan, conditions, and strategies for the long-term maintenance of the fuel management zones for adequacy and consistency with applicable state and County requirements.

Monitoring: The SBCFD and P&D Permit Compliance shall inspect to verify that all landscaping and open space areas and landscaping maintenance and fuel management activities are in compliance with the plan. Inspections will occur once prior to issuance of occupancy permits and annually each year or on as-needed during each season to monitor landscape maintenance. The HOA shall ensure that the fuel management zones are properly managed and maintained in safe conditions and report to the County consistent with SBCFD requirements.

MM FP-3 Oak Hills Estate Design Guidelines Fuel Management Revisions

The Oak Hills Estate Design Guidelines shall be revised to ensure consistency with the revised project description, to ensure the construction safety and fuel management provisions of MM-FP-1 and MM-FP-2, ~~and~~ to accurately reflect the revised development envelope boundaries and contiguous 100-foot Fuel Management Zones (FMZ 1: 0–30 feet and FMZ 2: 30–100 feet), and to implement Fire Department and USFWS approved fuel management requirements adjacent to the on-site spikerush wetland. FMZ 1: 0–30 feet shall be located entirely within the parcel boundaries of parcels located adjacent to open

space, and FMZ 2: 30–100 shall be located immediately adjacent to FMZ 1and outside these parcel boundaries. Future HOA revisions to the Oak Hills Estates Design Guidelines shall be submitted to SBCFD and the County P&D for review to ensure fuel management remains consistent throughout the life of the project.

Plan Requirements and Timing: Revised Oak Hills Estates Design Guidelines shall be submitted to o the SBCFD and the County P&D for review and approval prior to approval of building permits. SBCFD and the County P&D shall review the Design Guidelines for consistency with the HOA's implementation plan, conditions, and strategies for the long-term maintenance of the fuel management zones for adequacy and consistency with applicable state and County requirements.

Monitoring: The SBCFD shall inspect to verify that the Revised Oak Hills Estates Design Guidelines depict FMZ 1: 0-30 feet entirely within parcel boundaries and that all building envelopes are located outside of FMZ 1. Depictions of landscaping and open space areas and landscaping maintenance and fuel management areas shall be in compliance with the Fuel Management Plan. Future HOA revisions to the Oak Hills Estates Design Guidelines shall be submitted to SBCFD and the County P&D for consistency with the Fuel Management Plan. The HOA shall ensure that the fuel management zones are properly managed and maintained in safe conditions and shall report to the County consistent with SBCFD requirements.

Significance after Mitigation

The implementation of **MM FP-1, ~~and~~ MM FP-2**, and **MM FP-3** would ensure that the project-related risk of construction fires and impacts to future homes on the project site would be minimized. In addition, the mitigation measures require that the project and design guidelines implement a fuel management plan that is compliant with County fire protection development standards and that is properly maintained during construction and throughout the life of the project by the HOA. Compliance and adherence to all applicable federal, state, and local laws and policies including the CBC and CFC would also minimize potential project impacts from wildfire risks. Impacts would be less than significant with mitigation (Class II impact).

Impact FP-2: Fire Safety

As discussed above in Section 4.12.1, Setting, the project site is currently undeveloped and is covered with several vegetation communities. The dominating vegetation community on the west half of the project site is maritime chaparral, with coyote brush scrub comprising the majority of the landscape on the east half. Native trees also occur within the project site, including coast live oak trees. The presence of native vegetation and trees has the potential to result structural damage, injuries, or loss of life due to wildland fires.

Public Resources Code Section 4291 requires a 100-foot-wide vegetation management area be maintained between structures and highly flammable vegetation to reduce wildfire risk and create a defensible space. The project includes two proposed fuel management zones (FMZs) that would result in a 100-foot-wide fuel management area, and the fuel

management zones would be located on the proposed residential lots and on the project site open space area. The proposed fuel management zone would comply with Public Resources Code Section 4291 and SBCFD standards.

~~As discussed in t~~The Oak Hills Estate OSMP (see Appendix B) includes requirements for FMZ-1; however, it refers to FMZ-1 ~~the first 30-foot-wide defensible space is~~ as a "Low Fuel Zone" ~~(OSMP Zone 1)~~. The OSMP states that FMZ-1 would ~~bordering the outer edge of proposed Lots 1 through 14 and Lots 22 through 29, separating the residences from the on-site open space lot where fuel management activities, such as selective pruning and thinning of dead vegetation, would occur~~ be maintained in accordance with the General Guidelines for Creating Defensible Space by CAL FIRE (2006) and SBCFD Development Standard 6: Defensible Space Standards while working to protect the site's sensitive resources within the project site's open space areas. ~~A 70-foot-wide area of Defensible Space (OSMP Zone 2) would extend from the Low Fuel Zone, resulting in the creation of a 100-foot-wide vegetation management zone that would be adjacent to the future project site structures (illustrated in Figure 2-9 and Figure 4.12-2). The HOA would be responsible for managing the OSMP Zone 2 in accordance with Public Resources Code Section 4291.~~

~~As shown in Figure 4.12-2, the majority of vegetation where the residential lots are proposed would be removed. Existing vegetation adjacent to residences that is not removed would be extensively managed and maintained in OSMP Zone 1. OSMP Zone 2 would include thinned vegetation and appropriate spacing between individual plants.~~ The OSMP indicates that the vegetation within FMZ-1~~the Low Fuel Zone~~ from 0 to 30 feet of the foundation of structures would receive periodic maintenance to reduce the current fuel load ~~which~~and would be entirely within the residential lot lines. The proposed FMZ-1 area ~~and~~ would not overlap the project site open space area. ~~and that much of the lots existing native vegetation that is flammable be removed and replaced with appropriate irrigated landscape. No woody, flammable vegetation would be allowed to exist in OSMP Zone 1 and would be limited to groundcovers, green lawns, and a limited number of ornamental plants.~~ The OSMP also includes proposed fuel management strategies ~~as~~ described in **MM FP-2.** The proposed fuel management zones are shown in Figure 4.12-2 above.

In addition, as described under Impact FP-1, the design guidelines (see Appendix C-1) will be revised consistent with **MM FP-3 to** include site design specifications to increase fire safety. The design guidelines' fire safety measures related to the management and maintenance of vegetation and landscaping include (paraphrased):

- All homesites should be planted with native and Mediterranean-adapted low-water and low-vegetative-fuel plants.
- For fire safety, it is required that much of the homesite's natural vegetation be removed and replaced by appropriate irrigated landscape.
- The design guidelines' fire safety and fire safe landscapes standards apply to all lot owners. Additional specific standards that apply only to Lots 1-13, 22-25, and 27-29 are also specified.

- Areas outside the homesite boundaries are to be maintained by the HOA as part of a fire safe ecological management program. No native plants should be removed by homesite owners outside the homesite.

The Oak Hills Estate Design Guidelines ~~design guidelines~~ also include requirements for FMZ-1~~the Low Fuel Zone (OSMP Zone 1)~~; however, the design guidelines currently refer to the area as the "Fire Safety Zone 3." The design guidelines shall be revised consistent with **MM FP-3** to specify that the design, installation, and maintenance of landscaping must adhere to the principles of defensible space set forth by the SBCFD Standard 6, Defensible Space Standards, and clarify that FMZ-1: 0–30 feet ~~The 30-foot Fire Safety Zone 3, which~~ must consist of low vegetative fuel~~, spans 15 feet of the rear yards within the lot boundaries and 15 feet of the adjacent open space outside of the lot boundaries.~~ The homeowner would be responsible for the design and care of FMZ-1: 0–30 feet and subject to review by the HOA~~the first 15 feet of the Fire Safety Zone 3 in the rear yard~~. The Landscape Zone Plan and Plant List in the design guidelines (see Appendix C-1) shall be revised to include specifications for landscaping in this area consistent with **MM-FP-3**. ~~The HOA would be responsible for the remaining 15 feet of the Fire Safety Zone 3 located between the edge of the rear yard and the adjoining natural wildland around the residence.~~

Within FMZ-1: 0–30 feet~~the Fire Safety Zone 3 (or OSMP Zone 1)~~, irrigation is required for all vegetation, and much of the homesite's flammable natural vegetation must be removed and replaced by the appropriate irrigated landscape. Additionally, lawns or low water use lawn substitutes and non-vegetative ground covers such as pavers or crushed rock are allowed in this zone. The design guidelines also state that residents ~~and the HOA~~ must place plants so that foliage and limb growth are separated from the structure by 10 feet, and suggest using highly fire resistant plants such as agave, aloes and other succulents as part of the landscape. The plant materials called for in the design guidelines were chosen for their particular adaptability to the Burton Mesa weather and soils for their resistance to pests and diseases. The proposed HOA managed landscape/habitat plan~~ting zones of~~ for the residential lots adjoining the open space ~~as described in the design guidelines,~~ are illustrated in Figure 2-8.~~4.12-3.~~ ~~"Fire Safety Zone 3" shown as the space spanning an initial 15 feet within the lot to be managed by the property owner and the remaining 15 feet within adjacent open space to be managed by the HOA, for a total of 30 feet of managed defensible space.~~

The OSMP and design guidelines prepared for the project include strategies intended to minimize fire risk and ensure appropriate fuel management. However, landscaping would still remain a high fire hazard fuel source and the project is located close to highly flammable vegetation in the adjacent open space. In accordance with **MM FP-2** and **MM FP-3**, a comprehensive Fuel Management Plan and revised design guidelines must be completed and approved by the SBCFD and County P&D prior to issuance of ~~the~~ building permits. The plan would include written HOA implementation and maintenance requirements for the proposed project consistent with Public Resources Code 4291 and other applicable regulatory requirements.

Similar to the project site, the proposed off-site mitigation area for maritime chaparral habitat and oak restoration is located within a HFHSZ. However, the off-site mitigation (i.e., the creation of new native habitat) would occur outside of any 100-foot-wide fire management zones (as required by **MM BIO-2.2**) established for adjacent development, and would also be located away from adjacent roadways. Therefore, proposed restoration activities would not substantially increase wildfire risk near residences or roadways. Initial restoration actions (i.e., planting native vegetation) are likely to occur over a period of one year and require a crew of six to eight persons using a small fleet of vehicles (autos and trucks) to transport staff, materials, and equipment to the site. No heavy equipment other than vehicles for transport would be necessary as all habitat restoration and maintenance activities would be conducted using hand tools. Thereafter, the activity on the restoration site would be reduced and limited to routine maintenance by a smaller crew of one to three persons using transport vehicles and hand tools. The off-site mitigation area does not propose new buildings or residences to be built on the parcel that would expose people or structures to wildland fire risks or safety hazards. Considering the habitat restoration activities would use no heavy equipment (other than transport vehicles), significant impacts related to fire safety and fire hazards are not be anticipated. Nevertheless, the off-site parcel's designation as HFHSZ can pose a risk to staff during implementation, monitoring, and maintenance. Compliance with measures in **MM FP-1** would ensure impacts associated with wildland fire risks in the off-site mitigation area are less than significant with mitigation.

As described in the above discussion, with implementation of mitigation measures, both the project and off-site mitigation would not expose people or structures to a significant risk of loss, injury or death involving wildland fires. Potential impacts related to fire safety would be significant but mitigated with implementation of **MM FP-1**, ~~and~~ **MM FP-2, and MM FP-3** (Class II impact).

Mitigation Measures

Implementation of **MM FP-1**, **MM FP-2**, and **MM FP-~~2~~ 3** would ensure that preparation of a standalone fuel management plan would minimize fire safety risks resulting from development and long-term occupation of the project's residences in the HFHSZ.

Significance after Mitigation

With the implementation of **MM FP-2**, the project would comply with SBCFD Development Standard 6, Defensible Space, which requires the preparation, approval, and long-term implementation of a fuel management plan. Impacts would be less than significant with mitigation (Class II impact).

Impact FP-3: Emergency Access and Evacuation

As discussed in Chapter 4.11, Transportation and Circulation, the level of service (LOS) on adjoining collector roadways and at intersections would remain at LOS A and LOS B after construction of the proposed project. Buildout of the proposed project with 29 lots is anticipated to add approximately 75 residents to the area. Considering the absence of

existing or project-related significant traffic impacts in the project area, and minor population increase from the development of 29 lots, the project is not expected to result in significant emergency access and egress impacts. Thus, project impacts related to emergency access and evacuation would be less than significant (Class III impact).

Mitigation Measures

Impacts to emergency access and evacuation would be less than significant, therefore, no mitigation measures are required.

Significance after Mitigation

Impacts are less than significant (Class III impact).

Impact FP-4: Fire Protection Services and Facilities

County Fire Station 51 serves the Vandenberg Village area. The travel distance between Fire Station 51 and the project site is 3 miles, with a response time of approximately 5 to 6 minutes (pers. comm. Michael Moore, SBCFD Engineer, June 2016). Stations are strategically placed to have crews on scene as quickly as possible. The population of the unincorporated Vandenberg Village area is approximately 6,497 (U.S. Census Bureau 2010). The SBCFD staffing goals and facility plans are based upon population. Generally, the SBCFD seeks to maintain a service ratio of one firefighter per 2,000 people, with a maximum service ratio of one firefighter per 4,000 people. The SBCFD also strives to maintain a 5-minute response time within the Urban Area. Currently in the project area, there are two firefighters on duty at all times at Station 51 to provide service to these residents. With a population of 6,497 in the Vandenberg Village area, the current (year 2016) firefighter-to-resident ratio is approximately 1:3,250, which would not exceed the fire protection service ratio goal of one firefighter per 4,000 residents.

Buildout of the project site would result in additional residents within the service area for Fire Station 51. The increase in population anticipated as a result of the project would somewhat increase the existing on-duty firefighter per 4,000 residents service ratio; however, the estimated increase of 75 people (see Section 6.3.1, Population Growth) would not substantially change the existing service ratios. Future development on the project site would be required to pay SBCFD impact mitigation fees, which fees are applied toward the construction of new fire stations and acquisition of new equipment and apparatus when necessary. With the payment of the required County Fire Department Impact Mitigation Fees in accordance with Chapter 15 of the Santa Barbara County Code, project impacts to fire protection services and facilities would be less than significant (Class III impact).

Mitigation Measures

Impacts would be less than significant. No mitigation measures would be required.

Significance after Mitigation

With the payment of the required County Fire Department Impact Mitigation Fees, the potential environmental impacts to fire protection services would be less than significant. (Class III impact).

4.12.2.3 Cumulative Impacts

Continued urban development along urban interfaces with densely vegetated open space in northern Santa Barbara County could cumulatively increase the risk for exposure to wildland fires, and would increase the demand on fire protection services. The Village Country Club Development Plan was approved in 2008 as a 14-unit, two-story detached single-family residential project located southeast directly across Oak Hill Drive from the project site and has not been constructed yet. All other planned, pending, approved, or under construction projects in the Vandenberg Village and Lompoc Valley region are listed in Table 3-1, Cumulative Projects List, including buildout of the Providence Landing project at the southern end of Vandenberg Village and the Burton Ranch project in the City of Lompoc. The off-site mitigation activity parcel on APN 097-371-067 would be required to comply with **MM BIO-2.2** to be located outside of fire management zones associated with existing and potential future development on a parcel that is owned by the Vandenberg Village Community Services District.

SBCFD provides fire prevention, fire suppression, and life safety services to unincorporated Santa Barbara County, and has 16 stations throughout the County. As discussed in Impact FP-4, service levels in the Vandenberg Village area currently meet SBCFD standards. The Vandenberg Village area's firefighter-to-resident ratio is approximately 1:3,250, which is under the SBCFD's 1:4,000 standard. The project's 75 residents would not substantially impact service times as it would not cause a substantial change in service ratios and would be required to pay an SBCFD impact mitigation fees. The off-site restoration occurring on APN 097-371-067 would not result in development that would affect existing and future service ratios but would be required to comply with the fire safety requirements in **MM-FP-1** during implementation. The increase in population and development associated with the proposed project in conjunction with the planned, pending, approved, and under construction projects in the area surrounding the project site would also not significantly impact the service level. Additional residential development attributable to the proposed project would incrementally reduce the service ratios, as would other development within the SBCFD service area. However, each of the identified cumulative projects would also be required to pay SBCFD impact mitigation fees, which would be applied to the construction of new fire stations and acquisition of new equipment and apparatus when they become necessary. New fire protection facilities would be subject to CEQA environmental analysis with identified mitigation measures if such additional facilities are determined to be necessary.

Impacts associated with individual development proposals will be addressed on a case-by-case basis as needed, including the application of development standards or mitigation measures for development in HFHSZs to reduce fire-related risks. Each individual home

constructed in the Oak Hills Estate project would be required to meet all County Fire Department requirements and conditions and maintain defensible space during occupancy. Through the implementation of existing development standards and mitigation measures **MM FP-1**, **MM FP-2**, and **MM FP-~~2~~ 3** and payment of SBCFD impact mitigation fees, the proposed project's contribution to cumulative wildland fire hazards would not be cumulatively considerable. The proposed project's off-site mitigation plan would also be required to comply with **MM FP-1** to reduce fire hazard risks during implementation and the potential off-site mitigation plan would not be cumulatively considerable. Therefore, cumulative fire protection or wildland fire impacts would be less than significant (Class III impact).

Chapter 5.0
Policy Consistency

This chapter provides an analysis of the project's consistency with applicable policies of the County of Santa Barbara Comprehensive Plan. With respect to each policy, the project would be "consistent" if the project would achieve the goal(s) of the policy and determined as such by the County decision makers; "potentially consistent" if the project is likely to achieve the goal(s) of the policy; or "potentially inconsistent" if the project would conflict with the policy. A final determination of consistency with plans and policies will be made by County decision makers. Refer also to Section 4.2, Air Quality, for an analysis of the project's consistency with the adopted Clean Air Plan, and Section 4.6, Greenhouse Gas, for a discussion of the proposed project's consistency with applicable Energy and Climate Action Plan greenhouse gas emission reduction strategies. County decision makers will ultimately make the policy consistency determinations for the proposed project.

5.1 Santa Barbara County Comprehensive Plan

The County's Comprehensive Plan (Comprehensive Plan) is a long-range plan that serves as a guide for the physical development of Santa Barbara County. The Comprehensive Plan is comprised of several topical parts or elements, such as the Land Use Element, Noise Element, Circulation Element, Housing Element, and others. It includes goals and policies that provide a general framework for County-wide development and for the Vandenberg Village Urban Area. The plan also includes Lompoc Area Guidelines, which aim to further implement the goals of the Comprehensive Plan for the Lompoc area pertaining to development in the Urban Area of the Vandenberg Village–Mesa Oaks–Lompoc Wye area. Table 5-1 shows the proposed project's consistency or inconsistency with the Comprehensive Plan goals, policies, and guidelines that are applicable to the proposed project.

Table 5-1 Proposed Project's Consistency with Santa Barbara County Comprehensive Plan Goals, Policies, and Guidelines	
Goals, Policies, Actions, and Development Standards	Consistency Discussion
Land Use Element – Land Use Development Policies	
Policy 2. The densities specified in the Land Use Plan are maximums and may be reduced if it is determined that such reduction is warranted by conditions specifically applicable to a site, such as topography, geologic or flood hazards, habitat areas, or steep slopes. However, density may be increased under programs of the Housing Element.	**Potentially consistent.** The proposed project would result in the construction of 29 single-family residences on a 16.88-acre site. The project complies with the County Comprehensive Plan's land use designation for the site (RES-12.3), which could allow up to 207 units on the project site. The project does not propose to develop the site to the maximum density allowed by the site's land use designation, which will minimize the potential for impacts to the on-site sensitive natural habitat and adjacent Burton Mesa Ecological Reserve. Therefore, the project is potentially consistent with this policy.
Policy 3. No urban development shall be permitted beyond boundaries of land designated for urban uses except in neighborhoods in rural areas.	**Potentially consistent.** The project site is located at the northernmost extent of the Vandenberg Village designated Urban Area. The proposed 29 single-family homes are consistent with land uses allowed in designated Urban Areas. Therefore, the project is potentially consistent with this policy.
Policy 4. Prior to issuance of a development permit, the County shall make the finding, based on information provided by environmental documents, staff analysis, and the applicant, that adequate public or private services and resources (i.e., water, sewer, roads, etc.) are available to serve the proposed development. The applicant shall assume full responsibility for costs incurred in service extensions or improvements that are required as a result of the proposed project. Lack of available public or private services or resources shall be grounds for denial of the project or reduction in the density otherwise indicated in the land use plan. **Policy 5.** Within designated urban areas, new development other than that for agricultural purposes shall be serviced by the appropriate public sewer and water district or an existing mutual water company if such service is available.	**Potentially consistent.** **Water.** The project has been reviewed by the Vandenberg Village Community Services District (VVSCD), which has provided a Will Serve Letter for up to 13.6 acre-feet per year (AFY) of water for the project. The County's threshold of significance for the Lompoc Groundwater Basin (the source of VVCSD water) withdrawal is 12 AFY. The proposed project is estimated to have a water demand of 11.3~~11.6~~ AFY. Therefore, the project's water demand would be below the Lompoc Groundwater Basin threshold and 2.0 AFY below the VVCSD ~~Will~~ Intent to Serve letter allocation. In addition, mitigation measures MM WQ-1 and MM WQ-2 require the project to minimize water consumption during a declared state, County, and VVCSD drought emergency. **Sewer.** VVCSD has a current wastewater service capacity to serve an additional 2,600 units (County of Santa Barbara 2015a). The project would require service for 29 units and is required to obtain a Can and Will Serve letter from VVCSD prior to issuance of building permits. Therefore, there is adequate treatment capacity to serve the project.

Table 5-1 Proposed Project's Consistency with Santa Barbara County Comprehensive Plan Goals, Policies, and Guidelines	
Goals, Policies, Actions, and Development Standards	Consistency Discussion
	Roads. The project would access the existing County road system via Oak Hill Drive. Traffic generated by residences developed on the project site would not result in significant impacts to the operation of any roads or intersections in the project area. As such, the existing roads in the project vicinity are adequate to serve the proposed project. Therefore, adequate services would be available to serve future development on the project site and the project is potentially consistent with these policies.
Land Use Element – Hillside and Watershed Protection Policies	
Policy 1. Plans for development shall minimize cut and fill operations. Plans requiring excessive cutting and filling may be denied if it is determined that the development could be carried out with less alteration of the natural terrain.	**Potentially consistent.** Grading volumes that would be required for the construction of residences on the project site have not been determined, however, for analysis purposes it was estimated that the ~~The proposed~~ project would result in approximately 23,100 cubic yards of cut and approximately 20,100 cubic yards of fill. Based on the size of the proposed lots and typical grading quantities for similar residential projects, the future grading for the individual residential lots has been assumed to average approximately 600 square feet of cut and fill per lot, The project has limited cut-and-fill operations to the minimum amount necessary and preserves existing on-site native vegetation and natural terrain to the extent feasible. In addition, future construction on the proposed lots would be subject to subsequent design, building, and grading review by the County. Therefore, the project is potentially consistent with this policy.
Policy 2. All development shall be designed to fit the site topography, soils, geology, hydrology, and any other existing conditions and be oriented so that grading and other site preparation is kept to an absolute minimum. Natural features, landforms, and native vegetation, such as trees, shall be preserved to the maximum extent feasible. Areas of the site which are not suited to development because of known soil, geologic, flood, erosion or other hazards shall remain in open space.	**Potentially consistent.** Grading on the project site has been limited to the extent necessary to construct residences on the proposed lots, and an ephemeral drainage located on the central portion of the project site would be retained. The project would remove up to 6.92~~7.38~~ acres of moderate-quality maritime chaparral habitat and result in impacts to between 74 and 127~~131~~ coast live oaks. However, areas with oak trees and maritime chaparral would be retained on the project site, primarily in open space areas to be retained adjacent to the Burton Mesa Chaparral Reserve. Proposed mitigation measures would require the replacement of removed sensitive

Table 5-1 Proposed Project's Consistency with Santa Barbara County Comprehensive Plan Goals, Policies, and Guidelines	
Goals, Policies, Actions, and Development Standards	Consistency Discussion
	habitat and oak trees at specified ratios in an on-site open space ~~easement~~ area and at an off-site location. The project would preserve the small (0.02-acre) wetland located on the project site, but does have the potential to result in short- and long-term impacts on the wetland through sedimentation and water quality degradation (0.01 acre is located in FMZ-2). These potential impacts would be reduced to a less than significant level with the implementation of regulatory requirements, such as the preparation and implementation of an approved Storm Water Pollution Prevention Plan (SWPPP) and Storm Water Management Plan (SWMP). In addition, MM BIO-2.1 and MM FP-2.1 address avoidance of this habitat area through the implementation of fences and signs. The project site is not within a 100- or 500-year flood zone, and would not result in significant upstream or downstream flooding-related impacts. Although the project would result in the removal of native vegetation, it would result in the development of fewer homes than allowed by the RES-12.3 land use designation (e.g., 29 residences proposed versus the 207 residences potentially allowed). Therefore, the project has been designed to fit the existing site conditions and is potentially consistent with this policy.
Policy 3. For necessary grading operations on hillsides, the smallest practical area of land shall be exposed at any one time during development, and the length of exposure shall be kept to the shortest practicable amount of time. The clearing of land should be avoided during the winter rainy season and all measures for removing sediments and stabilizing slopes should be in place before the beginning of the rainy season.	**Potentially consistent.** The project would be required to implement MM GEO-1 and MM GEO-2, which require the implementation of sound engineering practices to stabilize soils on-site. This would include the preparation and implementation of an approved SWPPP, SWMP, or Erosion and Sediment Control Plan (ESCP) that incorporate Best Management Practices (BMPs) designed to stabilize the site, protect natural water sources, prevent erosion, convey storm water runoff to existing drainage systems, and keep contaminants and sediments on-site. These requirements must be in place before the beginning of the rainy season. Additionally, grading would be conducted only to the extent necessary, and on-site open space and habitat areas would be preserved. Therefore, the project is potentially consistent with this policy.

Table 5-1 Proposed Project's Consistency with Santa Barbara County Comprehensive Plan Goals, Policies, and Guidelines	
Goals, Policies, Actions, and Development Standards	Consistency Discussion
Policy 4. Sediment basins (including debris basins, desilting basins, or silt traps) shall be installed on the project site in conjunction with the initial grading operations and maintained through the development process to remove sediment from runoff waters. All sediment shall be retained on-site unless removed to an appropriate dumping location.	**Potentially consistent.** The project would be required to implement MM GEO-2, which requires the implementation of sound engineering practices to stabilize soils on-site during construction. This would include the preparation and implementation of an approved SWPPP, SWMP, or ESCP that incorporate BMPs designed to stabilize the site, protect natural water sources, prevent erosion, convey storm water runoff to existing drainage systems, and keep contaminants and sediments on-site. BMPs to control the discharge of sediment off the project site could include the use of sedimentation basins. Basins or equivalent devices/measures would be required to appropriately dispose of collected sediment at an off-site location. Therefore, the project is potentially consistent with this policy.
Policy 5. Temporary vegetation, seeding, mulching, or other suitable stabilization methods shall be used to protect soils subject to erosion that have been disturbed during grading or development. All cut and fill slopes shall be stabilized as rapidly as possible with planting of native grasses and shrubs, appropriate non-native plants, or with acceptable landscaping practices.	**Potentially consistent.** Erosion and sediment control BMPs would be required at the project site in accordance with MM GEO-2 and other applicable regulations (e.g., those requiring a SWPPP, SWMP, and/or ESCP). Therefore, project site soils subject to erosion would be appropriately protected during grading and development. Additionally, all cut-and-fill slopes would be stabilized as soon as possible following grading and construction with implementation of the project's landscape design plan as approved by the Board of Architectural Review per MM AES-1. Therefore, the project is potentially consistent with this policy.
Policy 6. Provisions shall be made to conduct surface water to storm drains or suitable watercourses to prevent erosion. Drainage devices shall be designed to accommodate increased runoff resulting from modified soil and surface conditions as a result of development. Water runoff shall be retained on-site whenever possible to facilitate groundwater recharge.	**Potentially consistent.** Project design features include the following Low-impact Development (LID) measures: vegetated swales and buffers, channeling runoff into roadside swales paralleling the road, permeable pavement where appropriate, and impervious surface reduction. These design features serve to slow runoff velocity and/or ensure that runoff volume is reduced by allowing for percolation into the ground. To control water that is not absorbed by pervious surfaces, the project also proposes three on-site detention basins and a system of vegetated drainage swales (bio-swales). Collected runoff would be discharged from the project site in a manner similar to existing conditions, which promotes groundwater recharge and reduces the

Table 5-1 Proposed Project's Consistency with Santa Barbara County Comprehensive Plan Goals, Policies, and Guidelines	
Goals, Policies, Actions, and Development Standards	Consistency Discussion
	potential for downstream erosion-related impacts. Therefore, the project is potentially consistent with this policy.
Policy 7. Degradation of the water quality of groundwater basins, nearby streams, or wetlands shall not result from development of the site. Pollutants, such as chemicals, fuels, lubricants, raw sewage, and other harmful waste, shall not be discharged into or alongside coastal streams or wetlands either during or after construction.	**Potentially consistent.** The project would be required to implement MM GEO-1 and MM GEO-2, which require the implementation of sound engineering practices to stabilize soils on-site. This would include the preparation and implementation of an approved SWPPP, SWMP, or ESCP that incorporate BMPs designed to stabilize the site, protect natural water sources, prevent erosion, convey storm water runoff to existing drainage systems, and keep contaminants and sediments on-site. In addition proposed wastewater/sewer pipelines would connect the future on-site residences to the existing infrastructure located in Oak Hill Drive. The proposed residences would not be a substantial source of pollutant discharge.. Therefore, the project is potentially consistent with this policy.
Land Use Element – Historical and Archaeological Sites Policies	
Policy 2. When developments are proposed for parcels where archaeological or other cultural sites are located, project design shall be required which avoids impacts to such cultural sites if possible.	**Potentially consistent.** Field investigations conducted on the project site did not identify any prehistoric or historic cultural remains, and the potential for unknown archaeological deposits is unlikely. Implementation of MM CR-1 and MM CR-2, which include procedures to follow in the event that potentially significant cultural resources are unearthed during construction, ensure that discovered cultural resources are appropriately recovered and evaluated in accordance with County Cultural Resource Guidelines. Therefore, the project is potentially consistent with this policy.
Policy 5. Native Americans shall be consulted when development proposals are submitted which impact significant archaeological or cultural sites.	**Potentially consistent.** An Extended Phase I Archaeological Investigation (Dudek 2016a) was conducted on the project site. The Extended Phase I verified the conclusions in the project archaeological report (Dudek 2015) that no tribal cultural resources or archaeological sites were discovered during site surveys. Appropriate tribal representatives were consulted, and no significant archaeological or cultural sites were identified on the project site; therefore, the project is potentially consistent with this policy.

Table 5-1 Proposed Project's Consistency with Santa Barbara County Comprehensive Plan Goals, Policies, and Guidelines	
Goals, Policies, Actions, and Development Standards	Consistency Discussion
Land Use Element – Parks/Recreation Policies	
Policy 1. Bikeways shall be provided where appropriate for recreational and commuting use.	**Potentially consistent**. The project does not propose to provide bikeways along Oak Hill Drive or adjacent roadways. Due to low traffic volumes on Oak Hill Drive, the installation of a bike lane is not warranted at this time for commuting or recreational use. Therefore, the project is potentially consistent with this policy.
Policy 3. Future development of parks should emphasize meeting the needs of local residents.	**Potentially consistent.** The project proponent would be required to pay County Parks (Quimby) fees prior to map recordation consistent with County requirements. ~~Additionally, the project includes a proposed private trail to serve future project residents.~~ Hiking opportunities are also available to future project residents at the Burton Mesa Ecological Reserve through a trail entrance adjacent to the project site. Therefore, the project is potentially consistent with this policy.
Policy 4. Opportunities for hiking and equestrian trails should be preserved, improved, and expanded wherever compatible with surrounding uses.	**Potentially consistent.** The project is located adjacent to the Burton Mesa Ecological Reserve, which provides hiking opportunities. A public trail entrance to the Reserve is located adjacent to the project site. No changes to the public trail or the entrance are proposed as a part of the project. ~~The project includes a private trail that would be provided for residents of the project and located within the open space area within the western and northern perimeter of the project site. The trail would not provide access to the Burton Mesa Ecological Reserve.~~ Therefore, the project is potentially consistent with this policy.
Land Use Element – Visual Resource Policies	
Policy 1. All commercial, industrial, and planned developments shall be required to submit a landscaping plan to the County for approval.	**Potentially consistent.** Mitigation measure MM AES-1 requires submittal of a landscape plan to be included with the construction document package for all project phases and approved by the County Board of Architectural Review. Therefore, the project is potentially consistent with this policy.

Table 5-1 Proposed Project's Consistency with Santa Barbara County Comprehensive Plan Goals, Policies, and Guidelines	
Goals, Policies, Actions, and Development Standards	Consistency Discussion
Policy 3. In areas designated as urban on the land use plan maps and in designated rural neighborhoods, new structures shall be in conformance with the scale and character of the existing community. Clustered development, varied circulation patterns, and diverse housing types shall be encouraged.	**Potentially consistent.** Home design plans are not available for review at this time, as residences on the proposed lots would be subsequently developed by the future lot owners. The project includes the proposed Oak Hills Estate Design Guidelines, which includes architectural and landscape design recommendations to direct and enhance the visual aesthetics of the neighborhood, create a distinct rural estate character, and allow for diversity in individual homes. The Guidelines address Site Design, Building Design, and Landscape Design s. The architectural design proposed is Mediterranean style, which is consistent with the character of the surrounding development. Additionally, at 29 units, the scale of the proposed development would be consistent with the scale of the surrounding land uses. Therefore, the project is potentially consistent with this policy.
Policy 4. Signs shall be of size, location, and appearance so as not to detract from scenic areas or views from public roads and other viewing points.	**Potentially consistent.** The proposed project does not include any signs of which size, location, or appearance would detract from scenic areas or views from public roads and viewpoints. Therefore, the project is potentially consistent with this policy.
Policy 5. Utilities, including television, shall be placed underground in new developments in accordance with the rules and regulations of the California Public Utilities Commission, except where cost of undergrounding would be so high as to deny service.	**Potentially consistent.** All utilities would be installed underground in accordance with the California Public Utilities Commission regulations and standard condition of the County approval. Therefore, the project is potentially consistent with this policy.
Housing Element	
Housing Element Program 1.2: Inclusionary Housing Ordinance (Ordinance 4855)	**Potentially consistent.** The proposed project would include payment of the County's affordable housing in-lieu fee rather than providing affordable units on-site. Therefore, the project is potentially consistent with the Inclusionary Housing Ordinance.
Noise Element	
Policy 1. In the planning of land use, 65 dB Day-Night Average Sound Level should be regarded as the maximum exterior noise exposure compatible with noise-sensitive uses unless noise mitigation features are included in project designs.	**Potentially consistent.** Noise sources in the vicinity of the project site include Oak Hill Drive, a residential street with a speed limit of 25 miles per hour. As indicated by the Circulation Element of the Comprehensive Plan, the policy traffic capacity for Oak Hill Drive is 5,000 Average Daily Trips. Thus, traffic noise levels would attenuate to 58 decibel (dB) day–night

Table 5-1 Proposed Project's Consistency with Santa Barbara County Comprehensive Plan Goals, Policies, and Guidelines	
Goals, Policies, Actions, and Development Standards	Consistency Discussion
	average noise level (L_{dn}) or below within the right-of-way of Oak Hill Drive. Therefore, the project is potentially consistent with this policy.
Circulation Element	
Policy A. The roadway classifications, intersection levels of service, and capacity levels adopted in this Element shall apply to all roadways and intersections within the unincorporated area of the County, with the exception of those roadways and intersections located within an area included in an adopted community area plan. Roadway classifications, intersection levels of service, and capacity levels adopted as part of any community or area plan subsequent to the adoption of this Element shall supersede any standards included as part of this Element.	**Potentially consistent.** The Circulation Element states that a project is consistent if it does not contribute trips to a roadway that exceeds capacity and it does not exceed defined volume/capacity ratios for intersections. With the addition of traffic generated by future residences on the project site, the study area roadways would operate in the Level of Service A or B range under AM and PM cumulative and cumulative plus project conditions. Additionally, the project would not result in an increase in volume/capacity ratio greater than 0.20 for an intersection operating at Level of Service A or greater than 0.15 for an intersection operating at Level of Service B (which are the Circulation Element standards). Therefore, the project would not exceed the Circulation Element thresholds and is potentially consistent with this policy.
Seismic Safety & Safety Element	
Fire Policy 2. The County shall use California Department of Forestry and Fire Protection-Fire Hazard Severity Zones to determine appropriate construction materials for new buildings in State Responsibility Areas (SRA), local agency Very High Fire Hazard Severity Zones and designated Wildland-Urban Interface areas pursuant to the California Code of Regulations Title 24, Part 2, California Building Code	**Potentially consistent.** The project site is located within a High Fire Hazard Severity Zone (HFHSZ). All residences that would be constructed on the project site would be required to be constructed with the appropriate materials as specified by building code and other regulatory requirements. Therefore, the project is potentially consistent with this policy.
Fire Policy 4. To reduce the potential for fire damage, the County shall continue to require consistency with County Fire Department Development Standards pursuant to the California Fire Code, Public Resource Code §4291, and Government Code §51175-51188.	**Potentially consistent**. Future residential development on the project site would be required to meet County Fire Department Development Standards. Mitigation measure MM FP-1 requires the implementation of Construction Fire Protective Measures, and MM FP-2 requires the implementation of an approved Fuel Management Plan that would result in the creation and maintenance of a 100-foot-wide fuel management zone that complies with the requirements of Public Resource Code (PRC) §4291. Therefore, the project is potentially consistent with this policy.
Fire Policy 5. The County shall continue to Require defensible space clearance around all structures in unincorporated Local Responsibility Areas pursuant to Public	**Potentially consistent**. The proposed project includes the establishment and maintenance of 100-foot-wide defensible space fuel management areas consistent with the requirements of PRC

Table 5-1 Proposed Project's Consistency with Santa Barbara County Comprehensive Plan Goals, Policies, and Guidelines	
Goals, Policies, Actions, and Development Standards	Consistency Discussion
Resource Code §4291, and Government Code §51175-51188.	§4291. Therefore, the project is consistent with this policy.
Flood Policy 1. The County shall avoid or minimize risks of flooding to development through the development review process pursuant to Government Code §65302(3)(g)(2)(i).	**Potentially consistent**. The proposed project would include the use of vegetated swales, drainage basins and permeable pavement that would reduce risk of flooding at and downstream from the project site. All plans would be required to be reviewed and approved by the County. Therefore, the project is potentially consistent with this policy.
Flood Policy 2. The County shall evaluate whether development should be located in flood hazard zones, and identify construction methods or other methods to minimize damage if development is located in flood hazard zones pursuant to Government Code §65302(3)(g)(2)(ii).	**Potentially consistent**. The proposed project is not within a 100-year or 500-year flood zone. Therefore, the project is potentially consistent with this policy.
Conservation Element	
PROTECTION OF WATER RESOURCES Developments in areas tributary to major surface water supplies or overlying or tributary to groundwater should be compatible with the protection of these water resources. Accordingly, lands in the County were categorized with respect to their relationship to such water sources.	**Potentially consistent**. The proposed project would implement MM WQ-1 through MM WQ-3, which avoid or lessen the project's potential construction and operational impacts on water supply and quality. Additionally, adequate water supply for the proposed project is available from the VVCSD's current sources. Therefore, the project is potentially consistent with this policy.
Lompoc Area Guidelines	
Guideline A-1. Development adjacent to the Burton Mesa Preserve and other chaparral areas adjacent to the Preserve should include prevention measures such as Class A roofs, interior sprinklers, adequate access to the urban/rural interface, and structural setbacks (minimum 100 feet) from these high fire hazard areas. Setbacks for fire protection shall occur on private property. It is preferred to locate the setback on a common open space lot in order to avoid conflicts with owners of future individual lots. Access for Fire Department equipment may be provided within this setback and landscaping within this area should not impede the use of such equipment. Paved roads and trails may be allowed within the setback. Fencing within the structural setback should be comprised of fire resistant material to minimize fire hazards.	**Potentially consistent.** The proposed project is within a high fire hazard area and would be required by building code to construct the residential units with Class A roofs and use fire-resistant building materials. Additionally, structures would be equipped with sprinklers, and spark arrestors would be required for all wood-burning fireplaces. A defensible space of 100 feet around future residences would be created and maintained as required by PRC Section 4291 and this policy. Therefore, the project is potentially consistent with this policy.
Guideline A-2. Fuel Modification Zones that call for selective thinning and removal of down and dead materials should not be located through riparian or wetland areas or result in	**Potentially consistent.** In accordance with MM FP-2, the Owner/Applicant would prepare a Fuel Management Plan that would address fuel modification and vegetation management. All

Table 5-1 Proposed Project's Consistency with Santa Barbara County Comprehensive Plan Goals, Policies, and Guidelines	
Goals, Policies, Actions, and Development Standards	Consistency Discussion
the removal of healthy specimen oaks. Within the Fuel Modification Zones, treatment of oak trees should be limited to limbing the branches up to a height of 6 feet, removing deadwood, and mowing the understory. Where specimen oaks have multiple trunks, all trunks should remain. Specimen trees are defined in the Board of Supervisors adopted Environmental Threshold and Guidelines Manual (January 1995) as: "mature trees that are healthy and structurally sound and have grown into the natural stature particular to that species". For oaks on the Burton Mesa this should be considered as trees having one or more 4- inch diameter trunk(s) at a height four feet above the ground.	fuel modification or vegetation management conducted on the project site would be required to adhere to this policy's requirement regarding the treatment of oak trees and wetlands. Therefore, the project is potentially consistent with this policy.
Guideline A-3. Development adjacent to the Burton Mesa Ecological Preserve and other undeveloped natural open space within high fire hazard areas should be sited and designed to minimize habitat alteration on the Preserve. Toward that end, Fuel Modification Zones should be designed to occur on private land rather than on the Preserve itself.	**Potentially consistent.** The proposed project is adjacent to the Burton Mesa Ecological Reserve and in a high fire hazard area. The project proposes to establish fuel management zones that would consist of 100-foot-wide areas located on the project site between the proposed residences and the Reserve. Residences on the project site would also be required to comply with the high fire hazard area development standards of the Santa Barbara County Fire Department. Therefore, the project is potentially consistent with this policy.
Guideline A-4. To the maximum extent feasible, development on the edge of the Burton Mesa Ecological Preserve should be designed to avoid damage to Burton Mesa Chaparral, riparian areas, and established oak trees by incorporating setbacks, clustering or other appropriate methods. Rare, threatened, and endangered species, and species of local concern that inhabit these natural communities should be protected. Areas protected from grading, paving, and other disturbances should include the area 6 feet outside established native tree driplines, unless this distance would interfere with reasonable development of a property. Where native trees are removed, they should be replaced with natives of the Burton Mesa in a manner consistent with County standards.	**Potentially consistent**. The Burton Mesa Ecological Reserve is adjacent to the project site to the north and west. The project has been designed to minimize impacts to the Reserve by retaining on-site open space areas adjacent to the Reserve and by providing a 100-foot-wide fuel management zone on the project site. The project would, result in the removal of up to 6.927~~7.38~~ acres of moderate-quality maritime chaparral habitat and between 74 and 127~~131~~ coast live oak trees. However, areas with oak trees and maritime chaparral would be retained on the project site, primarily in open space areas to be retained adjacent to the Reserve. Proposed mitigation measures would require the replacement of removed sensitive habitat and oak trees at specified ratios in an on-site open space ~~easement~~ area and at an off-site location. The project would preserve the small (0.02-acre) wetland located on the project site, but does have the potential to result in short- and long-term

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	impacts on the wetland through sedimentation and water quality degradation (0.01 acre is located in FMZ-2). These potential impacts would be reduced to a less than significant level with the implementation of regulatory requirements, such as the preparation and implementation of an approved SWPPP and SWMP. In addition, MM BIO-2.1 and MM FP-2.1 address avoidance of this habitat area through the implementation of fences and signs. Proposed biological resource mitigation measures would reduce impacts to chaparral habitat, coast live oak trees, and the small on-site wetland to a less than significant level. Therefore, the project is potentially consistent with this policy.
Guideline A-5. Landscaping for development on the edge of the Preserve and other designated natural undeveloped open space areas should include trees and shrubs native to the Burton Mesa, with habitat restoration efforts focused on buffers. Landscaping with highly invasive weedy plants (e.g., iceplant, pampas grass, veldt grass, Monterey pine, eucalyptus, spiny clotbur, and Australian fireweed) should be avoided.	**Potentially consistent.** MM BIO-2.4 requires that the project landscape plans incorporate the use of drought-tolerant, locally native plant species, and that noxious, invasive, and/or non-native plant species that are recognized on the Federal Noxious Weed List, California Noxious Weeds List, and/or California Invasive Plant Council Lists not be permitted on the project site. Therefore, the project is potentially consistent with this policy.
Guideline A-6. Development should be sited and designed to avoid disruption and fragmentation of significant natural resources, minimize removal of oaks and Bishop Pines and other significant native vegetation, preserve wildlife corridors, and provide reasonable levels of habitat restoration.	**Potentially consistent.** The proposed project site is adjacent to the Burton Mesa Ecological Reserve and would not result in significant direct impacts to the Reserve. Potential indirect impacts to the Reserve (e.g., edge effects) would be minimized by preserving on-site open space adjacent to the Reserve boundaries. The project was designed to minimize removal of coast live oaks to the extent feasible but would impact between 74 and 127~~131~~ oak trees. Proposed mitigation measure BIO-3.2 requires the preparation and implementation of a Tree Protection Plan, and mitigation measure BIO-3.3 requires the implementation of an approved Tree Replacement Plan that would require impacted oak trees to be replaced at a ratio of 10:1. The project would, result in the removal of up to 6.92~~7.38~~ acres of moderate-quality maritime chaparral habitat. Mitigation measure BIO-2.1 requires the implementation of an On-Site Habitat and Open Space Protection Plan, and mitigation measure BIO-2.2 requires

Table 5-1 Proposed Project's Consistency with Santa Barbara County Comprehensive Plan Goals, Policies, and Guidelines	
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	implementation of an approved Off-Site Habitat Restoration Plan. These plans would minimize impacts to on-site habitat that is to be preserved and maintained, and would require that impacted maritime chaparral be replaced at a 2:1 ratio in an on-site open space ~~easement~~ area and at an off-site open space parcel owned by the VVCSD. The project would preserve the small (0.02-acre) wetland located on the project site, but does have the potential to result in short- and long-term impacts on the wetland through sedimentation and water quality degradation (0.01 acre is located in FMZ-2). These potential impacts would be reduced to a less than significant level with the implementation of regulatory requirements, such as the preparation and implementation of an approved SWPPP, ~~and~~ SWMP, and MM BIO-2.1 and MM FP-2.1, which address avoidance of this habitat area through the implementation of fences and signs. With the implementation of these mitigation measures, the project is potentially consistent with this policy.
Guideline A-7. Recognizing that many animals that depend on the riparian system of streams also depend upon the adjacent upland habitat often exceeding 100 feet from streams, development should be sited and buffered to the greatest extent feasible from riparian areas known to support such species, while preserving reasonable use of the property.	**Potentially consistent.** The project site does not include riparian habitats. Therefore the proposed project is potentially consistent with this policy.
Guideline A-8. Where avoidance has been achieved to the maximum extent feasible, impacts to Burton Mesa Chaparral may be mitigated at ratios of 3:1 for high quality chaparral, 2:1 for moderate quality, and 1.5:1 for degraded chaparral.1 Mitigation may take the form of 1) habitat restoration either inside the State's Ecological Preserve or in a permanently protected area outside the Preserve, or 2) in-lieu fees that would fund habitat restoration and/or management in the Preserve. However, state and federal laws requiring protection of Threatened and Endangered Species may preclude such mitigation strategies in some cases. The three classes of Burton Mesa Chaparral are defined as follows: High Quality Chaparral includes areas that have	**Potentially consistent.** The maritime chaparral habitat on the project site is considered to be of moderate quality. The proposed project includes off-site mitigation for maritime chaparral habitat at a minimum of 2:1 ratio (area restored/created/enhanced: area lost). Therefore, the project is potentially consistent with this policy.

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very little evidence of disturbance (excluding fire), and are contiguous with larger habitat areas. Moderate Quality Chaparral includes areas that are somewhat disturbed (i.e., have a road, trails, or populations of non-native species) or are fragmented, but still contain a high proportion of established chaparral species. Degraded Chaparral includes areas that show extensive evidence of disturbance, and are either very small or isolated, or that support a low cover of typical chaparral dominants, but still provide some habitat value.	
Guideline A-9. In order to provide community cohesiveness, new neighborhoods should be designed to provide public multi-purpose trails and transit-linkages to existing neighborhoods, schools, parks, and commercial areas.	**Potentially consistent.** The proposed project includes internal sidewalks along private roads "A" and "B" that would connect with a proposed sidewalk along the frontage of Oak Hills Drive that would provide a connection to an existing Burton Mesa Ecological trail entrance located immediately to the west of the project.~~a private recreation trail through the open space to be retained on the project site.~~ Therefore, the project is potentially consistent with this policy.
Guideline A-10. Development adjacent to open space areas should be sited and designed to protect and enhance the natural resources of these areas.	**Potentially consistent.** The proposed project has been designed to minimize impacts to natural resources to the extent feasible. Specifically, the project would retain 42.4~~43~~ percent open space on the project site, the preserved open space would provide a buffer between the proposed residences and the Burton Mesa Ecological Reserve, and the project would provide fewer residential units than what could be allowed by the site's residential land use designation (12.3 units per acre). Therefore, the project is potentially consistent with this policy.
Visual Goal: The natural backdrop of the area should be preserved through strict controls on hillside development. Hillside grading over 30 percent on residential and commercial land should be severely restricted.	**Potentially consistent.** The proposed project site does not propose any grading on slopes over 30 percent. Therefore, the project is potentially consistent with this policy.
Visual Goal: Development, construction, and roads cut in steep areas should be limited to ensure safety and protection of the terrain, as well as environmental and scenic values.	**Potentially ~~in~~consistent.** Steep slopes ~~greater of~~than 20-30 percent gradient on the project site are limited to locations along the central drainage and Oak Hill Drive frontage. ~~Steep cuts~~Grading on steep slopes along the central drainage would be required ~~along the ephemeral~~ to correct existing drainage and erosion problems. ~~The grading/cuts within steep slopes have been proposed~~ to ensure safety~~, and minimize future erosion,~~ and would not

Table 5-1 Proposed Project's Consistency with Santa Barbara County Comprehensive Plan Goals, Policies, and Guidelines	
Goals, Policies, Actions, and Development Standards	Consistency Discussion
	result in topographic modification that would adversely affect scenic values when viewed from on- or off-site locations. Grading on slopes adjacent to Oak Hill Drive would be for the construction of a proposed storm water detention basin, which would not be visible from off-site locations. Therefore, while grading within some steep slopes would be required, it would be limited to the minimum necessary. Therefore, the proposed project is potentially ~~in~~consistent with this policy.
Guideline A-11. New homes on lots on the edge of bluff tops and in other locations that are highly visible to the public should be of single story or partial second story design to minimize impacts to public view corridors. Where such sites are also constrained by unique biological resources, two-story homes may be allowed where public views are protected by extensive landscaping.	**Potentially consistent.** The project site is not located at the edge of a bluff top. The project site is adjacent to the Burton Mesa Ecological Reserve and could have the potential to visible to persons on the Reserve. However, all proposed residences would be single story with a maximum height of 22 feet. Therefore, the project is potentially consistent with this policy.
Guideline A-12. All development, including buildings, understories, fences, water tanks and retaining walls adjacent to designated natural open space areas should be sited and designed to protect the visual character of these areas and blend in with natural landforms through the use of such methods as setbacks, building orientation, materials and colors (earth tones and non-reflective paints), landscape buffers, shielded exterior lighting, screening of parking areas and inclusion of perimeter roads to allow maintenance of open space corridors.	**Potentially consistent.** The Oak Hills Estate Design Guidelines includes architectural and landscape design recommendations to direct and enhance the visual character of future residences developed on the project site. The guidelines would ensure that the development blends with natural landforms and surroundings to the extent practicable by requiring the use of earth tones in exterior colors as well as simple color schemes and lighting that minimizes impacts on adjacent areas. Additionally, the design guidelines require the establishment and maintenance of landscaping that is consistent with the natural surroundings. Therefore, the project is potentially consistent with this policy.
Guideline A-13. Sound wall construction should be minimized through the alternative use of landscape berms for noise reduction.	**Potentially consistent.** No sound walls are proposed as part of the project. Therefore, the project is potentially consistent with this policy.
Guideline B-1. To the maximum extent feasible, development projects should dedicate land and construct, public or privately developed parks, athletic fields, and trails for public use. Examples include playing fields, basketball courts, playground equipment, etc. Developers and the County shall work together to provide regional park facilities in accordance with the findings of the Regional Needs Assessment for Parks as adopted by the Board of Supervisors.	**Potentially consistent.** The proposed project includes an open space area ~~with a private passive recreation trail~~ on the project site. Therefore, the project is potentially consistent with this policy.

Table 5-1 Proposed Project's Consistency with Santa Barbara County Comprehensive Plan Goals, Policies, and Guidelines	
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Guideline B-2. Development projects should include public and/or private open space dedications that preserve natural areas.	**Potentially consistent.** The proposed project includes an open space area ~~with a private passive recreation trail~~ on the project site. Therefore, the project is potentially consistent with this policy.
Guideline B-3. Tract maps and development plans should provide affordable units distributed throughout the sites, at a minimum, consistent with the County's adopted affordable housing goals for the Lompoc Housing Market Area. These units should be similar in appearance to the market rate units. Emphasis should be placed on meeting the unmet income levels of the Lompoc Housing Element Guidelines as they may be amended.	**Potentially consistent.** The project would comply with the County's Inclusionary Ordinance by paying in-lieu fees for affordable housing. Therefore, it would be consistent with the County's affordable housing goals and the inclusion of affordable units would not be required. Therefore, the proposed project is potentially consistent with this policy.

Chapter 6.0
Other CEQA Mandated Sections

6.1 Effects Found Not to be Significant

Section 15128 of the California Environmental Quality Act (CEQA) Guidelines requires an Environmental Impact Report (EIR) to briefly describe any possible effects that were determined not to be significant and were, therefore, not discussed in detail in the EIR. These less than significant effects were identified in the scoping document that was attached to the Notice of Preparation for the proposed project (Appendix A). This section addresses the resource areas identified in the scoping document that the proposed project has been found to have no significant impact on. Any environmental issue areas not addressed in this section were fully analyzed in Sections 4.1 through 4.12 of this EIR.

6.1.1 Agriculture and Forestry

The proposed project site is not located within any designated prime or unique farmlands or forest lands, and the site is not actively farmed. The California Department of Conservation Farmland Mapping and Monitoring Program has designated the project site as "Other Land" and surrounding land uses in the Vandenberg Village as "Urban and Built-up Land" (State of California 2015). In addition, the project site is not located within an agricultural zone district in the County of Santa Barbara (County) and has not historically been used for agricultural resources. Therefore, no impacts related to agriculture or forestry would occur.

6.1.2 Energy

The County has not identified significance thresholds for electrical and/or natural gas service impacts, and the proposed project would not involve a substantial increase in energy demand or the development of new energy sources. In addition, increasingly efficient building fixtures as well as implementation of policies included in the County's Comprehensive Plan and Energy and Climate Action Plan are expected to offset the demand to some degree. It is not anticipated that the growth accommodated under the proposed project would significantly affect local or regional energy supplies. As such, the proposed project's impacts on energy would be less than significant.

6.1.3 Hazards Materials/Risk of Upset

The proposed project is a residential development and would not result in the transport of hazardous materials nor create a hazard to the public. In addition, the proposed project would not emit hazardous emissions or require the handling of acute hazardous substances. According to the Department of Toxic Substance Control and pursuant to Government Code Section 65962.5, the project site is not listed as a site known to contain hazardous materials.

Overall, the proposed project would not involve the storage of unusual types or quantities of fuels, lubricants, or explosives and these aspects of the use would be regulated by the Santa Barbara County Fire Department. Impacts would be less than significant. Refer to Section 4.12, Fire Protection, for a discussion of potential wildland fire risks.

A Freeport–McMoRan sour (H2S) gas pipeline is located approximately 1,800 feet north of the project site. The EIR prepared for the pipeline determined that a potential pipeline operation hazard zone extends 350 feet from the pipeline. The Oak Hills Estate project site is approximately 1,450 feet south of the predicted pipeline hazard zone (pers. comm. from Errin Briggs, Santa Barbara County Energy Division, June 27, 2017). Therefore, the pipeline would not result in significant hazard-related impacts to the proposed project.

6.1.4 Population and Housing

The proposed project would include 29 residential units. Based on the U.S. Census Bureau's data of average household family size of 2.58 residents in the Vandenberg Village area from 2010–2014, the proposed project would generate approximately 75 residents. This would not be considered substantial population growth. In addition, the proposed project site is currently vacant and would not displace existing housing or result in the need for replacement housing. Therefore, no significant impacts to population and housing would occur.

6.1.5 Recreation

The proposed project site is located near established off-site recreational trails within the Burton Mesa Ecological Reserve. However, the proposed project would not significantly impact the quality or quantity of these trails and other existing regional recreational opportunities, either in the project vicinity or Countywide. The ~~proposed~~ project ~~also~~ proposes two internal sidewalks along private roads "A" and "B" that would connect to proposed sidewalks along the project's frontage on Oak Hill Drive. These sidewalks would provide ~~a private trail to enhance~~ safe, direct connectivity and access to the Burton Mesa Ecological Reserve's recreational trails that are maintained by the Oak Hills Estate Homeowner's Association ~~to recreational opportunities (i.e., walking, running)~~ for all community residents (see Chapter 2.0, Project Description). Therefore, no significant impacts to recreation would occur.

6.1.6 Mineral Resources

The proposed project site is not within an area designated by the state for locally important mineral resources and is not utilized for mineral resource extraction or production. As such, the proposed project would not impact the availability of any known mineral resources, and no further analysis of this topic is required in the EIR.

6.2 Significant Environmental Effects Which Cannot Be Avoided if the Project Is Implemented

In accordance with CEQA Guidelines Section 15126.2(b), any significant unavoidable impacts of a project, including those impacts that can be mitigated but not reduced to below a level of significance despite the willingness to implement all feasible mitigation measures, must be identified in the EIR. These are referred to as Class I impacts by the County of Santa Barbara. Implementation of the project would result in significant, unavoidable aesthetics impacts.

All other significant impacts identified in Chapter 4.0 of this EIR can be reduced to below a level of significance with implementation of identified mitigation measures. Significant impacts are also minimized or avoided through compliance with existing regulations and County Comprehensive Plan policies.

6.3 Growth-Inducing Effects

CEQA requires that an EIR evaluate the "growth-inducing" effects of a proposed project. Specifically, CEQA Guidelines Section 15126.2(d) requires that an EIR:

> Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (for example, a major expansion of a waste water treatment plant might allow for more construction in service areas). Increases in the population might tax existing community services facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

The following discussion and impacts identified below are based on buildout of the proposed project and the 29 single-family residential units that would be developed under the Oak

Hills Estate Tentative Tract Map, Rezone, and Development Plan (project) and off-site restoration.

6.3.1 Population Growth

As discussed in Section 2.0, Project Description, a total of 29 single-family residential units would be constructed under the proposed project. The current population of Vandenberg Village is approximately 6,497 and the area has approximately 2.58 persons per household (U.S. Census 2010). Development of the proposed project would add approximately 75 residents (29 dwelling units x 2.58 persons per household), thereby increasing the area's population to 6,572. Considering the relatively low number of population that would be accommodated by the proposed project, the project would not exceed the population projection assumptions in the County Comprehensive Plan, the Santa Barbara County Association of Government's Regional Growth Forecast, or Regional Transportation Plan and Sustainable Communities Strategy.

6.3.2 Economic Growth

The proposed project includes residential development rather than commercial development. As such, the proposed project would not directly contribute to economic growth by providing additional space for business. Under the proposed project, 29 new single-family residential units would be developed, which may indirectly contribute to economic growth by providing housing for the regional workforce. As development occurs under the proposed project, the additional population would likely contribute to the local economy as the demand for general goods increases, which in turn could result in economic growth for various sectors. However, the proposed project would not induce economic expansion to the extent that significant environmental impacts directly associated with the project's contribution would occur.

6.3.3 Development of Open Space/Vacant Land

Development of open space is considered growth-inducing when it occurs outside urban boundaries or in isolated locations instead of infill areas. As discussed in Chapter 2.0, Project Description, the project site has been designated and zoned for residential development in the County Comprehensive Plan. As discussed above, the project site has a Residential land use designation of R-12.3 and is zoned as Residential Ranchette (RR-10), which would currently permit one residential estate for the entire project site. The proposed rezoning of the project site to Design Residential (DR-1.8) would permit 29 single-family residences and one open space lot. Although the project site is located on vacant land with the Burton Mesa Ecological Reserve located to the north and east, the open space lot would comprise 42.4~~43.3~~ percent of the total preserved lot area as natural open space. Additionally, the proposed project site is within a designated Urban Area of the Vandenberg Village, and the Comprehensive Plan's land use designation is residential (RES-12.3) and proposes restoration of the off-site Vandenberg Village Community Services District (VVCSD)-owned parcel APN 097-371-067, to compensate for sensitive habitat removal consistent with the Land Use Element policies for the Lompoc Area. Therefore, the

development is not considered growth inducing, because it occurs within a designated Urban Area and is consistent with the Comprehensive Plan land use designation.

6.3.4 Removal of Impediment to Growth

The lack of adequate infrastructure, including roads, water, and sewer service and police and fire protection are typically considered impediments to growth, since growth is either typically prohibited in such areas or development cannot feasibly occur where such infrastructure is not present. The proposed project would facilitate residential development for one of the parcels identified for future development under the County Comprehensive Plan. The County Comprehensive Plan, serving as a long-range land use planning document, is intended to reduce the potential for uncontrolled growth from specific development proposals and its associated environmental impacts. The project site is contiguous to urban land uses to the east and south and is located along the fringe of and within the designated urban boundary. The proposed project, with mitigation measures identified within this EIR, would minimize edge effects and environmental impacts to the Burton Mesa Ecological Reserve to the north and west. The proposed project would utilize existing water, wastewater, and solid waste facilities that serve the urban areas of Vandenberg Village. Water and sewer services would be provided through minor extensions of existing utility infrastructure. No additional infrastructure or facilities beyond those necessary to accommodate the proposed project would be required. The project would include roads, sidewalks, ~~a trail,~~ drainage, and utility infrastructure that would be maintained by a homeowners association. Development of the project would occur alongside an existing public road with essential utilities and public services (refer to Sections 4.7, Hydrology and Water Quality, and 4.10, Public Services and Utilities). Therefore, the project would not remove an impediment to growth.

6.4 Significant Irreversible Environmental Changes Which Would be Caused by the Proposed Project Should it be Implemented

CEQA Guidelines Section 15126.2(c) requires that an EIR discuss the significant irreversible environmental changes resulting from the proposed project. This may include uses of non-renewable resources, primary and secondary impacts that generally commit future generations to similar use, irreversible damage due to environmental accidents associated with the project, and irretrievable commitments of resources. The proposed project includes residential development, which will consume energy, some mineral products, and other non-renewable resources. However, the primary resource that would be affected is the land. While the proposed project is consistent with the Comprehensive Plan's land use designation, it includes a rezoning of the site to change the zoning of the project parcel from RR-10 (Residential Ranchette, 1 unit per 10 acres) to DR-1.8 (Design Residential, 1.8 units per acre). This rezoning would increase the land use intensity of the 16.88-acre site from a single unit to up to 30 units (the proposed project includes 29 units).

The Burton Mesa Ecological Reserve is located adjacent to the project site to the north and west, and the development would remove unobstructed natural views of the area. Additionally, the project site would remove native maritime chaparral habitat and coast live oak trees. The development would cause irreversible ecological change to the project site and irreversible but less than significant edge effects on the Burton Mesa Ecological Reserve that would continue over the life of the project. The project proposes restoration of the off-site VVCSD-owned parcel APN 097-371-067, to compensate for sensitive habitat removal.

Residential development exists to the southwest and east of the project site, and the proposed project would be consistent with these existing uses. The proposed residential use would not likely lead to a major environmental accident or release that could threaten human health or ecology. However, the proposed project would place residential development in an area with high risk for wildfires, exposing more people to the risk. The proposed project design includes defensible space and would construct with materials that are fire resistant, in accordance with applicable regulations.

The proposed project would bring more people to the area and likely increase the use of the off-site recreational trails of the Burton Mesa Ecological Reserve, and this change would continue over the life of the project and be irreversible. However, the increase would be limited to approximately 75 residents as only 29 units are proposed. ~~Additionally, the proposed project includes a private passive recreation trail for use by the future residents~~.

6.5 Energy Conservation

Appendix F of the CEQA Guidelines requires that EIRs include an evaluation of the potential energy consumption and/or conservation impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, or unnecessary consumption of energy.

The project would require the use of energy for construction and after the proposed residential units are occupied. Energy use during construction would primarily be diesel and gasoline used to fuel construction equipment. Occupancy of the residences would require the use of electricity and natural gas, and vehicle use by project residents would require fossil fuels.

The project would be required to comply with the mandatory energy conservation requirements of Title 24 of the California Code of Regulations, also known as the California Building Standards Code, the energy efficiency standards required by the County Code, and with the County's Energy and Climate Action Plan. Compliance with existing regulatory requirements would ensure that the project would not use energy in an inefficient or wasteful manner.

Chapter 7.0 Alternatives

7.1 Rationale for Project Alternatives

The California Environmental Quality Act (CEQA) Guidelines Section 15126.6 requires that an Environmental Impact Report (EIR) compare the effects of a "range of reasonable alternatives" to the effects of a project. The alternatives selected for comparison should be those that would attain most of the basic project objectives and avoid or substantially lessen one or more significant effects of the project.

As discussed in Chapter 4.0, the proposed Oak Hills Estate project would result in potentially significant direct, and/or cumulative environmental impacts related to aesthetics, biological resources, cultural resources, geology and soils, hydrology and water quality, noise, public services and utilities, and fire protection. In developing the alternatives to be addressed in this chapter, consideration was given to the ability to eliminate or substantially reduce significant environmental impacts (as identified in Chapter 4.0 of this EIR).

CEQA Guidelines Section 15126(f) states that "the range of alternatives in an EIR is governed by the 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The CEQA Guidelines outlines factors that should be considered regarding the feasibility of an alternative: (1) site suitability; (2) economic viability; (3) availability of infrastructure; (4) general plan consistency; (5) other plans or regulatory limitations; (6) jurisdictional boundaries; and (7) whether the project applicant can reasonably acquire, control, or otherwise have access to the alternative site (if an off-site alternative is evaluated).

The Lead Agency for this project is the County of Santa Barbara (County). The County Planning Commission will consider these alternatives and determine whether to recommend approval of the project to the Board of Supervisors as proposed, or one of the alternatives.

The alternatives addressed in this EIR were selected in consideration of one or more of the following factors:

- The extent to which the alternative would feasibly accomplish most or all of the basic objectives of the project;
- The extent to which the alternative would avoid or substantially lessen any of the identified significant environmental effects of the project;
- The feasibility of the alternative, taking into account site suitability, economic viability, availability of infrastructure, Comprehensive Plan consistency, and consistency with other applicable plans and regulatory limitations;
- The appropriateness of the alternative in contributing to a "reasonable range" of alternatives necessary to permit a reasoned choice; and
- The requirement of the CEQA Guidelines to consider a "no project" alternative and identify an "environmentally superior" alternative in addition to the no project alternative (Section 15126.6[e]).

CEQA Guidelines Section 15126.6 generally defines "feasible" to mean an alternative that is capable of being accomplished in a successful manner within a reasonable period, while also taking into account economic, environmental, social, technological, and legal factors. According to the CEQA Guidelines, any alternative considered would also need to accomplish most of the basic objectives of the project as described in Chapter 2.0, Project Description.

The objectives of the Oak Hills Estate project are as follows:

1. To develop the site in a manner that is consistent with the County's Comprehensive Plan, environmental requirements, and that complements the physical characteristics of the site.
2. To provide desirable housing types and densities consistent with surrounding neighborhoods.
3. To develop the site in a manner that preserves a significant component of the site as permanent open space designed and managed to protect the natural habitat.
4. To ensure that the site is compatible with the Burton Mesa Ecological Reserve and surrounding area through sensitive site design and residential architectural design standards.
5. To develop design criteria that encourage connectivity inside and adjacent to the project, that link the community with walking trails, and provide access to the adjacent Country Club property.

As required under CEQA Guidelines Section 15126.6(e)(2), the EIR must identify the environmentally superior alternative. Pursuant to the CEQA Guidelines, if the No Project Alternative is determined to be the environmentally superior alternative, then another alternative among the alternatives evaluated must be identified as the environmentally superior alternative. The environmentally superior alternative determination analysis is in Section 7.4 below.

7.2 Alternatives Considered but Rejected

CEQA Guidelines state that the EIR should identify any alternatives that were considered by the Lead Agency but were rejected, and briefly explain the reasons underlying the Lead Agency's determination. Among factors used to eliminate alternatives from detailed consideration in the EIR is failure to meet most of the basic project objectives or inability to avoid significant environmental effects (CEQA Guidelines Section 15126.6[c]).

7.2.1 Alternative Location

In accordance with CEQA Guidelines Section 15126.6(f)(2), an alternative project site location should be considered if development of another site is feasible and if development of another site would avoid or substantially lessen significant impacts of the project. Factors that may be considered when identifying an alternative site location include the size of the site; its location relative to major transportation corridors, employment centers, and the availability of services (including commercial services along with public services, such as fire protection, libraries, and schools); the General Plan (or Community Plan) land use designations, and availability of infrastructure. CEQA Guidelines Section 15126.6(f)(2)(A) states that a key question in looking at an off-site alternative is ". . . whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location."

The project is located on one of the few remaining parcels of undeveloped land with a residential land use designation in the Vandenberg Village urban area. Two undeveloped parcels were looked at and dismissed from further consideration. The first was a vacant parcel located at the corner of Burton Mesa Boulevard and Rucker Road and the second was a parcel located adjacent to the Vandenberg Village Community Services District Building on Burton Mesa Boulevard, but is the site of an under-construction project. Both parcels have residential zoning and are located within the designated urban area adjacent to housing and commercial uses. The first site, based on its 7-R-2 zoning, could potentially accommodate development of approximately 6–10 units of single-family housing but was dismissed from further consideration as its availability and/or the applicant's ability to acquire the site is speculative. The second site was dismissed from further consideration due to an active construction project on the site.

7.2.2 Higher Density Alternative

A higher density project was considered for the proposed project site in 1992 to 1994. This previous project was called the Oak Hill/Oak View project (92-RZ-008, 92-DPP-005) and was studied in an EIR (94-EIR-4). The proposal was to construct 66 residential units, including 30 detached, two-story single-family residences, 2 detached single-family homes, and 34 two-story multi-family units. The higher density project was not implemented because of the significant and unavoidable environmental impacts identified by the previously prepared EIR (94-EIR-4). The project was subsequently revised to include a rezone of the site to a density of DR 1.8, and to subdivide the parcel into 23 lots consisting

of 21 residential lots, 1 lot for common open area, and 1 lot for a Burton Mesa Chaparral Preserve area; however, the revised project did not proceed after comments regarding the project were received from the Planning Commission on May 25, 2006. Though the RES-12.3 land use designation of the site could facilitate development of more units than what is included in the proposed project, more units would likely result in increased environmental impacts compared to the proposed project. Specifically, the EIR for the previously proposed higher density project concluded potentially significant impacts to aesthetics, visual resources, and biological resources. Therefore, a high density alternative is considered infeasible for the project site and was removed from further consideration in this EIR.

7.3 Summary of EIR Alternatives and Impacts Identified

This EIR looks at three development scenarios as alternatives to the proposed project: (1) development under the current zoning (No Project Alternative), (2) the Reduced Unit Alternative, and (3) the Clustered ~~Project~~ Unit Alternative.

Table 7-1
Comparison of the Project and Alternatives Impacts

Environmental Issue Area	Proposed Project	No Project/ Current Zoning	Reduced Unit Alternative	Clustered ~~Project~~ Unit Alternative
Aesthetics				
AES-1: Visual Aesthetic Character	Class I, II, III	REDUCED	REDUCED	REDUCED
AES-2: Important Scenic Areas	Class III	SIMILAR	SIMILAR	SIMILAR
AES-3: Scenic Quality Impacts to the Burton Mesa Ecological Reserve and Other Off-site Locations	Class I	REDUCED	SIMILAR	REDUCED
Cumulative Aesthetics and Visual	Class I	REDUCED	REDUCED	REDUCED
Air Quality				
AQ-1: Air Quality Plans Consistency	Class III	SIMILAR	SIMILAR	SIMILAR
AQ-2: Criteria Pollutant Emissions	Class III	REDUCED	REDUCED	SIMILAR
AQ-3: Cumulative Criteria Pollutant Emissions	Class III	REDUCED	REDUCED	SIMILAR
AQ-4: Sensitive Receptors	Class III	REDUCED	REDUCED	SIMILAR
AQ-5: Odors	Class III	REDUCED	REDUCED	SIMILAR
Biological Resources				
BIO-1: Sensitive Special Status Plants and Wildlife Species	Class II	REDUCED	REDUCED	REDUCED
BIO-2: Sensitive Natural Communities	Class II	REDUCED	REDUCED	REDUCED
BIO-3: Loss of Oak Trees	Class II	REDUCED	REDUCED	REDUCED
BIO-4: Federal Jurisdictional Waters and Wetlands	Class II	REDUCED	REDUCED	REDUCED
BIO-5: Nesting Birds	Class II	REDUCED	REDUCED	REDUCED
BIO-6: Wildlife Movement	Class III	REDUCED	REDUCED	REDUCED
Cumulative Biological Resources	Class II	REDUCED	REDUCED	REDUCED

Table 7-1 Comparison of the Project and Alternatives Impacts				
Environmental Issue Area	Proposed Project	No Project/ Current Zoning	Reduced Unit Alternative	Clustered ~~Project~~ Unit Alternative
Cultural Resources				
CR-1: Unearthing previously unidentified subsurface cultural resources	Class II	REDUCED	REDUCED	REDUCED
Cumulative Cultural Resources	Class III	REDUCED	REDUCED	REDUCED
Geology and Soils				
GEO-1: Unstable Soils, Steep Slopes, and Erosion	Class II	REDUCED	REDUCED	REDUCED
GEO-2: Seismic Hazards	Class II	REDUCED	REDUCED	SIMILAR
GEO-3: Liquefaction	Class III	REDUCED	REDUCED	REDUCED
GEO-4: Lateral Spreading and Expansive Soils	Class III	REDUCED	REDUCED	REDUCED
Cumulative Geology and Soils	Class III	REDUCED	REDUCED	REDUCED
Greenhouse Gas (GHG) Emissions				
GHG-1: GHG Emissions	Class III	REDUCED	REDUCED	SIMILAR
GHG-2: Consistency with GHG Plans, Policies, and Regulations	Class III	REDUCED	REDUCED	SIMILAR
Hydrology and Water Quality				
WQ-1: Water Supply and Groundwater Resources	Class II	REDUCED	REDUCED	SIMILAR
WQ-2: Water Quality: Construction, Grading, and Operation	Class II	REDUCED	REDUCED	REDUCED
WQ-3: Drainage, Storm Water Flows, and Runoff	Class II	REDUCED	REDUCED	REDUCED
WQ-4: Impervious Surfaces & Long Term Water Quality	Class II	REDUCED	REDUCED	REDUCED
WQ-5: Flooding	Class III	SIMILAR	SIMILAR	REDUCED
Cumulative Hydrology and Water Quality	Class III	REDUCED	REDUCED	REDUCED
Land Use				
LU-1: Conflict with Plans	Class III	SIMILAR	SIMILAR	SIMILAR
LU-2: Land Use Compatibility	Class III	SIMILAR	SIMILAR	SIMILAR
Cumulative Land Use	Class III	SIMILAR	SIMILAR	SIMILAR
Noise				
N-1: Noise Standards	Class III	REDUCED	REDUCED	SIMILAR
N-2: Groundborne Noise and Vibration	Class III	SIMILAR	SIMILAR	SIMILAR
N-3: Permanent Noise Level Increases	Class III	REDUCED	REDUCED	SIMILAR
N-4: Temporary Noise Level Increases	Class II	REDUCED	REDUCED	SIMILAR
N-5: Aircraft Noise Level Increases	Class III	SIMILAR	SIMILAR	SIMILAR
Cumulative Noise	Class III	REDUCED	REDUCED	SIMILAR

Table 7-1 Comparison of the Project and Alternatives Impacts				
Environmental Issue Area	Proposed Project	No Project/ Current Zoning	Reduced Unit Alternative	Clustered ~~Project~~ Unit Alternative
Public Services and Utilities				
PSU-1: Public Schools	Class III	REDUCED	REDUCED	SIMILAR
PSU-2: Water Supply	Class II	REDUCED	REDUCED	SIMILAR
PSU-3: Wastewater	Class III	REDUCED	REDUCED	SIMILAR
PSU-4: Solid Waste	Class II	REDUCED	REDUCED	SIMILAR
PSU-5: Police Protection, Healthcare Facilities and Emergency Services, and other Facilities	Class III	REDUCED	REDUCED	SIMILAR
Cumulative Public Services and Facilities	Class III	REDUCED	REDUCED	SIMILAR
Transportation and Circulation				
T-1: Impacts on Roadways	Class III	REDUCED	REDUCED	SIMILAR
T-2: Impacts on Intersections	Class III	REDUCED	REDUCED	SIMILAR
T-3: Conflicts with Existing Plans (Congestion Management Program)	Class III	REDUCED	REDUCED	SIMILAR
T-4: Traffic Hazards, Emergency Access, and Parking	Class III	REDUCED	REDUCED	SIMILAR
T-5: Alternative Transportation Modes	Class III	SIMILAR	SIMILAR	SIMILAR
Cumulative Transportation and Circulation	Class III	REDUCED	REDUCED	SIMILAR
Fire Protection				
FP-1: Wildland Fires	Class II	REDUCED	REDUCED	REDUCED
FP-2: Fire Safety	Class II	REDUCED	REDUCED	REDUCED
FP-3: Emergency Access and Evacuation	Class III	REDUCED	REDUCED	SIMILAR
FP-4: Fire Protection Services and Facilities	Class III	REDUCED	REDUCED	SIMILAR
Cumulative Fire Protection	Class III	REDUCED	REDUCED	SIMILAR
Class III = less than significant; Class II = significant and mitigated; Class I = significant and unavoidable				

7.3.1 Alternative 1: Development under the Current Zoning (No Project Alternative)

This scenario examines the potential impacts to the project site associated with buildout under the current Residential Ranchette (Inland Area); 10-acre gross lot minimum (RR-10) zoning of the project site. Under the current zoning with the No Project Alternative, one single-family dwelling would be constructed on the 16.88-acre parcel with approval of a land use permit consistent with Land Use and Development Code Section 35.23.030. Permitted uses also include a farmworker dwelling unit and a residential second unit. This analysis assumes that the lot would develop with a single-family home consistent with the project site's current zoning and neighborhood context.

7.3.1.1 Aesthetics

Potential impacts associated with aesthetics and visual resources (public views, scenic resources, visual character, and light and glare) would be less under this alternative due to the limited development potential of the greatly reduced project of one single-family home in comparison to the proposed project with 29 single-family residential units, including infrastructure with streets and open space ~~with a formal trail~~.

The development of a single-family home would considerably lessen the overall potential visual impacts to the site when compared to the alterations public views associated with constructing 29 homes, roads, and infrastructure that would occur under the proposed project. Scenic resources visible from a designated scenic vista or roadway would not be impacted under either scenario as there are no state- or County-designated scenic vistas or roadways in the project vicinity. The No Project Alternative would result in the development of one single-family residence and would not result in a substantial change in the existing condition of the project site as the majority of the site would remain undeveloped. Therefore, the potential significant and unavoidable (Class I) aesthetics impacts (scenic quality and cumulative aesthetic impacts) resulting from the proposed project's removal of approximately 74 oaks and removal of up to 6.92~~7.38~~ acres of maritime chaparral habitat would be avoided.

In addition, the need for off-site restoration and habitat creation would also be greatly reduced through implementation of the No Project Alternative, as substantially less habitat removal on the project site would occur with under this alternative with the development of one-single family residence. The single-family residence that could be developed under the No Project Alternative could be located in a previously disturbed area located towards the southeastern portion of the site, which would reduce impacts to aesthetics and visual resources to less than significant when compared to the proposed project (Class III impact). Therefore, impacts to aesthetics and visual resources would be less than significant and reduced under the No Project Alternative compared to the proposed project.

7.3.1.2 Air Quality

The number of construction equipment and work force vehicles required to clear, grade, and construct one single-family residence under the No Project Alternative would be considerably less than when compared to that needed to construct 29 single-family residences proposed by the project. The reduced air quality emissions resulting from construction of one single-family home under the No Project Alternative would result in fewer short-term air quality impacts to sensitive receptors adjacent to the project site (residents) than construction of the proposed project. In addition to reduced air quality emissions associated with short-term construction, the emissions associated with long-term occupancy of one residence (energy consumption, cooking odors, landscaping equipment) would be greatly reduced compared to 29 single-family residences under the proposed project. The vehicle emissions under the No Project Alternative would also be greatly reduced compared to the proposed project.

Both the No Project Alternative and proposed project include land uses of equal or lesser intensity from the project site's General Plan designation, which is the basis for the growth projections of the Santa Barbara County Air Pollution Control District (SBCAPCD's) Clean Air Plan. Therefore, emissions from both the single-family residence under the No Project Alternative and the 29 single-family homes proposed by the project would fall within the projected infill residential land uses in Vandenberg Village consistent with household growth projected in in the 2013 Clean Air Plan (March 2015). As such, air quality impacts associated with air quality plan consistency would be the same under both scenarios and less than significant. However, numerically, the overall construction and occupancy air quality effects of the single-family residence constructed on the site under the No Project Alternative would be greatly reduced when compared to the proposed project due to the difference land use intensity (one residence in the No Project Alternative versus 29 residences in the proposed project). Therefore, the overall air quality impacts related to criteria pollutants, sensitive receptors, and odors from construction and occupancy under the No Project Alternative would be less than significant (Class III) and reduced compared to the proposed project.

7.3.1.3 Biological Resources

The No Project Alternative would result in the development of only one single-family residence on the entire project parcel and presumably the residence would be located in a manner that would largely avoid the significant and mitigated Class II biological impacts to special status plants, ~~and~~ animals and their habitat, and important biological communities associated with the proposed project, and eliminating the need for off-site restoration. The one residence that could be developed under the No Project Alternative could be placed so as to avoid sensitive biological resources and minimize impacts to plant communities, leaving the majority of the site undeveloped. This would result in reduced impacts to biological resources compared to the proposed project, which would develop more of the site with residences and associated infrastructure and roadways. The No Project Alternative would preserve a substantial area of the site as open space and habitat. Therefore, impacts associated with biological resources under the No Project Alternative would be reduced from Class II to Class III, less than significant, and would have reduced impacts compared to the proposed project.

7.3.1.4 Cultural Resources

Historical and prehistoric resources are known to exist within the County and project area. Therefore, future development (and associated grading) has the potential to result in impacts to cultural or paleontological resources under both the No Project Alternative and the proposed project. The Phase I and Extended Phase I Archaeological Resources Reports prepared for the project site by Dudek determined that there is an unlikely chance of finding subsurface cultural resources at the project site. Potential impacts to cultural resources resulting from implementation of the No Project Alternative would be reduced when compared to the proposed project because less land would be disturbed. Grading, construction, and the associated infrastructure and roadways associated with the development of 29 single-family residential units under the proposed project would result in

a greater potential to discover cultural resources than the No Project Alternative. However, because the potential to unearth unknown cultural resources under the No Project Alternative still exists, the same construction mitigation would be required as under the proposed project. Therefore, impacts to cultural resources under the No Project Alternative would be reduced compared to the proposed project but would remain Class II, less than significant with mitigation.

7.3.1.5 Geology and Soils

Under the No Project Alternative, the site would be developed with one single-family residence. The on-site soils have little to no cohesion and are highly erodible. As with the proposed project, implementation of the No Project Alternative would have the potential to result in significant impacts related to geologic hazards. However, fewer residences would be built under the No Project Alternative, which would reduce the amount of new development that could be exposed to geological hazards such as compressible soils, landslides, seismicity, and expansive soils. Future development under both the No Project Alternative and the proposed project would be required to comply with existing federal, state, and local regulations relative to engineering and construction, which would further reduce potential geology- and soils-related impacts to occur. Additionally, mitigation to implement geotechnical expert recommendations and an erosion and sediment control plan would be required for both the No Project Alternative and the proposed project. Because the No Project Alternative would expose only one residence to potential geologic hazards compared to the 29 residences under the proposed project, geology and soils impacts under the No Project Alternative would be reduced compared to the proposed project. However, impacts would remain potentially significant and reduced to less than significant with mitigation (Class II) because exposure to geologic hazards would still exist.

7.3.1.6 Greenhouse Gas Emissions

Construction of the proposed project would result in 29 single-family residences. The greenhouse gas (GHG) emissions associated with construction and occupancy of one residence under the No Project Alternative would be less than impacts associated with the proposed project. As a result, the GHG emissions produced from the No Project Alternative would be less than significant (Class III) and significantly reduced compared to the proposed project.

7.3.1.7 Hydrology and Water Quality

More open space and undeveloped land would be preserved under the No Project Alternative, as it would involve the development of only one residential unit compared to the proposed project's 29 units. Therefore, this alternative would result in reduced impacts associated with hydrology, flooding, and water quality. Under the proposed project with 29 single-family residences, the total amount of impervious cover and the increase in runoff would be higher in comparison to the development of one single-family residence under the No Project Alternative. In addition, significantly less water supply and groundwater resources from the Vandenberg Community Services District in the Lompoc Uplands

groundwater basin would be necessary for the project site under the No Project Alternative compared to the proposed project. Impacts associated with flooding under both the No Project Alternative and proposed project would be similar and less than significant because the project parcel is not located in a flood zone. Future development under the project and the No Project Alternative would be required to comply with existing federal, state, and local regulations relative to runoff and water quality. Nonetheless, County thresholds state that construction involving over one acre of disturbance has the potential to cause significant hydrology and water quality impacts and would require mitigation. If it is assumed that the No Project Alternative development would have the potential to disturb one or more acres of the project site, this alternative would result in less than significant impacts with mitigation incorporated (Class II) to hydrology and water quality, although impacts would be reduced compared to the proposed project.

7.3.1.8 Land Use

Buildout under the No Project Alternative would result in the development of one single-family home. The average household size for Vandenberg Village according to the 2010 U.S. Census is 2.58 persons. Buildout under the proposed project would result in a higher intensity of land use with 29 single-family residences, which would accommodate approximately 75 persons compared to the No Project Alternative with one single-family residence that would accommodate approximately 3 persons. Neither alternative would result in the displacement of people nor housing, as the project parcel is currently vacant.

The project site is designated as an Urban Area and RES-12.3 in the Comprehensive Plan, which theoretically would allow development of 207 residential units. However, the current zoning designation of the site as Residential Ranchette (RR-10) restricts development to one single-family dwelling on the entire parcel. Neither the proposed project nor the No Project Alternative would require a Comprehensive Plan amendment to change the land use designation of the project site, as they both would include fewer residential units than the maximum allowed by the RES-12.3 land use designation. Additionally, while the proposed project includes a rezone of the site to accommodate additional houses than allowed by RR-10, the No Project Alternative would not require a change. Adjacent land uses are designated for residential and agricultural uses, which would be compatible with the No Project Alternative that could result in single ranchette-style residence at the site. As discussed in Section 4.8, Land Use, the proposed project would also be compatible with adjacent land uses. Therefore, land use impacts of the No Project Alternative would be less than significant (Class III) and similar to the impacts of the proposed project.

7.3.1.9 Noise

Impacts associated with noise would be reduced under the No Project Alternative compared to the proposed project. The proposed project would result in the construction of 29 single-family residences compared to the one single-family residence of the No Project Alternative. Therefore, the No Project Alternative would result in fewer temporary and permanent noise impacts during and following construction than the proposed project. Project operation impacts under the proposed project and the No Project Alternative would be similar and

less than significant because the residential development that would occur under either scenario would not result in substantial sources of noise or vibration. Impacts from aircraft noise would be less than significant and similar under the two alternatives, as the project site is beyond the Lompoc Airport and Vandenberg Air Force Base noise compatibility contours. Overall, fewer automobile, construction, and off-site noise sources would occur under the No Project Alternative than under the proposed project, because the No Project Alternative includes 28 fewer residences than the proposed project. Therefore, noise impacts of the No Project Alternative would be less than significant (Class III) and reduced compared to the noise impacts of the proposed project.

7.3.1.10 Public Services and Utilities

Development under the No Project Alternative would result in reduced impacts to public services and utilities compared to the proposed project. The No Project Alternative would result in substantially less demand on public services including schools, police, emergency, solid waste, fire, and water and sewer infrastructure, as development would be limited to one single-family residence compared to the proposed project's 29 residences. Therefore, the No Project Alternative would result in reduced impacts to public services and utilities compared to the proposed project, and impacts would be less than significant (Class III).

7.3.1.11 Transportation and Circulation

Impacts related to transportation and circulation that would result from the No Project Alternative would be reduced when compared to the proposed project. Under the No Project Alternative, one single-family residence would be constructed on the project site. According to the Traffic Analysis prepared for the project site by Penfield & Smith (see Appendix I-1), the proposed project would generate approximately 276 trips per weekday, with approximately 28 trips occurring in the peak hour from construction of the 29 single-family residences. In comparison, the one single-family residence developed on the project site under the No Project Alternative would generate approximately 9.5 average daily trips. Therefore, transportation and circulation impacts of under the No Project Alternative would be less than significant (Class III) and reduced compared to the proposed project.

7.3.1.12 Fire Protection

Impacts associated with fire protection that would result from the No Project Alternative would be reduced compared to the proposed project. Under the No Project Alternative, the single-family house that could be developed on the project site would have increased opportunities to construct the residence in an area further away from high fuel zones and oak trees. In addition, a larger defensible space setback could be established under the No Project Alternative to provide increased safety from fire hazards that could result from the additional open space that would be retained on the project site. In addition, the No Project Alternative would have a reduced demand on the existing fire emergency response services through the reduction of the number of units and persons located on the project site compared to the development that would occur under the proposed project. Therefore, impacts requiring mitigation (Class II) associated with wildland fires, fire safety, and

evacuation that would result from the proposed project could be reduced to a less than significant impact (Class III) under the No Project Alternative. All other impacts related to fire protection under the No Project Alternative would be less than significant (Class III) and reduced compared to the proposed project.

7.3.2 Alternative 2: Reduced Unit Alternative

The purpose of the Reduced Unit Alternative is to minimize the project's development footprint to reduce resource impacts from the project while providing single-family homes consistent with the project objectives. This alternative includes reduced roadways, ~~and~~ infrastructure footprint, ~~reduced~~ and area for homes~~, and elimination of the on-site trail~~ (Figure 7-1). Under the Reduced Unit Alternative, approximately 5.07 acres would be available for single-family lots. The project site area used for the development of residential lots would be reduced by 2.35~~2.28~~ acres in comparison to the 7.42~~7.35~~ acres that would be used by the proposed project. Approximately 20 homes are anticipated to be constructed under this alternative based on proposed project's lot sizes. Roadways would comprise approximately 0.67 acre under this alternative, which is 0.45 acre less than the proposed project's 1.12 acres of roadways. In addition, a 100-foot-wide fuel management area totaling approximately 4.75 acres~~,~~ would be established at the edge of the development area.

7.3.2.1 Aesthetics

The Reduced Unit Alternative would eliminate the units proposed to be located on the northern half of the project site, thereby reducing the overall development footprint and limiting the number of residential units to 20, which would be 9 fewer units than under the proposed project. Potential impacts associated with aesthetics and visual resources (e.g., public views, scenic resources, visual character, and light and glare) would be reduced under this alternative due to the reduction in the number of units and associated infrastructure, including streets, compared to the proposed project. This alternative would also retain a larger amount of open space on the project site than the proposed project ~~and eliminate the on-site trail included in the proposed project~~. The reduction in developed acreage of the site would reduce the acreage of chaparral habitat removal and number oak tree removals and reduce the off-site restoration area needed compared to the proposed project. Although reduced, chaparral habitat and oak tree removal would still be required under the Reduced Unit Alternative, resulting in visual impacts to the existing natural character of the site. However, compared to the proposed project, more of the aesthetic and visual value of the site would be retained, as the Reduced Unit Alternative would retain more natural, undeveloped land than the proposed project. Scenic resources visible from a designated scenic vista or roadway would not be impacted under either scenario, as there are no state- or County-designated scenic vistas or roadways in the project vicinity.

Image source: USDA FSA NAIP (flown June 2014)

0 Feet 180

Project Boundary **Reduced Unit Area**

Single Family Lots - 5.07 ac

Roadway - 0.67 ac

100-ft Fire Clearance Buffer - 4.75 ac

FIGURE 7-1

Reduced Unit Alternative

RECON

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Retaining more of the project site in its natural state than would be done under the proposed project minimizes visual degradation resulting from the conversion of undeveloped land to a developed condition and maintains more views of the Burton Mesa Ecological Reserve from the surrounding areas. The Reduced Unit Alternative would retain existing habitat contiguous to the Burton Mesa Ecological Reserve. Because this alternative still includes residential development on much of the site that would change the existing visual quality, the same mitigation measures as applied to the proposed project could be applied to the Reduced Unit Alternative to reduce visual impacts. Mitigation would ensure that the Reduced Unit Alternative would be designed consistent with County of Santa Barbara policies, regulations, and guidelines, thus maintaining aesthetic consistency with nearby development and surrounding natural character. However, this alternative would change the visual character of the majority of the project site from a semi-disturbed open space condition with scenic chaparral and oak woodland habitat to an urbanized condition with 20 single-family homes. Therefore, the aesthetic impacts of the Reduced Unit Alternative would be significant and unmitigable (Class I), similar to the impacts of the proposed project.

7.3.2.2 Air Quality

Both the Reduced Unit Alternative and proposed project would result in residential development that would have fewer units than could be developed based on the project site's General Plan land use designation, which is the basis for the growth projections of the SBCAPCD's Clean Air Plan. Therefore, emissions from both the Reduced Unit Alternative and the proposed project would fall within the projected infill residential land uses in Vandenberg Village consistent with household growth projected in the 2013 Clean Air Plan (March 2015). As such, air quality impacts associated with air quality plan consistency would be similar under both scenarios and less than significant. The use of construction equipment and work force vehicles to clear, grade, and construct 20 single-family residences under the Reduced Unit Alternative would be reduced from the equipment needed to construct the 29 single-family residences under the proposed project. The Reduced Unit Alternative would result in reduced construction emissions compared the proposed project, but impacts would be similar (less than significant (Class III). In addition to reduced air emissions associated with short-term construction, the emissions associated with long-term occupancy of fewer residences (energy consumption, landscaping equipment) would be reduced compared to the proposed project. The vehicle emissions under the Reduced Unit Alternative would also be reduced compared to emissions generated by vehicle trips generated by the 29 residences of the proposed project.

The overall construction and occupancy air quality emissions resulting from the development and occupancy of 9 fewer units in the Reduced Unit Alternative would be reduced compared to the proposed project. Therefore, the air quality impacts related to criteria pollutants, sensitive receptors, and odors from construction and occupancy under the Reduced Unit Alternative would be less than significant and reduced compared to the proposed project.

7.3.2.3 Biological Resources

The Reduced Unit Alternative would eliminate the units proposed to be located on the northern half of the project site, thereby reducing the overall development footprint and reducing the number of proposed residences to 20, which would be 9 fewer than under the proposed project. The Reduced Unit Alternative's fewer number of residences- and reduced associated infrastructure, including streets, would reduce biological impacts to special status plants, animals and wildlife habitat and important biological communities compared to the proposed project. The reduction in residences and site configuration would reduce chaparral habitat and oak tree removal impacts by preserving approximately 2.892.73 additional acres of the project site, and would provide increased buffer area for the adjacent Burton Mesa Ecological Reserve. The Reduced Unit Alternative would reduce potential impacts to four sensitive species that will require the preparation and implementation of a Habitat Conservation Plan that has been approved by the U.S. Fish and Wildlife Service. This alternative would reduce impacts to on-site coast buckwheat (*Eriogonum parvifolium)* plants, which would result in a corresponding reduction in potential impacts to El Segundo blue butterfly. The reduced development area associated with this alternative would provide an increased buffer area for the spikerush wetland in the northern portion of the site, which would reduce the potential for impacts to California red legged frog and fairy shrimp if present on the project site. The reduced development area associated with this alternative would also reduce the potential for impacts to Lompoc monkeyflower plants if present on the project site. The reduced ~~project related~~ impacts associated with this alternative would result in a corresponding reduction in the need for on- and off-site habitat restoration mitigation. However, because this alternative would include the development of 20 residences and roads within undeveloped natural habitat, biological impacts to 5.655.74 acres would still occur under the Reduced Unit Alternative. Therefore, impacts to biological resources under the Reduced Unit Alternative would be reduced compared to the proposed project but would still be potentially significant, and mitigation would be required (Class II impact).

7.3.2.4 Cultural Resources

Historical and prehistoric resources are known to exist within the project area. Therefore, future development on the project site has the potential to result in impacts to cultural or paleontological resources under both the Reduced Unit Alternative and the proposed project. The Phase I and Extended Phase I Archaeological Resources Reports prepared for the project site by Dudek identified an unlikely chance of finding subsurface cultural resources at the project site. The potential for impacts to cultural resources resulting from implementation of the Reduced Unit Alternative would be reduced when compared to the potential impacts of the proposed project because fewer residences would be developed and less land would be disturbed under this alternative. Grading, construction, and the associated infrastructure and roadways associated with the development of 29 single-family residential units under the proposed project would result in a greater potential to discover cultural resources than the Reduced Unit Alternative. Therefore, impacts to cultural resources under the Reduced Unit Alternative would be reduced compared to the proposed

project, but would remain potentially significant, and mitigation would be required (Class II impact).

7.3.2.5 Geology and Soils

Under the Reduced Unit Alternative, the project site would be developed with 9 fewer residences than would be developed by the proposed project. As with the proposed project, implementation of the Reduced Unit Alternative would have the potential to result in significant impacts related to geologic hazards; however, fewer units would be built under the Reduced Unit Alternative. As such, less development would be exposed to geological hazards associated with unstable conditions related to compressible soils, landslides, seismicity, and expansive soils at the project site. Impacts related to geology and soil conditions resulting from the implementation of the Reduced Unit Alternative would be reduced compared to impacts identified for the proposed project. Future development under both the Reduced Unit Alternative and the proposed project would be required to comply with existing federal, state, and local regulations relative to engineering and construction, which would reduce potential impacts under both scenarios. However, the Reduced Unit Alternative would have reduced geology and soil impacts, as 9 fewer residences would be exposed to potential geologic hazards compared to the 29 residential units that would be developed by the proposed project. Thus, impacts to geology and soils under the Reduced Unit Alternative would be reduced compared to the proposed project but would remain potentially significant, and mitigation would be required (Class II impact).

7.3.2.6 Greenhouse Gas Emissions

Construction of the proposed project would result in 29 single-family residences. The greenhouse gas (GHG) emissions associated with construction and occupancy of the Reduced Unit Alternative would be reduced compared to the impacts associated with the proposed project, as it would result in 9 fewer residential units. As a result, the overall GHG emissions produced from the Reduced Unit Alternative would be less than significant (Class III) and reduced compared to the proposed project as a result of the reduction of housing units and reduced number of vehicle trips generated.

7.3.2.7 Hydrology and Water Quality

More open space and undeveloped land would be preserved on the project site under the Reduced Unit Alternative than under the proposed project; therefore, the Reduced Unit Alternative would result in reduced impacts associated with hydrology, flooding, and water quality. Approximately 2.80~~2.73~~ more acres could be retained as open space under the Reduced Unit Alternative instead of being developed with residential use. Under the proposed project with 29 single-family residences, the total amount of impervious cover and the increase in runoff would be higher than the development of 20 single-family residences under the Reduced Unit Alternative. In addition, less groundwater from the Vandenberg Village Community Services District and the Lompoc Uplands Groundwater Basin would be required by the Reduced Unit Alternative than by the proposed project. Impacts associated with flooding under both scenarios would be less than significant and similar, as

the project parcel is not located in a flood zone. Future development under the proposed project and the Reduced Unit Alternative would be required to comply with existing federal, state, and local regulations relative to runoff and water quality. Nonetheless, construction involving over one acre of disturbance under County thresholds has the potential to cause significant hydrology and water quality impacts and would require mitigation (Class II). As such, hydrology and water quality impacts would be reduced under the Reduced Unit Alternative in comparison to the proposed project but would still remain Class II.

7.3.2.8 Land Use

The Reduced Unit Alternative would result in the development of 9 fewer single-family homes compared to the proposed project. The average household size for Vandenberg Village according to the 2010 U.S. Census is 2.58 persons. The proposed project would result in the development of 29 single-family residences, which would accommodate approximately 75 persons compared to the Reduced Unit Alternative, which is estimated to accommodate approximately 52 persons with buildout of 20 residential units on the project parcel. Because the project site is designated as an Urban Area and RES-12.3 in the Comprehensive Plan, which theoretically would allow development of 207 residential units, neither the Reduced Unit Alternative nor the proposed project would require a Comprehensive Plan amendment.

Neither the proposed project nor the Reduced Unit Alternative would result in the displacement of people or housing, as the project site is currently vacant. Aside from the Burton Mesa Ecological Reserve to the north and west of the project site, the surrounding land uses include single-family residences to the east and multi-family residences to the southwest. Similar to the proposed project, the Reduced Unit Alternative would result in the development of single-family residences whose architectural designs would be similar in scale to the existing houses in the surrounding neighborhood. Compared to the proposed project, land use compatibility impacts that would be result under the Reduced Unit Alternative would be similar and less than significant (Class III impact).

7.3.2.9 Noise

Noise impacts would be similar under the Reduced Unit Alternative compared to the proposed project. The proposed project would result in the construction of 29 single-family residences compared to the Reduced Unit Alternative's 20 single-family residences. While the Reduced Unit Alternative would result in fewer residential units, the construction methods and schedule would be similar to that of the proposed project. Mitigation would be required for both the proposed project and the Reduced Unit Alternative because construction would result in temporary noise level increases within 1,600 feet of sensitive receptors, and is considered a significant impact. Therefore, temporary noise impacts during construction would be similar, and both the Reduced Unit Alternative and the proposed project would result in less than significant impacts associated with temporary noise increases after mitigation is incorporated (Class II). Additionally, the project site is not located within the noise compatibility contour areas of the Lompoc Airport or

Vandenberg Air Force Base; therefore, aircraft noise impacts would also be less than significant and similar under the two alternatives.

The proposed project would not result in a significant impact associated with permanent noise from project-generated traffic or other residential noise sources (e.g., heating, ventilation, and air conditioning). The Reduced Unit Alternative would result in the development of 9 fewer residences; therefore, the permanent noise impacts under this alternative would be slightly reduced compared to the proposed project and remain less than significant.

The Reduced Unit Alternative would result in less than significant temporary noise impacts with mitigation incorporated (Class II) and less than significant permanent noise impacts (Class III). Temporary impacts would be similar to the proposed project, while permanent impacts would be reduced compared to the proposed project.

7.3.2.10 Public Services and Utilities

Development under the Reduced Unit Alternative would result in reduced impacts to public services and utilities compared to the proposed project. The Reduced Unit Alternative would result in a slightly reduced demand on public services including schools, police, emergency, solid waste, fire, and water and sewer infrastructure, as this alternative would have 9 fewer single-family residences. The proposed project would add 29 single-family residences to the community, which would have an increased demand on existing public services' and utilities' capacity and service ratios. Therefore, impacts associated with public services and utilities under the Reduced Unit Alternative would be less than significant (Class III) and reduced compared to the proposed project.

7.3.2.11 Transportation and Circulation

Impacts related to transportation and circulation from the Reduced Unit Alternative would be reduced compared to the impacts of the proposed project. Under the Reduced Unit Alternative, 9 fewer single-family residences would be constructed on the project site. According to the Traffic Analysis prepared for the project site by Penfield & Smith (see Appendix I-1), the proposed project's 29 single-family residences would generate approximately 276 trips per weekday, with approximately 28 trips occurring in the peak hour. The Reduced Unit Alternative would generate fewer vehicle trips than the proposed project due to the reduced number of residences on the project site. Impacts to transportation and circulation under the Reduced Unit Alternative would be less than significant (Class III) and reduced compared to the proposed project. However, depending on the location and aspect of the main driveway, MM TRAF-1 would still be required for the Reduced Unit Alternative, and less than significant impacts (Class II) associated with traffic hazards would result, similar to the project.

7.3.2.12 Fire Protection

Impacts associated with fire protection from the Reduced Unit Alternative would be reduced compared to the proposed project. The Reduced Unit Alternative would result in 20 single-family houses on the project site, which could allow for an increase in the distance from the structures, high fuel zones, and oak trees on the project site compared to the proposed project. In addition, the Reduced Unit Alternative would have a reduced demand for fire emergency response services resulting from the reduction of 9 residential units and 52 residents compared to the proposed project with 29 units and 75 residents. However, the project site's location at an urban–wildland interface would pose a wildfire risk even with the reduction in residential units. Therefore, impacts related to fire protection under the Reduced Unit Alternative would still be potentially significant requiring mitigation (Class II), but would be reduced compared to the proposed project.

7.3.3 Alternative 3: Clustered ~~Project~~Unit Alternative

The purpose of the Clustered ~~Project~~Unit Alternative is to reduce the project's overall development footprint and scale, and to minimize or avoid resource impacts that would result from the implementation of the proposed project. The Clustered ~~Project~~Unit Alternative would provide 29 condominiums or townhomes clustered onto two areas of the project site. This alternative design would retain additional open space area on the project site. Under this alternative~~, the on-site trail would be eliminated and~~ Road A would become a cul-de-sac (Figure 7-2). This alternative would use approximately 4.91 acres for condominium/townhome development, a reduction of approximately 2.51~~2.44~~ acres compared to the area used for residential development by the proposed project. This alternative would use approximately 0.49 acre for roadways, which would be approximately 0.63 acre less than would be used by the proposed project for road construction. Under this alternative, approximately 5.27 acres would be used to provide a 100-foot-wide fuel management area. The Clustered ~~Project~~Unit Alternative would result in residential and roadway development on approximately 5.4 acres of the project site, compared to 8.54~~8.47~~ acres of residence and roadway development that would occur if the proposed project were implemented.

7.3.3.1 Aesthetics and Visual Resources

Potential impacts associated with aesthetics and visual resources (public views, scenic resources, visual character, and light and glare) would be reduced under the Clustered ~~Project~~Unit Alternative due to a reduction of 3.07 acres of impact area compared to the proposed project, which involves 8.47 acres of residential development, including infrastructure ~~with~~ and streets~~ and open space with a formal trail~~. While the Clustered ~~Project~~Unit Alternative would still result in visual impacts associated with the removal of 5.4 acres of chaparral habitat and oak trees, more of the on-site open space would be retained, particularly along the western portion of the project site, and the need for off-site restoration would be reduced. Scenic resources visible from a designated scenic vista or roadway would not be impacted by the proposed project or the Clustered ~~Project~~Unit

Image source: USDA FSA NAIP (flown June 2014)

Project Boundary **Clustered Unit Area**

Clustered Condos - 4.91 ac

Roadway - 0.49 ac

100-ft Fire Clearance Buffer - 5.27 ac

0 Feet 180

FIGURE 7-2

Clustered Unit Alternative

RECON

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Alternative, as there are no state- or County-designated scenic vistas or roadways in the project vicinity.

The Clustered ~~Project~~Unit Alternative would result in development on approximately 3.14~~3.07~~ fewer acres of the project site compared to the proposed project, thereby reducing overall housing development on vacant land compared to the project. As such, more of the existing on-site open space would be retained and would remain visible from public roadways and surrounding areas. Therefore, the proposed project's significant (Class I) aesthetics impact resulting from the removal of approximately 74 oaks and removal of up to 6.92~~7.28~~ acres of maritime chaparral habitat could be reduced to a total of 5.74~~5.4~~ acres. Increasing on-site retention of habitat by 3.14~~3.07~~ acres would also increase the viability of on-site restoration by ~~keeping~~ retaining habitat on the fringe of the project and adjacent to the Burton Mesa Ecological Reserve~~. out of fire management zones.~~ It would also reduce visual impacts by moving developed areas away from areas with the most existing tree and chaparral growth. The implementation of the Clustered ~~Project~~Unit Alternative would reduce the removal of trees but would still remain significant and unmitigable (Class I) by changing the visual character of the site similar to changes that would result from the implementation of the proposed project.

7.3.3.2 Air Quality

The use of construction equipment and work force vehicles to clear, grade, and construct residences under the Clustered ~~Project~~ Unit Alternative would be slightly reduced compared to that needed to construct the 29 single-family residences proposed by the project. Implementation of the Clustered ~~Project~~ Unit Alternative would result in less than significant (Class III) short-term air quality emissions from construction, similar to the proposed project. However, the emissions associated with long-term occupancy of 29 residences (energy consumption, odors, landscaping equipment) with implementation of the Clustered ~~Project~~ Unit Alternative would be similar to the emissions from the 29 single-family residences under the proposed project, as the number of units would be the same. The vehicle emissions under the Clustered ~~Project~~ Unit Alternative's denser development of 29 condominiums or townhomes would also be similar to 29 single-family residences under the proposed project. As such, the anticipated population from buildout under the two scenarios would be similar.

Emissions from the 29 residential unit Clustered ~~Project~~Unit Alternative and the 29 single-family homes in the proposed project would be similar and fall within the projected infill residential land uses in Vandenberg Village consistent with household growth projected in in the 2013 Clean Air Plan (March 2015). The overall construction and occupancy air quality effects of the clustered units would generally be similar to the emissions of the proposed project. Therefore, the overall air quality impacts related to criteria pollutants, sensitive receptors, and odors from construction and occupancy under the Clustered ~~Project~~ Unit Alternative would be less than significant (Class III) and similar to the proposed project.

7.3.3.3 Biological Resources

The Clustered ~~Project~~Unit Alternative would facilitate the development of 29 condominiums or townhomes on both sides of the project site's central ephemeral drainage. Approximately 3.14~~3.07~~ acres of the project site's open space and habitat would be retained under the Clustered ~~Project~~Unit Alternative compared to the proposed project. The Clustered ~~Project~~Unit Alternative would facilitate increased buffer distance between on-site residences and the Burton Mesa Ecological Reserve by retaining additional open space and habitat, thereby reducing edge effects and the need for off-site restoration. The Clustered Unit Alternative would reduce potential impacts to sensitive species that will require the preparation and implementation of a Habitat Conservation Plan that has been approved by the USFWS. This alternative would reduce impacts to on-site coast buckwheat (*Eriogonum parvifolium)* plants, which would result in a corresponding reduction in potential impacts to El Segundo blue butterfly. The development area associated with this alternative as depicted on Figure 7-2 would provide a buffer area for the spikerush wetland in the northern portion of the site that is generally similar to the buffer that would be provided by the proposed project. Therefore, the potential for impacts to California red legged frog and fairy shrimp if present on the project site would likely be similar to the impacts of the proposed project. The reduced development area associated with this alternative would also reduce the potential for impacts to Lompoc monkeyflower plants if present on the project site. Therefore, impacts associated with biological resources under the Clustered ~~Project~~Unit Alternative would be reduced compared to the proposed project but would remain potentially significant, requiring mitigation (Class II impact).

7.3.3.4 Cultural Resources

Historical and prehistoric resources are known to exist within the project area. Therefore, future development on the project site has the potential to result in impacts to cultural or paleontological resources under both the Clustered ~~Project~~Unit Alternative and the proposed project. The Phase I and Extended Phase I Archaeological Resources Reports prepared for the project site by Dudek identified an unlikely chance of finding subsurface cultural resources at the project site. Similar to the proposed project, implementing the Clustered ~~Project~~Unit Alternative would have the potential to unearth previously unidentified subsurface archaeological resources resulting in a potentially significant and mitigated impact (Class II impact).

7.3.3.5 Geology and Soils

Under the Clustered ~~Project~~Unit Alternative, the site would be developed with 29 condominiums or townhomes compared to the proposed project's 29 single-family residences. Similar to the proposed project, implementation of the Clustered ~~Project~~Unit Alternative would have the potential to result in significant impacts from geologic hazards related to compressible soils, landslides, seismicity (faults), and expansive soils at the project site. Impacts to geology and soils resulting from the implementation of the Clustered ~~Project~~Unit Alternative could be reduced compared to the proposed project because development would occur on 3.14~~3.07~~ fewer acres of the project site; however, the

Clustered ~~Project~~Unit Alternative would include the same number of residences as the proposed project and therefore expose a similar number of persons to the geologic hazards that may affect the project site. Future development under both the Clustered ~~Project~~Unit Alternative and the proposed project would be required to comply with existing federal, state, and local regulations relative to engineering and construction, which would reduce potential impacts under both scenarios. Thus, similar to the proposed project, the Clustered ~~Project~~Unit Alternative would have potentially significant but mitigable (Class II) geologic hazards impacts.

7.3.3.6 Greenhouse Gas Emissions

Construction of the proposed project would result in the buildout of 29 single-family residences. The GHG emissions associated with construction and occupancy of the 29-unit condominiums or townhomes of the Clustered ~~Project~~Unit Alternative would be similar to those associated with the proposed project. As a result, the overall GHG emissions impact produced by the Clustered ~~Project~~Unit Alternative would be less than significant (Class III) and similar to the emissions impact of the proposed project.

7.3.3.7 Hydrology and Water Quality

The Clustered ~~Project~~Unit Alternative would consist of the same number of residential units but have reduced water demand compared to the proposed project's larger landscaped lots and single-family homes. The Clustered ~~Project~~Unit Alternative would be subject to similar water conservation requirements as the proposed project. As a result, the Clustered ~~Project~~Unit Alternative would have a reduced demand for water supply and groundwater resources from the Vandenberg Community Services District and the Lompoc Uplands groundwater basin.

Runoff from the Clustered ~~Project~~Unit Alternative would be reduced compared to the proposed project due to the 3.14~~3.07~~ additional acres of open space that would be retained. Although the Clustered ~~Project~~Unit Alternative would result in a reduced development footprint and reduced impervious surfaces compared to the proposed project, it would result in similar impacts associated with hydrology, flooding, and water quality. Future development under the proposed project and the Clustered ~~Project~~Unit Alternative would be required to comply with existing federal, state, and local regulations relative to runoff and water quality. Construction involving over one acre of disturbance under County thresholds has the potential to cause significant hydrology and water quality impacts and would require mitigation (Class II). As such, hydrology and water quality impacts would be reduced under the Clustered ~~Project~~Unit Alternative in comparison to the proposed project but would remain Class II.

7.3.3.8 Land Use

Buildout under the Clustered ~~Project~~Unit Alternative would result in the development of 29 condominiums or townhomes compared to the 29 single-family residences of the proposed project. The average household size for Vandenberg Village according to the

2010 U.S. Census is 2.58 persons. Buildout of the proposed project and the Clustered ~~Project~~Unit Alternative would result in a similar intensity of land use with 29 residences that would accommodate approximately 75 persons. Because the project site is designated as an Urban Area and RES-12.3 in the Comprehensive Plan, which theoretically would allow development of 207 residential units, neither the Clustered ~~Project~~Unit Alternative nor the proposed project would require a Comprehensive Plan amendment.

Neither the proposed project nor the Clustered ~~Project~~Unit Alternative would result in the displacement of people or housing, as the project parcel is currently vacant. Aside from the Burton Mesa Ecological Reserve to the north and west of the project site, the surrounding land uses include single-family residences to the east and multi-family residences to the southwest. The Clustered ~~Project~~Unit Alternative would result in the development of multi-family residences whose architectural designs would be similar in scale to the existing houses in the surrounding neighborhood. By conforming to the scale of the adjacent neighborhood, the Clustered ~~Project~~Unit Alternative would be consistent with the neighborhood located near the project site. Therefore, impacts of this alternative would be less than significant (Class III) and similar to the impacts of the proposed project.

7.3.3.9 Noise

Impacts associated with noise would be similar under the Clustered ~~Project~~Unit Alternative and the proposed project. The proposed project would result in the construction of 29 single-family residences compared to the Clustered ~~Project~~Unit Alternative's 29 condominiums or townhomes. Therefore, the Clustered ~~Project~~Unit Alternative would introduce similar temporary and permanent noise impacts to the surrounding area but in a condensed project area during and following construction compared to the proposed project. Operational noise generated by the proposed project and Clustered ~~Project~~Unit Alternative would be similar and less than significant, since neither scenario would include substantial noise, groundborne noise, and vibration sources. Impacts from aircraft noise would be less than significant and similar under this alternative and the proposed project, as the project site is located outside the noise compatibility contour from the Lompoc Airport and Vandenberg Air Force Base. Overall, similar construction and off-site noise sources would occur under the Clustered ~~Project~~Unit Alternative and the proposed project. Therefore, impacts associated with noise under the Clustered ~~Project~~Unit Alternative would be less than significant (Class III) and similar to the proposed project.

7.3.3.10 Public Services and Utilities

Development under the Clustered ~~Project~~Unit Alternative would result in impacts to public services and utilities that are similar to those of the proposed project. The Clustered ~~Project~~Unit Alternative would result in the same number of housing units and approximately the same number of residents as the proposed project. Therefore, the Clustered ~~Project~~Unit Alternative and proposed project would place similar demand on public services including schools, police, emergency, solid waste, fire capacity as well as water and sewer infrastructure and capacity. As such, impacts associated with public

services and utilities under the Clustered ~~Project~~Unit Alternative would be less than significant (Class III) and similar to the proposed project.

7.3.3.11 Transportation and Circulation

Impacts related to transportation and circulation resulting from the Clustered ~~Project~~Unit Alternative would be similar to the impacts of the proposed project. The Clustered ~~Project~~Unit Alternative would be developed on a reduced area of the project site but with the same number of housing units (29 townhomes/condominiums) as the proposed project. According to the Traffic Analysis prepared for the project site by Penfield & Smith (see Appendix I-1), the proposed project would generate approximately 276 trips per weekday, with approximately 28 trips occurring in the peak hour. Under the Clustered ~~Project~~Unit Alternative, traffic generation characteristics and associated impacts would be similar to the proposed project as both the project and this alterative would have the same number of residential units. Therefore, impacts to transportation and circulation under the Clustered ~~Project~~Unit Alternative would be less than significant (Class III) and similar to the proposed project.

7.3.3.12 Fire Protection

Impacts associated with fire protection from the Clustered ~~Project~~Unit Alternative would be reduced compared to the proposed project. Under the Clustered ~~Project~~Unit Alternative, the reduced development footprint would provide additional area to create and maintain fuel management zones. ~~Therefore,~~ Impacts ~~related to fire protection under the Clustered Project Alternative~~ would still be ~~potentially~~ less than significant ~~requiring mitigation~~ (Class III), ~~but would be reduced~~ similar compared to the proposed project. Impacts related to fire protection under the Clustered Unit Alternative with measures FP MM-1 and FP MM-2 implemented would still be potentially significant (Class II) but would be reduced compared to the proposed project.

7.4 Environmentally Superior Alternative

CEQA Guidelines Section 15126.6(e)(2) requires an EIR to identify the environmentally superior alternative. As discussed in Section 7.3.1 and shown in Table 7-1, the No Project Alternative would substantially reduce impacts when compared to the proposed project and other alternatives. However, as required by CEQA, if the No Project Alternative is the environmentally superior alternative, the EIR must identify an environmentally superior alternative from the other alternatives. In addition, the project itself may not be identified as the environmentally superior alternative.

The Reduced Unit Alternative is considered the environmentally superior alternative, because it would reduce significant impacts associated with air quality, biological resources, cultural resources, geology, hydrology and water quality, noise, and fire protection compared to the proposed project (refer to Table 7-1). Aesthetics impacts would remain significant and unavoidable for the proposed project under all project scenarios except for the No Project Alternative. The Clustered ~~Project~~Unit Alternative would have a reduced

development area compared to both the proposed project and Reduced Unit Alternative but would have more impacts that are similar to the proposed project's, as shown in Table 7-1.

The Reduced Unit Alternative would reduce impacts by reducing the number of residences on the project site by approximately 9 units and by siting the housing lots further away from the Burton Mesa Ecological Reserve compared to the proposed project. The Reduced Unit Alternative would preserve more of the scenic quality of the project site while also reducing impacts to biological resources and habitat. Further, the Reduced Unit Alternative would develop the site in a manner that implements the project objectives to be consistent with the County's General Plan and environmental requirements; complements the physical characteristics of the site; and preserves a significant component of the site as permanent open space designed to protect natural habitat. The Reduced Unit Alternative is also consistent with project objectives to design and provide desirable housing at densities that are compatible with existing neighborhoods and the adjacent Burton Mesa Ecological Reserve. The Reduced Unit Alternative is also consistent with implementing the project objective to encourage connectivity inside and adjacent to the project, ~~linking the community with walking trails,~~ and providing access to the adjacent Village Country Club property. Therefore, implementation of the Reduced Unit Alternative would meet all of the project's objectives in a manner that is consistent with the County's Comprehensive Plan while preserving more habitat and open space than the proposed project.

In conclusion, the Reduced Unit Alternative is considered the environmentally superior alternative, because it would result in more reduced impacts compared to the proposed project than the Clustered ~~Project~~Unit Alternative and still meets the project's objectives.

Chapter 8.0
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Chapter 9.0
Agencies Consulted

The following section includes a list of persons and agencies consulted in the preparation of this Environmental Impact Report.

California Department of Fish and Wildlife

- Mary Meyer, Senior Environmental Scientist
- Betty Courtney, Environmental Program Manager I

County of Santa Barbara

Planning and Development Department

- Zoraida Abresch, Supervising Planner
- John Zorovich, Supervising Planner
- Joyce Gerber, Senior Planner/Archaeologist
- Dana Eady, Senior Planner
- Analise Merlo, Senior Planner
- Steve Rodriguez, Project Manager

Public Works Department, Project Clean Water

- Cathleen Garnand, Civil Engineering Associate

Fire Department

- Fred Tan, Captain
- Michael Moore, Engineer
- Glenn Fidler, Captain

Sheriff's Office

- Shawn O'Grady, Lieutenant

Santa Barbara County Air Pollution Control District

- Krista Nightingale, Air Quality Specialist

United States Fish and Wildlife Service

- Heather Tipton, Staff Biologist
- Kendra Chan, Staff Biologist

Vandenberg Village Community Services District

- Joe Barget, General Manager
- Cynthia Allen, Administrative Services Manager

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Chapter 10
List of Preparers

This document has been completed by the County of Santa Barbara Planning Department and is based on independent analysis and determinations made pursuant to CEQA. A list of contributing County and consultant, team staff members, their titles and affiliations, is provided below.

County of Santa Barbara

- Steve Rodriguez, Project Manager
- John Zorovich, Supervising Planner
- Zoraida Abresch, Supervising Planner
- Joyce Gerber, Senior Planner/Archaeologist
- Dana Eady, Senior Planner

RECON Environmental, Inc.

- Lee Sherwood, Principal
- Bret McNulty, Project Manager
- Valerie Mattos, Environmental Planner
- Lori Woods, Visual Analyst/Landscape Architect
- Bill Maddux, Senior Air Quality Specialist
- Susy Morales, Environmental Planner
- Jesse Fleming, Environmental Analyst
- Jack Emerson, Environmental Analyst
- Lauren Kahal, Environmental Specialist
- Kristina Phung, Research Assistant
- Gerry Scheid, Senior Biologist, Peer Review
- Tim Buonaccorsi, Senior Botanist
- Richard Shultz, Senior Archaeologist
- Stacey Higgins, Senior Production Specialist
- Eija Blocker, Production Specialist
- Frank McDermott, GIS Manager
- Sean Bohac, GIS Specialist
- Chris Nixon, Graphics

Fugro Consultants, Inc.

Geotechnical Peer Review

- Gregory S. Denlinger, G.E., Principal Geotechnical Engineer

Associated Transportation Engineers

Traffic and Circulation Study Peer Review

- Scott A. Schell, Principal Transportation Planner

Rick Engineering Company

Drainage Peer Review

- Cristi E. Fry, Principal Project Manager

11

Chapter 11.0
Letters of Comment and Responses

This chapter was added after the Revised Public Review Draft EIR, but is not underlined as new text.

Letters of comment on the content of the public review Draft EIR and Revised Draft EIR were received from the following agencies, organizations, and individuals. Several comment letters received during the Draft EIR public review period contained revisions that resulted in changes to the Final EIR text. Revisions to the Draft EIR are intended to correct minor discrepancies and provide additional clarification. The changes to the Draft EIR text are indicated by ~~strike-out~~ (deleted) and underline (inserted) markings. For clarity, double strikeout and underline text (~~strikeout~~/underline) has been used to identify changes to the Revised Draft EIR in this Final EIR. The letters of comment and responses follow.

FIRST PUBLIC REVIEW DRAFT (Released February 2, 2017)

Agencies and Organizations

A State Clearinghouse and Planning Unit RTC-2
B U.S. Fish and Wildlife Service RTC-4
C California Department of Fish and Wildlife RTC-11
D Native American Heritage Commission RTC-34
E Central Coast Regional Water Quality Board RTC-40
F Vandenberg Village Community Services District RTC-43
G Urban Planning Concepts, Inc. RTC-47

Individuals

H Picciuolo, Jon RTC-66

REVISED PUBLIC REVIEW DRAFT (Recirculated July 11, 2017)

Organizations

I Urban Planning Concepts, Inc. RTC-67
J Rincon Consultants, Inc. RTC-79

Individuals

K Littlejohn, Charles RTC-83

Letter A

STATE OF CALIFORNIA
GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

March 20, 2017

Steve Rodriguez
Santa Barbara County Planning and Development
624 W. Foster Rd., Suite C
Santa Maria, CA 93455-3623

Subject: Oak Hills Estate Tentative Tract Map, Rezone, and Development Plan
SCH#: 2015111069

Dear Steve Rodriguez:

A-1

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on March 17, 2017, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

A-1 The comment acknowledges that the EIR complied with the State Clearinghouse review requirements pursuant to CEQA. No further response is required.

Document Details Report
State Clearinghouse Data Base

SCH# 2015111069
Project Title Oak Hills Estate Tentative Tract Map, Rezone, and Development Plan
Lead Agency Santa Barbara County

Type EIR Draft EIR

Description The project is a request for entitlements for the proposed Oak Hills Estate Subdivision project from the county of Santa Barbara Planning and development department. The applicant is seeking approval of (1) a rezone to change the zoning on the project parcel from RR-10 (residential ranchette, 1 unit per 10 acres) to DR-1.8 (Design residential, 1.8 units per acre); (2) a vesting tentative tract map to subdivide an existing vacant 16.88 acre parcel into 30 parcels, including 29 single family lots and 1 common open space lot; and (3) a development plan to develop 29 single family residential units. The project also includes the proposed Oak Hills Estate Open Space Management Plan for management of common areas and habitat on the project site to be maintained by a Homeowners Association as well as the Oak Hill Estate Guidelines that would establish standards for the future development of single family residences on the project site.

Lead Agency Contact

Name Steve Rodriguez
Agency Santa Barbara County Planning and Development
Phone 805-568-2000 **Fax**
email
Address 624 W. Foster Rd., Suite C
City Santa Maria **State** CA **Zip** 93455-3623

Project Location

County Santa Barbara
City Lompoc
Region
Lat / Long 34.718677° N / 120.460985° W
Cross Streets Oak Hill Road
Parcel No. 097-371-010
Township **Range** **Section** **Base**

Proximity to:

Highways SR 1
Airports
Railways
Waterways
Schools Cabrillo High School, Maple HS, Buena Vista ES
Land Use RR-10

Project Issues Drainage/Absorption; Air Quality; Archaeologic-Historic; Biological Resources; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Noise; Public Services; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Growth Inducing; Landuse; Cumulative Effects; Other Issues

Reviewing Agencies Resources Agency; Department of Fish and Wildlife, Region 5; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 5; Regional Water Quality Control Board, Region 3; Native American Heritage Commission

Date Received 02/01/2017 **Start of Review** 02/01/2017 **End of Review** 03/17/2017

Note: Blanks in data fields result from insufficient information provided by lead agency.

Letter B

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93003

IN REPLY REFER TO:
08EVEN00-2017-CPA-0070

March 24, 2017

Steve Rodriguez
County of Santa Barbara
Planning and Development Department
624 W. Foster Road, Suite C
Santa Maria, California 93455

Subject: Comments on the Oak Hills Estate in Unincorporated Vandenberg Village, Santa Barbara County, California

Dear Mr. Rodriguez:

B-1 The U.S. Fish and Wildlife Service (Service) recently became aware of the proposed Oak Hills Estate project and Santa Barbara County's draft Environmental Impact Report (EIR) for the project. The proposed project involves the request for the approval of a rezone, vesting tentative tract map, and a development plan to develop an existing 16.88-acre parcel with 29 single-family residential units and one open space lot. The proposed project site is located along the north side of Oak Hills Drive between Stanford Circle and Doral Drive, adjacent to the Burton Mesa Ecological Reserve, in the unincorporated Vandenberg Village area in Santa Barbara, California (Parcel Number 097-371-010). The proposed project site is within the range of the federally endangered El Segundo blue butterfly (*Euphilotes battoides allyni*) and Vandenberg monkeyflower (*Mimulus fremontii* var. *vandenbergensis*), and the federally threatened California red-legged frog (*Rana draytonii*) and vernal pool fairy shrimp (*Branchinecta lynchi*).

B-2 The Endangered Species Act of 1973, as amended (16 U.S.C. §1538; Act) prohibits the unpermitted "take" of listed species (16 U.S.C. 1538(a)(1)(B)). "Take" means to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" (16 U.S.C. 1532(19)). "Harm" means "an act which actually kills or injures wildlife, including acts causing significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering" (50 Code of Federal Regulations (CFR) 17.4). Take may be authorized by permit (16 U.S.C. 1539) or through consultation between the U.S. Fish and Wildlife Service (Service) and a Federal agency authorizing, funding, or permitting an action (16 U.S.C. 1536). Violations of the Act can result in civil penalties of up to $25,000 per violation or criminal penalties of up to $100,000 and a year of imprisonment.

B-3 Exemptions to the prohibitions against take in the Act may be obtained through coordination with the Service in two ways. If a project is to be funded, authorized, or carried out by a Federal agency and may affect a listed species, the Federal agency must consult with the Service,

B-1 This is an introductory comment.

B-2 This comment provides details regarding the Endangered Species Act (ESA) and does not comment on the EIR.

B-3 This comment provides information on how to obtain exemptions to the ESA and does not comment on the EIR.

pursuant to section 7(a)(2) of the Act. If the proposed project does not involve a Federal agency, but may result in the take of a listed animal species, the project proponent should apply to the Service for an incidental take permit, pursuant to section 10(a)(1)(B) of the Act. To qualify for the permit, the project proponent would need to submit an application to the Service along with a habitat conservation plan (HCP) that describes, among other things, how the impacts of the proposed taking of federally listed species would be minimized and mitigated and how the plan would be funded. A complete description of the requirements for a HCP can be found at 50 CFR 17.32 or our website (http://www.fws.gov/ventura).

B-4

The proposed project area includes suitable habitat for El Segundo blue butterfly, California red-legged frog, vernal pool fairy shrimp, and Vandenberg monkeyflower. The project area is known to be occupied by El Segundo blue butterfly based on on-site observations made in 2012 (Tetra Tech Inc. and Pratt 2012) and in 2016 (ManTech SRS Technologies, Inc. 2017). In addition, California red-legged frogs are known to occur in Santa Lucia Canyon, approximately 1.5 miles to the west of the project site, and may use the project area for dispersal and sheltering. As the project's Biological Resources Assessment (Appendix D-1 of the EIR) indicates, vernal pool fairy shrimp may also occur in a wetland on the project area; however, focused surveys for the species have not yet been conducted. Lastly, while focused plant surveys conducted in 2014 did not detect Vandenberg monkeyflower within the project area, occupancy of sites can vary from year-to-year and may have been negatively affected by drought conditions at the time of the survey.

B-5

The Service anticipates the proposed project would result in take of El Segundo blue butterfly and California red-legged frog, and believes additional information (e.g., surveys) are needed to assess potential direct or indirect impacts to vernal pool fairy shrimp and Vandenberg monkeyflower. Although the project may be authorized by the County's approval process upon implementation of avoidance and minimization measures, the project is nonetheless subject to the Act when there is a likelihood of impacts to federally listed species. Accordingly, any take of listed species that could result from the proposed project would require exemption pursuant to Section 7 or authorization pursuant to Section 10 of the Act, despite incorporation of any mitigation measures developed pursuant to the California Environmental Quality Act.

In addition, aerial imagery of the project area indicates that ground disturbing activities have occurred in recent years, including bulldozed access routes shown on January 2015 imagery which correspond to soil test pits identified in the project's Geotechnical Investigation (Appendix F-1 of the EIR). Ground disturbing activities on the property have likely caused and would continue to cause the take of the federally listed El Segundo blue butterfly and California red-legged frog, and thus be in violation of the Act, as described above; other state and federal agencies may have additional concerns with the activity. By this letter, we recommend all ground disturbance activities on the property be stopped until an assessment can be made regarding the effects to federally listed species.

B-6

The Service would like to help you make informed decisions about future uses of your property and to ensure you are aware of the potential for liability associated with un-permitted "take" of

B-4 This comment regards suitable habitat for El Segundo blue butterfly, California red-legged frog, vernal pool fairy shrimp, and Vandenberg monkeyflower within the project area. The comment states that the project would result in take of El Segundo blue butterfly and California red-legged frog, and that additional information is needed to assess potential direct or indirect impacts to vernal pool fairy shrimp and Vandenberg monkeyflower. Please see responses associated with each species under the appropriate headings below.

<u>El Segundo Blue Butterfly</u>

To address the USFWS comment regarding potential take of El Segundo blue butterfly, the impact assessment in Chapter 4.3, Biological Resources has been revised and the EIR was recirculated for a second public review to disclose impacts to this federally endangered species and its habitat. The Applicant must obtain USFWS approval of an Incidental Take permit and Habitat Conservation Plan pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act. To ensure the appropriate regulatory processes are followed, **MM BIO-1.13** requires that the Applicant obtain these necessary permits/approvals from USFWS prior to the County's issuance of any grading permit. **MM BIO-1.13** also specifies avoidance of the El Segundo blue butterfly host plant (*Eriogonum parvifolium*) and grading avoidance during all life stages of the El Segundo blue butterfly (particularly during the adult flight season). Avoidance measures would require that a County-approved biologist conduct pre-construction surveys for all life stages of the El Segundo blue butterfly one week prior to grading. With the implementation of **MM BIO-1.13** and the requirements included in a USFWS approved Habitat Conservation Plan, Impact BIO-1 would be mitigated to a less than significant level for the El Segundo blue butterfly (Class II impact).

B-4 (cont)

California Red-Legged Frog

To address the USFWS comment regarding potential take of the California red-legged frog, the impact assessment in Chapter 4.3, Biological Resources has added additional information from the Rincon 2017 Biological Resources Assessment (Appendix D-1). The USFWS identified the project site as containing suitable habitat for the California red-legged frog because the species occurs 1.5 miles west of the project site in Santa Lucia Canyon and may use the site for dispersal and sheltering. According to the Rincon Biological Resources Assessment, the project site does not provide suitable breeding habitat. The Biological Resources Assessment also concluded that the off-site occurrences and the site are not located along a path to other suitable aquatic habitat in the area (the species requires slow-moving streams, ponds, etc., with dense vegetation cover providing shade over water surface) and that the site is not conducive to long-term occupation because of moisture constraints. However, to address the USFWS's comments regarding potential take of the California red-legged frog, the impact assessment in Chapter 4.3 has been revised to disclose potential impacts to this federally threatened species and its habitat. The Applicant must obtain USFWS approval of an Incidental Take permit and Habitat Conservation Plan pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act. To ensure the appropriate regulatory processes are followed, **MM BIO-1.14** requires that the Applicant obtain these necessary permits/approvals from USFWS prior to the County's issuance of any grading permit. With the implementation of **MM BIO-1.14** and the requirements included in a USFWS approved Habitat Conservation Plan, Impact BIO-1 would be mitigated to a less than significant level for the California red-legged frog (Class II impact).

Vernal Pool Fairy Shrimp

To address the USFWS comment regarding the potential for vernal pool fairy shrimp located on the project site, the Applicant has changed the project design by removing a previously proposed trail from the project and adjusted the fuel management zones so that the first 30 feet of vegetation management are located on the proposed individual residential lots. As shown in Chapter 4.3 Biological

B-4 (cont)

Resources (Table 4.3-6), no direct impacts to spikerush emergent wetland habitat would occur. However, indirect impacts may occur, because 0.01 acre (decreased from 0.02 acre) is located within a required vegetation management area (FMZ-2).

To address the USFWS comment regarding potential take of vernal pool fairy shrimp, the impact assessment in Chapter 4.3 has been revised to disclose potential impacts to this federally threatened species and its habitat (Impact BIO-1). A meeting was held between USFWS, the County of Santa Barbara Fire Department, and the Applicant/Applicant's consultant (Rincon) regarding measures that would avoid impacts to the spikerush emergent wetland that is located in the 30- to 100-foot fire clearing zone (FMZ-2). During this meeting on August 17, 2017, it was determined that protective fencing and signs (stating to keep out of the vernal pool) would be placed between the spikerush emergent wetland and the proposed development (specifically located at a lower elevation on the development side of the topographical divide). With the implementation of avoidance criteria approved by the USFWS and the Fire Department, fuel management impacts to the potentially occurring vernal pool fairy shrimp would be less than significant. Specific avoidance criteria are summarized in **MM FP-2** and **MM BIO-2.1**. If avoidance measures required by the USFWS cannot be achieved on the project site, Impact BIO-1 would be mitigated to a less than significant level for the vernal pool fairy shrimp with implementation of **MM BIO-1.12** and the requirements included in a USFWS approved Incidental Take Permit and Habitat Conservation Plan (Class II impact).

<u>Vandenberg Monkeyflower</u>

To address USFWS comment on the potential for Vandenberg monkeyflower take, focused plant surveys were conducted in the spring of 2014 and 2017. As noted in Chapter 4.3 and Rincon's Biological Resources Assessment, focused surveys determined that this species was not observed on the project site at the time when this species was confirmed in flower at reference sites in the region. Despite the potentially suitable habitat on-site, focused plant surveys during a particularly wet year in 2017 confirmed that the species has a low potential for occurrence.

B-4 (cont)

However, the impact assessment in Chapter 4.3 has been revised to disclose potential impacts to this federally endangered species. The Applicant must obtain USFWS approval, of an Incidental Take permit and Habitat Conservation Plan pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act. To ensure the appropriate regulatory processes are followed, **MM BIO-1.15** requires that the Applicant obtain these necessary permits/approvals from USFWS prior to the County's issuance of any grading permit. With the implementation of **MM BIO-1.15** and the requirements included in a USFWS approved Incidental Take Permit and Habitat Conservation Plan, Impact BIO-1 would be mitigated to a less than significant level for the Vandenberg monkeyflower (Class II impact).

B-5 The Applicant has been made aware of the requirements of the federal ESA. A discussion of the applicability of Section 10 of the ESA to the project has been added to the EIR. U.S. Fish and Wildlife Service (USFWS) approval of a Section 10 Incidental Take Permit and Habitat Conservation Plan (HCP) will be obtained for El Segundo blue butterfly, California red-legged frog, and Vandenberg monkeyflower prior to issuance of any grading permit for the project and may be required for vernal pool fairy shrimp if adequate avoidance measures cannot be implemented on the project site. See response B-4 for species specific changes that were made to the EIR in response to this comment.

B-6 This comment requests that the Applicant contact the USFWS for consultation regarding liability associated with the un-permitted take of endangered species. The Applicant has been made aware of the requirements of the federal ESA. A discussion of the applicability of Section 10 of the ESA to the project has been added to the EIR. USFWS approval (of a Section 10 Incidental Take Permit and HCP) will be obtained for El Segundo blue butterfly, California red-legged frog, and Vandenberg monkeyflower prior to issuance of any grading permit for the project and may be required for vernal pool fairy shrimp if adequate avoidance measures cannot be implemented on the project site. See response B-4 for species specific changes that were made to the EIR in response to this comment.

endangered wildlife, including take related to habitat alteration. Please contact the Service to arrange a meeting to discuss these issues further. As noted above, an assessment of the property should be done to determine the effects of the ground disturbance activity on federally-listed species. The Service is also available to discuss its permitting processes to authorize future incidental take of listed species.

B-7 Please contact Heather Tipton of my staff at (805) 677-3266 or Heather_Tipton@fws.gov if you have questions regarding this letter.

Sincerely,

Stephen P. Henry
Field Supervisor

cc:
Gary Blake, Oak Hills Estate LLC
David Swenk, Urban Planning Concepts, Inc.
John Zorovich, County of Santa Barbara, Planning and Development Department

B-7 This is a closing comment with contact information. Comment noted.

Literature Cited

ManTech SRS Technologies, Inc. 2017. 2016 Flight Season Surveys for El Segundo Blue Butterfly (*Euphilotes battoides allyni*). 87 pp.

Tetra Tech, Inc. and G. Pratt. 2012. Final Report for El Segundo Blue Butterfly Surveys, XUMUOS278412, Vandenberg Air Force Base, California. 52 pp.

Letter C

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
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EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director

March 24, 2017

Mr. Steve Rodriguez-Planning and Development
County of Santa Barbara
524 W. Foster Road
Santa Maria, CA 93455
Email: rodriguezaicp@aol.com

Dear Mr. Rodriguez:

RE: Oak Hills Estate Tentative Tract Map, Rezone, and Development Plan
DRAFT ENVIRONMENTAL IMPACT REPORT
SCH #2015111069

C-1 The California Department of Fish and Wildlife (CDFW, Department) received a Notice of Availability of a Draft Environmental Impact Report (DEIR) from the County of Santa Barbara (Lead Agency) for the Oak Hills Estate Tentative Tract Map, Rezone, and Development Plan (Project) pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW ROLE

C-2 CDFW is California's Trustee Agency for fish and wildlife resources, and holds those resources in trust by statute for all the people of the state. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (Id., § 1802.) Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.) or state-listed rare plant pursuant to the Native Plant Protection Act (NPPA; Fish and Game Code §1900 et seq.), related authorization as provided by the Fish and Game Code will be required.

Conserving California's Wildlife Since 1870

C-1 This introductory comment does not discuss the content of the EIR.

C-2 This comment provides details regarding the California Department of Fish and Wildlife's (CDFW's) role as a Trustee Agency for fish and wildlife resources, and as a Responsible Agency under California Environmental Quality Act (CEQA). This comment is informational and does not comment on the EIR.

C-3

PROJECT DESCRIPTION SUMMARY

Property Owner
Oak Hills Estate, LLC 3130
Skyway Drive, Suite 601
Santa Maria, California 93455

Project Applicant's Representative
Urban Planning Concepts
2624 Airpark Drive
Santa Maria, California 93455

Project Objective: The Project buildout includes the following Avoidance, Minimization, and Proposed Mitigation Measures built into the Project Objectives:

(1) To develop the site in a manner that is consistent with the County's General Plan, environmental requirements, and that complements the physical characteristics of the site;

(2) A Rezone (Case No. 15RZN-0002) to change the zoning on the project parcel from RR-10 (Residential Ranchette, 1 unit per 10 acres) to DR-1.8 (Design Residential, 1.8 units per acre);

(3) A Vesting Tentative Tract Map (Case No. 15TRM-00001/TRM 14,180) to subdivide an existing vacant 16.88-acre parcel into 30 parcels. The proposed tentative map would create 29 single-family lots that would range in size from 9,725 square feet to 14,837 square feet, and one open space lot that would have 9.86 acres of dedicated common open space area, drainage features, and private roads;

(4) A Development Plan (Case No. 15DVP-00001) to develop 29 single-family residential units;

(5) To provide desirable housing types and densities consistent with surrounding neighborhoods.

(6) To develop the site in a manner that preserves a significant component of the site as permanent open space designed and managed to protect the natural habitat;

(7) To ensure that the site is compatible with the Burton Mesa Ecological Reserve and surrounding area through sensitive site design and residential architectural design standards; and.

(8) To develop design criteria that encourage connectivity inside and adjacent to the Project, that link the community with walking trails, and provide access to the adjacent Country Club property.

Location: The proposed Project location can be identified as Assessor's Parcel Number (APN) 097-371-010, located in northern Santa Barbara County (County), in the unincorporated Vandenberg Village area, approximately six miles north of the City of Lompoc.

Project Background: The Project owner of 16.88 acres of existing sensitive habitats and open-space, directly south and east of the Burton Mesa Ecological Reserve (BMER), requested that Santa Barbara County have the parcel rezoned from RR-1, and approved and rezoned for a vesting tentative tract map. The Lead Agency DEIR stated, "The proposed project would not require a Comprehensive Plan Amendment, as the project site would retain its existing RES

C-3 This comment provides a project description summary and does not comment on the EIR. Please note, however, that items listed by this comment and numbered 2, 3 and 4 are not objectives of the project but are discretionary land use permits for which decision-maker approval is required to implement the proposed project.

12.13 (Residential 12.3 units per acre) land use designation. The proposed open space lot would include a private trail and would be designated as common open space managed by a homeowners association (HOA). The common open space lot would be located along the northern and western perimeters of the project site and serve both as a buffer between the proposed residential lots and the Burton Mesa Ecological Reserve and as a fuel management zone. The DEIR also includes the Offsite Mitigation Area Baseline Biological Report and Conceptual Mitigation Plan (Rincon 2016a) (see Appendix D-3) that details the potential for 13.5 acres of off-site restoration to mitigate for 6.38 acres of sensitive on-site oak tree and habitat removal" (Page 1-2).

C-4

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the Lead Agency in adequately identifying and/or mitigating the Project's significant, potentially significant, and/or direct and indirect impacts on fish and wildlife (biological) resources.

I. Project Description and Related Impact Shortcoming

Comment #1:

The significant effects analysis was conducted in accordance to the County's Environmental Thresholds and Guideline Manual and/or California Environmental Quality Act (CEQA) thresholds, as described in the *Executive Summary: S.2 Summary of Significant Effects and Mitigation Measures that Reduce or Avoid the Significant Effects.* The DEIR, states, "The significance of each impact resulting from implementation of the proposed [P]project has been determined according to the County's Environmental Thresholds and Guidelines Manual and/or California Environmental Quality Act (CEQA) thresholds. Table S-1, located at the end of this section, summarizes the significant and less-than-significant effects identified during the environmental analysis completed for the [P]roject. Table S-1 also includes a mitigation framework to reduce the significant environmental effects, with a conclusion as to whether the impact has been mitigated to below a level of significance" (Page S-2).

C-5

Issue: It is unclear if the Lead Agency adhered to the County of Santa Barbara (2003) Environmental Thresholds and Guidelines Manual (Manual)/ CEQA Appendix G in its significant effects analysis. The current guidelines would result in the net loss of Burton Mesa chaparral habitat associations; the DEIS proposed mitigation is limited to offsite habitat restoration and only proposes enhancement activities in an area that already serves as mitigation for another project that impacted Burton Mesa chaparral (Clubhouse Estates, the Lot 54 mitigation area).

C-6

Evidence impact would be significant: The methodology and significance thresholds for impacts to biological resources should include analysis of the substantial effects on rare, threatened, and/ or endangered species of animals, plants, and their habitat; substantial interference with movement of any resident or migratory fish or wildlife species; and if the project substantially diminishes habitat for fish, wildlife, or plants.

C-7

The proposed Project would directly and substantially effect rare and endangered plants and wildlife species by removing habitats within the project site and by directing that offsite mitigation occur on the Lot 54 parcel which is itself a sensitive habitat area supporting numerous listed plant and animal species. t would also severe connectivity and reduce wildlife access to

C-4 This comment is informational and summarizes that the significant effects analysis was conducted in accordance with the County of Santa Barbara's Environmental Thresholds and Guidelines Manual and/or the California Environmental Quality Act thresholds. It also mentions Table S-1 and S-2 as sources that summarize the environmental analysis and mitigation framework. No changes were made to the Final EIR as a result of this comment.

C-5 To address CDFW comment regarding the proposed off-site mitigation parcel and restoration areas, additional information has been added to Chapter 4.3, Biological Resources. The Final EIR states that the project includes a proposal to restore habitat at the 123-acre parcel, owned by the Vandenberg Village Community Services District (VVCSD), which is located north of the intersection of Burton Mesa Road and Clubhouse Road. The VVCSD confirmed that the necessary mitigation acreage is available. The same parcel was also identified as the mitigation parcel in the Clubhouse Estates EIR. As stated in the Chapter 4.3 and Off-site Mitigation Area Baseline Biological Report and Conceptual Mitigation Plan, mitigation requirements for both projects can be accommodated on the same 123-acre parcel because the Clubhouse Estates project is required to primarily complete weed abatement activities at the mitigation site, whereas the Oak Hills Estate project would be required to establish native maritime chaparral habitat and plant replacement oak trees at the mitigation site. To clarify, language has been added to Chapter 4.3 stating that mitigation planting (seeding) was only required to be implemented by the Clubhouse Estates project in three specified areas to create central dune scrub vegetation. Two of the areas to be seeded are located on the northwestern portion of the mitigation site and are approximately 1.02 and 0.19 acres. The third area is near Clubhouse Road and approximately 1.88 acres (see revised Figure 4.3-3 of the Final EIR). Please also refer to response C-9, which provides additional information about the project's on-site and off-site mitigation Additional surveys on the off-site VVCSD parcel identified sufficient potential off-site land suitable to assure that a net loss of Burton Mesa Chaparral would not occur, consistent with the County of Santa Barbara Environmental Thresholds and Guidelines Manual (2015) and CEQA Guidelines Appendix G.

C-6 This comment states that the methodology and significance thresholds for impacts to biological resources should include an analysis on biological resources for (a) the substantial effects to rare, threatened, and/or endangered species of animals, plants, and their habitat, (b) substantial interference with movement of any resident or migratory fish or wildlife species, and (c) substantially diminishes habitat for fish, wildlife, or plants.

Chapter 4.3 of the Draft EIR assesses the potential impacts to biological resources resulting from implementation of the project. Section 4.3.2.1 outlines the Methodology and Significance Thresholds for biological resources defined by CEQA (Appendix G) and the County of Santa Barbara. Impacts BIO-1, BIO-2, BIO-3, and BIO-6 in Section 4.3.2.2 provides an analysis to project-related impacts as it relates to Sensitive Special Status Plants and Wildlife Species, Sensitive Natural Communities, Loss of Oak Trees, and Wildlife Movement. No changes to the EIR were made as a result of this comment.

C-7 This comment suggests that (a) impacts will be made to the project site and mitigation site by impacting rare/endangered plants and wildlife species; (b) the project would sever connectivity/reduce wildlife access and, therefore, diminish habitat; and (c) result in a loss of foraging habitat to the fully-protected white-tailed kite and other birds of prey.

(a) The Applicant has changed the project design by removing a previously proposed trail from the project and adjusted the fuel management zones so that the first 30 feet of vegetation management are located on the proposed individual residential lots. In addition, implementation of the revised recommended mitigation measures detailed in the Final EIR (**MM BIO 1.1** through **MM BIO 1.15**, and **MM BIO 2.1** through **MM BIO-2.4**) would reduce potential impacts to special status plants/wildlife and sensitive natural communities.

(b) Impact BIO-6 states that the proposed project is not expected to significantly hinder regional wildlife movement because the project would be surrounded by contiguous native habitat to the north and west of the development footprints (including the central drainage

the State's land and substantially diminishes the habitat for the State's trustee fish, wildlife, and plant resources. Burton Mesa and its surrounding area supports this unique and rare chaparral ecosystem. The habitat provides unique ecological niches, resulting in a variable, sensitive, irreplaceable flora and fauna community that flourishes on the open space parcel proposed for development as well as the adjoining Burton Mesa. This also includes losses foraging habitat for the fully-protected white-tailed kite (*Elanus leucurus*) and other birds of prey.

II. Environmental Setting and Related Impact Shortcoming

Comment #1:

C-8 The DEIR includes various project goals such as- "[T]o develop the site in a manner that is consistent with the County's General Plan, environmental requirements, and that complements the physical characteristics of the site; to provide desirable housing types and densities consistent with surrounding neighborhoods; To develop the site in a manner that preserves a significant component of the site as permanent open space designed and managed to protect the natural habitat; to ensure that the site is compatible with the Burton Mesa Ecological Reserve and surrounding area through sensitive site design and residential architectural design standards; and to develop design criteria that encourage connectivity inside and adjacent to the project, that link the community with walking trails, and provide access to the adjacent Country Club property" (Pages S 1-3).

C-9 **Issue:** The proposed rezoning and proposed site plan would not achieve the objective of preserving a significant component of the site as permanent open space in the view of CDFW (Project Objective # 6) as most of the site would be developed. The proposed site design would not be protective of the adjacent BMER and existing habitats offsite to the south including the Country Club and Lot 54 mitigation area, both of which would be physically isolated, blocking wildlife movement and use, and therefore does not appear to achieve Project Objective # 7.

C-10 CDFW requests the Lead Agency make in-depth evaluations using a comprehensive assessment of loss of open space, riparian woodlands, Burton Mesa chaparral associations, and ephemeral streambeds over time, and including past, present and future projects.

C-11 The DEIR proposes to rezone (RR-10) open space to accommodate buildout of the proposed tentative tract map and development plan. CDFW is concerned with the rezoning due to the Project's proximity to the Ecological Reserve. CDFW recommends the current zoning be retained to better limit the potential for disturbance of sensitive habitats and open space.

C-12 **Evidence impact would be significant:** Introduction of additional homes to the area will eliminate sensitive habitat and further contribute to negative wildlife-human interactions. The proposed open space area would be set aside for use by wildlife, as it states in the DEIR, Pages S 1-5. However, as proposed in the project, it is intended to accommodate project fuel modification and onsite recreational activity. This is an incompatible use for the open space as its habitat values would be damaged by disturbance, chronic vegetation removal and presence of humans and pets. It will not effectively serve as buffer to neutralize adverse edge effects stemming from developing adjacent to the protected BMER in our opinion.

C-7 (cont.)
area) that will remain as a suitable wildlife corridor. The contiguous native habitat would be placed into an open space that would be managed and protected per MM BIO-2.1 (On-site Habitat and Open Space Protection Plan).

(c) According to the Biological Resources Assessment located in Appendix D-1 of the EIR, the white-tailed kite was not observed during project surveys nor was this species identified within the California Natural Diversity Database (CNDDB) 9-quadrangle search vicinity. The habitat on-site may be appropriate foraging and nesting habitat for these species. Therefore, there is a low to moderate potential for this species to occur on-site. In order to address CDFW's comment regarding this species, MM BIO-5.1 (Preconstruction Surveys for Nesting Birds) has been revised to include a focused survey for raptor species, including any avoidance measures if this species is observed.

C-8 This comment is informational and identifies the project goals described by the Draft EIR. Comment noted.

C-9 This comment states that project objectives #6 and #7 would not be achieved.

Project objective #6 states "to develop the site in a manner that preserves a significant component of the site as permanent open space designed and managed to protect the natural habitat." The Applicant has changed the project design by removing a previously proposed trail from the project and adjusted the fuel management zones so that the first 30 feet of vegetation management are located on the proposed individual residential lots. Required habitat restoration and oak tree planting must be located on previously disturbed land or areas that support non-native vegetation. The project is required to identify a total of 13.84 acres of mitigation land (6.92 acres of mesa horkelia at a 2:1 mitigation to impact ratio). Chapter 4.3 Biological Resources has been revised to reflect that approximately 26 sites on the VVCSD parcel have been identified totaling approximately 13.19 acres of potentially suitable off-site mitigation areas (MM BIO-2.2, see Figure 4.3-3). An additional 0.61

C-9 (cont.)

acre of coyote brush scrub habitat within the proposed on-site open space parcel would be available for habitat restoration (MM BIO-2.1, this area does not include FMZ-2). Additionally, another three adjacent sites within the VVCSD parcel totaling 3.08 acres were assessed for suitability for off-site mitigation. These three sites were previously approved mitigation areas for the adjacent Clubhouse Estates project and used for invasive plant removal and native grass reseeding. It was determined that these areas are suitable for additional mesa horkelia mitigation at a reduced 0.5 acre to 1.0 acre ratio. This would add another 1.54 net acres of potentially suitable off-site mitigation area to the 13.19 acres previously identified, bringing the total on these 29 off-site mitigation areas to 14.73 acres. Along with the 0.61 acre on-site coyote brush scrub habitat area, the project's total available mitigation area for mesa horkelia is approximately 15.34 acres (Arcadis 2014; LFR 2007; and Rincon 2016b, 2017c). The 29 off-site mitigation areas are located on small patches of land immediately contiguous to existing maritime chaparral on the VVCSD parcel (see Figure 4.3-3). Restoration on these small patches of land would cumulatively increase the size of the adjacent contiguous maritime chaparral habitat and by removing invasive species, improve the overall health of this important habitat. Therefore, sufficient land has been identified as potentially suitable to implement required on-site and off-site habitat restoration mitigation, and would attain the required 13.84 acres in order to fully comply with MM-BIO-2.2.

Project objective #7 states "to ensure that the site is compatible with the Burton Mesa Ecological Reserve and surrounding area through sensitive site design and residential architectural design standards." The project was designed to be accessible from and adjacent to Oak Hill Drive/existing development to the south and avoid approximately 7.15 acres of open space that would be located south of and adjacent to the Burton Mesa Ecological Reserve. The project was also designed to avoid the central drainage which may provide wildlife access to and from the site, coming from the south (i.e. the Country Club and Lot 54 mitigation area). It is important to note that the project has also been redesigned, and FMZ-1 would be located on the proposed residential lots only, which would minimize the potential for long-

C-9 (cont.)
term vegetation management impacts to the proposed on-site open space. In addition, the previously proposed private trail crossing the central drainage was removed from the project design. The removal of the private trail from the project and relocation of the 30-foot fuel management zone from the proposed open space will enhance the project's compatibility with the Burton Mesa Ecological Reserve.

C-10 The comment suggests a more comprehensive assessment be conducted of the loss of open space, riparian woodlands, Burton Mesa chaparral associations, and ephemeral streambeds over time. Historic losses of the habitats identified above have contributed to regional baseline conditions, and a comprehensive evaluation of such effects is not required by CEQA. Section 4.3.2.3 of the Draft EIR discusses cumulative impacts to biological resources and identifies that the project would have a potentially significant but mitigable (Class II) impact. When considered with other reasonably foreseeable projects in the region, the project's impacts would not be cumulatively considerable because its impacts to biological resources would be avoided, reduced, or mitigated through implementation of proposed mitigation measures.

C-11 This comment suggests that the project site's existing zoning designation be retained in order to limit the potential for impacts to the adjacent Ecological Reserve. The current zone, with a 10-acre gross lot minimum, would allow one single-family dwelling unit on the 16.88-acre project parcel. This "No Project" alternative was evaluated in EIR Section 7.3.1, which concluded that the alternative would not meet any of the proposed project's objectives. This comment does not identify an inadequacy or error in the EIR.

C-12 This comment states that the proposed open space will accommodate project fuel modification and on-site recreational activity, which is an incompatible use for open space. The Applicant has changed the project design by removing a previously proposed trail from the project and adjusted the fuel management zones so that the most intensive areas of vegetation management (within 30 feet of proposed residences) would occur on the proposed individual residential lots.

C-12 (cont.)

This comment states that the proposed open space will accommodate project fuel modification and on-site recreational activity, which is an incompatible use for open space. The Applicant has changed the project design by removing a previously proposed trail from the project and adjusted the fuel management zones so that the most intensive areas of vegetation management (within 30 feet of proposed residences) would occur on the proposed individual residential lots.

The comment also states that the introduction of additional homes to the area would contribute to negative wildlife–human interactions, which are also termed "edge effects." The proposed project would not increase the amount of negative-human interactions, because the existing residences located along Oak Hill Drive are not substantially different in terms of linear edge effects.

The comment also states that the introduction of additional homes to the area would contribute to negative wildlife–human interactions and other edge effect type impactsMM BIO-2.1 has been amended to require that the project's On-Site Habitat and Open Space Protection Plan describe public outreach to be implemented to educate the residents of the project site about not using invasive species in landscaping, overuse of pesticides and fertilizers, the problem with unleashed pets and pet waste, methods to minimize potentially harmful human/wildlife interaction, and to minimize the use of rodenticides. The plan must also depict the type and location of protective fencing to be installed on the project site to prevent trespass onto the adjacent Burton Mesa Ecological Reserve.

Additionally, project design changes resulting in complete removal of the previously proposed on-site trail minimizes the potential for edge effect type impacts to the adjacent Burton Mesa Ecological Reserve.

Recommended Potentially Feasible Mitigation Measure(s):

C-13 **Mitigation Measure # 1:** Open space and mitigation areas set-aside to offset project impacts under the CEQA should be should be managed by well-trained biologists that can maintain the conservation and ecological functions and values in perpetuity. The Department recommends the Lead Agency require a non-wasting endowment for the long-term management of the open space and all mitigation lands. Absent this, the Lead Agency would be obligated to ensure mitigation areas are maintained in perpetuity and appropriately managed and monitored.

C-14 **Mitigation Measure #2:** CDFW recommends the home-owners be advised of the potential for wildlife-human interactions to occur. Covenants, Conditions, and Restrictions (CCRs) for any Home Owners Association (HOA) should include provisions for "Keep it Wild", provide protection of on-site open space, and protection of the BMER. The Project, if approved, should incorporate the following restrictions into the CCRs: a) prohibit the use of rodenticides (Lima & Salmon, 2010); b) recreation opportunities (bike path, running trail, equestrian activities) should be designed to avoid the BMER Reserve. Feasible mitigation could include the installation of a permanently maintained 3-wire barbed fence to delineate property boundaries while enabling wildlife movement. Fencing must be constructed entirely within the private parcel and cannot therefore be located on the property line; this has led to past damage of the BMER and trespass on other projects. The fence line should include clearly marked signs; and, c) the use wildlife friendly exclusionary devices/options should be considered if home-owners develop problems with wildlife ; d) all fuel modification should occur within the project footprint and not encroach on the BMER or offsite habitats.

III. Mitigation Measure or Alternative and Related Impact Shortcoming

Comment #1:

C-15 The proposed Project will result in residential development which will directly block wildlife corridors and connectivity. Current wildlife movement through the project area is in a north and south direction. The proposed Project area acts as a corridor, enabling wildlife on the Ecological Reserve to reach perennial sources of water in Davis Creek and associated habitats located south within the existing golf course, the Lot 54 mitigation area and adjoining Ecological Reserve in the south mesa. Wildlife both resides in and utilizes onsite woodlands, chaparral and other habitats. Loss of this valuable habitat on the proposed Project site is significant; replacement with residential housing will block and impair wildlife movement. Mitigation for habitat losses at some offsite location will not serve to address or mitigate the loss of wildlife movement through this area, and CDFW finds this would be a Class I impact.

Issue: The loss of wildlife movement at the proposed Project site has not been sufficiently evaluated in the DEIR. The proposed Project is in a locally important wildlife movement corridor. Wildlife move back-and-forth from the north portion of the Ecological Reserve, through the Project parcel, across the golf course, through the Club House Estates Lot 54 Mitigation Preserve to reach springs and Davis Creek, a perennial stream.

Evidence impact would be significant: Immediately south of the Project property is existing golf course which supports Davis Creek. To the immediate south lies the Lot 54 mitigation area, permanently set aside as wildlife mitigation for the Clubhouse Estates Project. The onsite native habitats and cover enable numerous nocturnal and diurnal animal species to move undetected

C-13 This comment recommends that the open space and mitigation areas should be managed by well-trained biologists, and that the Lead Agency (i.e. County of Santa Barbara) require a non-wasting endowment for the long-term management of the open space and all mitigation lands. The required On-site Habitat and Open Space Protection Plan (**MM BIO-2.1**), and Off-site Habitat Restoration Plan (**MM BIO-2.2**) would reduce the project's impacts to sensitive habitat and will be required to provide management and maintenance details that would be implemented by the project Applicant until the required mitigation areas become self-sustaining. In addition, the project's Homeowner's Association would be responsible for the long-term maintenance of all on-site mitigation areas. Funding mechanisms for specified maintenance and monitoring activities would be identified by the on-site and off-site restoration plans, and bonding is required to ensure the completion of the mitigation requirements prior to recordation of the final tract map.

C-14 This comment states that the Covenants, Conditions, and Restrictions for any Homeowners Association (HOA) should include provisions for the protection of the on-site open space and the Burton Mesa Ecological Reserve. MM BIO-2.1 has been amended to require that the project's On-Site Habitat and Open Space Protection Plan describe public outreach to be implemented to educate the residents of the project site about not using invasive species in landscaping, overuse of pesticides and fertilizers, the problem with unleashed pets and pet waste, methods to minimize potentially harmful human/wildlife interaction, and to minimize the use of rodenticides. The plan must also depict the type and location of protective fencing to be installed on the project site to prevent trespass onto the adjacent Burton Mesa Ecological Reserve.

C-15 This comment states that the project will directly block wildlife corridors that move in a north-south direction. The comment further states that the Draft EIR has not sufficiently evaluated the loss of habitat that connects the Ecological Reserve to water sources located at Davis Creek/golf course area, to the Lot 54 mitigation site and Ecological Reserve located on the south mesa.

The Applicant proposes to provide open space habitat that would maintain connectivity from the northern Burton Mesa Ecological

C-15 (cont.)

Reserve to the southern golf course area, including retaining the drainage on the central portion of the project site and an open space corridor along the northern and western perimeters of the site. The comment also states that "fuel modifications would eliminate most of the cover". As stated previously, the revised fuel management (FMZ-1) would be entirely within the lot lines, and FMZ-2 would not eliminate vegetation cover but rather it would thin vegetation mostly by removal of dead, damaged, and diseased branches. The project would not disconnect the northern Ecological Reserve from the golf course property, Lot 54 mitigation site, and/or southern Ecological Reserve because terrestrial wildlife would be able to skirt freely along the edges of development and enter the golf course property. Impact BIO-6 was determined a Class III impact and the project was determined to have a less than significant effect on wildlife corridors.

through the Project site on the open space lot. The loss of this corridor system would create an adverse effect on local wildlife populations in the area, including California mule-deer (*Odocoileus hemionus californicus*); doe's are known to fawn in this area including just north of Oak Hill Drive (CDFW files). The build out of this parcel will prevent wildlife access to and from the Ecological Reserve. The remnant area adjacent to the ephemeral channel on Lot 30 would not provide limited wildlife movement and fuel modifications would eliminate most of the covery it might provide. Loss of this wildlife movement area could also reasonably be presumed to result in increased risk of mortality to wildlife from traffic wildlife collisions as they will continue to attempt to reach known water sources.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1: Maintain the existing wildlife linkages that connect the Ecological Reserve to the open space south of Oak Hill Drive and includes the existing golf course, Lot 54 Mitigation area, and Davis Creek habitat corridor on the Ecological Reserve.

Mitigation Measure #2: Project-related mitigation should be completed at a location that has not been utilized to offset mitigation for previous projects.

Comment #2:

C-16 The open space parcel provides an important existing buffer between residential developments and protects the Ecological Reserve from non-native weed invasions, for example. The open space lot also currently serves as a buffer that would be expected to reduce the spread of non-native Argentine ants (*Linepithema humile*) into the adjoining Ecological Reserve. Development of the proposed Project would result in ground disturbance, paving, and introduction of irrigation which is known to result in spread of Argentine ants. The open space lot also offers additional roosting, foraging, hunting and nesting areas for rare and sensitive animals and birds of prey.

C-17 **Issue #1**: Many important on-site ecological functions, micro-ecosystems, and unique plant communities are present on the proposed Project site, adding to its uniqueness and rarity. For example, black elfin saddles (*Helvella dryophila)*, which have a close symbiotic commensalism association with coast live oak trees (*Quercus agrifolia*), were observed by CDFW during a site-visit conducted on February 27, 2017. This aspect of the on-site plant community was not included in the Lead Agency's Biological Assessment in Section 4.0 of the DEIR. Also present in this area were bird's nest fungus (*Cyathus striatus*); California spineflower (*Mucronea californica*) and La Purisima manzanita (*Arctostaphylos purissima*), a rare species, also known as the Lompoc manzanita, and Bishop pine *(Pinus muricata)*, a state-listed rare plant tracked by CNDDB.

C-18 **Issue #2:** Burton Mesa chaparral is known to support unique coast live oaks which are emergent within stands of chaparral, or occur in bands as unique woodlands and forests. Coast live oak is of tremendous value to a large array of wildlife species. Coast live oak woodlands are considered an ecologically valuable plant community. Currently, coast live oak woodlands are experiencing the phenomenon of sudden oak death syndrome (Swiecki and Bernhardt, 2016) and infestation from invasion of the non-native goldspotted oak borer (*Agrilus coxalis)* that allows a fungus to be introduced into the xylem and phloem of multiple *Quercus* spp., causing decreased health and vitality, and ultimately mortality (Seybold and Coleman, 2015; see also Coleman and Seybold, 2008). Due to the existing stressors experienced throughout Southern

C-16 This comment suggests that project development would result in the spread of Argentine ants. This comment also states that the project site currently serves as a buffer for the introduction of non-native species into the Burton Mesa Ecological Reserve. The project proposes an on-site open space that will be managed in perpetuity and would continue to serve the Burton Mesa Ecological Reserve as an open space buffer from existing and proposed development. **MM BIO-2.1** (On-site Habitat and Open Space Protection Plan), **MM BIO-2.3** (Landscaping Plan), and **MM BIO-2.4** (Invasive Weed Prevention and Management Program) in the EIR provide mitigation measures that would ensure oversight and management of the proposed on-site open space by coordinating with qualified biologists that would monitor the area, coordinate with the landscape architect, and prevent invasion of native habitat by non-native plant species. In addition, **MM BIO-2.1** requires that the Open Space Management Plan (and MM **BIO-2.2** for off-site restoration areas) address invasive species control, which would include specific measures to control Argentine ants.

MM BIO-5.1 (Preconstruction Surveys for Nesting Birds) include focused surveys for nesting birds and raptor species, and if necessary the implementation of avoidance measures if these species are observed.

C-17 This comment states that the project site was noted by CDFW (after a site visit on February 27, 2017) to possess many on-site ecological and unique functions that were not noted in the Biological Assessment in Section 4.0 of the Draft EIR. The comment also noted unique associations specifically with coast live oak trees and black elfin saddles (a mushroom noted on-site by CDFW) and other unique species such as bird's nest fungus, California spineflower, Lompoc manzanita, and Bishop pine.

Section 4.3.2.1a (second bullet) and Section 4.3.2.1b (item b) provide an outline of state and County significance thresholds, both of which address potentially significant impacts to special status species. CEQA Appendix G and County thresholds do not address potential impacts to common species (such as Bishop pine, black elfin saddles, and bird's nest fungus). The EIR adequately proposes mitigation for impacts to California spineflower and La Purisima manzanita (**MM BIO-1.2**). This comment does not identify an inadequacy or error in the EIR; no changes are required.

C-18 This comment states that pressure from residential development within Burton Mesa chaparral exacerbates losses from the ecologically valuable plant community and wildlife habitat. The comment uses sudden oak death syndrome as an example of the existing stress that California oak woodlands face and that removing healthy specimens of oaks is a significant adverse impact and the project does not propose adequate avoidance and minimization of impacts.

The County of Santa Barbara recognizes the value of oaks and adopted the Oak Tree Protection and Regeneration Program. As noted, the Oak Tree Protection and Regeneration Program encourages the protection of all species of mature oaks, stating that "development shall avoid removal of or damage to mature oak trees, to the maximum extent feasible. A Native Tree Inventory and Health Assessment (Appendix F of the Biological Assessment (Appendix D-1) of the EIR) was conducted to assess the overall health and quantify the native trees on-site. The Revised Draft EIR summarizes that 74 oak trees will be directly impacted, with an additional 53 oak trees located within the fuel management zone (and/or their roots may be impacted from the proposed development). The loss of up to 127 total oaks exceeds the 10 percent County threshold. However, it is important to note that the fuel management zones were re-located so that the first 30 feet of vegetation management are located on the proposed individual residential lots. This change would reduce the level of oak impact compared to the previous design, but it would still exceed the 10 percent County threshold. **MM BIO-1.2** (Special Status Plant Species Protection and Restoration), **MM BIO-2.2** (Off-site Habitat Restoration Plan), **MM BIO-2.3** (Landscaping Plan), and **MM BIO-3.1** (Native Tree Protection), **MM BIO-3.2** (Tree Protection Plan), **MM BIO-3.3** (Tree Replacement Plan), and **MM BIO-3.4** (On-site Arborist/Biologist) would reduce impacts to on-site oak trees by providing a restoration plan that includes the replacement of oaks at a 10:1 ratio at a County-approved receiver site.

California to oak woodlands (drought, infestations of beetles, sudden oak tree death, unchecked removal of healthy tress), and continued pressure from residential developments, additional development within Burton Mesa chaparral and oak woodlands exacerbates losses of this ecologically valuable plant community and wildlife habitat.

Evidence impact would be significant: The proposed Project states in the DEIR, stated "131 coast live oak trees shall be removed from the site" (Page S 1-5). It seems that to remove healthy specimens of an imperiled ecologically valuable habitat without proper findings of significance, is only creating more impacts to this species and Burton Mesa chaparral by removing healthy trees. This appears to be a significant adverse impact and the DEIS has not proposed adequate avoidance and minimization of impacts to these resources.

Recommended Potentially Feasible Mitigation Measure(s):

C-19 **Mitigation Measure # 1**: Conduct a recent Floristic, alliance-and/or association-based mapping and vegetation impact assessments at the Project site and within the neighboring vicinity. Evans (2009) *Identification and mapping of rare plant communities* is recommended for mapping an isolated area for unique and rare plants. Adjoining habitat areas should be included in this assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions. Also, the CDFW website, with regard to Natural Communities, can provide guidance for surveying and mapping sensitive and rare plant communities: https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities/List.

C-20 **Mitigation Measure #2:** The DEIR should include measures to fully avoid and otherwise protect sensitive plant communities from Project-related direct and indirect impacts. CDFW considers these communities to be imperiled habitats having both local and regional significance. Plant communities, alliances, and associations with a statewide ranking of S-1, S-2, S-3 and S-4 should be considered sensitive and declining at the local and regional level. Wildlife and rare plant surveys should meet CDFW's timeline for approved assessments, to qualify as recent. CDFW generally considers biological field assessments for animal species to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. Some aspects of the proposed Project may warrant periodic updated surveys for certain sensitive taxa, particularly if buildout could occur over a protracted time frame, or in phases.

C-21 All offsite mitigation for unavoidable impacts to sensitive species and habitats must occur on lands that have not been used for previous mitigation associated with any prior project.

Comment #3:

C-22 Many local California native animal species occur on the proposed Project site. During a site visit conducted by CDFW on February 27, 2017, CDFW identified signs of burrows, nests, resting areas, scat, pellets, bones, and tracks including ungulates, small carnivores, and small rodents. Reviewing photographs, and materials observed during the site-visit, the following native animals likely occur on-site: **Reptiles:** California gopher snake *(Pituophis melanoleucus)*, California king snake *(Lampropeltis getula californiae)*. **Small Mammals:** North American raccoon *(Procyon lotor)*; striped skunk *(Mephitis mephitis)*; coyote *(Canis latrans)*; bobcat *(Lynx rufus)*; and, mule-deer (*Odocoileus hemionus californicus*). **Birds:** Dozens of passerines and

C-19 This comment recommends using the Identification and Mapping of Rare Plant Communities and recommends using the CDFW website (https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities/ List) for surveying and mapping sensitive and rare plant communities. The recommended website refers to currently accepted List of Vegetation Alliances and Association that are based on A Manual of California Vegetation (Sawyer, Keeler-Wolf, and Evens 2009). The biological surveys and mapping tools used for this project were adequate for the purpose of the EIR analysis.

C-20 This comment states that (a) the Draft EIR should include measures that would fully avoid and protect sensitive plant communities from direct project impacts, and (b) that plant and wildlife surveys should meet the CDFW's timeline for approved recent assessments (rare plants valid up to three years and wildlife valid for one year).The project Applicant has updated its Biological Resources Assessment and sensitive plant surveys in 2017. Also, adequate mitigation under CEQA does not require that impacts be fully avoided to reduce them to a less than significant level. CEQA Guidelines section 15370 defines general mitigation actions that are adequate under CEQA. Those actions include: avoiding the impact; minimizing the impact; rectifying the impact through restoration; reducing or eliminating the impact over time; or compensating for the impact by replacing or providing substitute resources. As proposed, the project would implement mitigation that is consistent with the requirements of CEQA and that would reduce its impacts to biological resources to a less than significant level.

C-21 The comment states that off-site mitigation should not be used on lands that have been used for previous mitigation. Please refer to responses C-5 and C-9.

C-22 This comment states that the CDFW site visit conducted on February 27, 2017 noted many reptile, small mammal, and bird species. Appendix D-1 of the EIR provides the Biological Resources Assessment that was based on field surveys from February, March, April, and August 2014 and additional surveys conducted in 2017. Many of the species mentioned in the comment were also observed by the field biologists (i.e., gopher snake and passerines) and are listed

raptor species were observed on-site; several weeks would be required to conduct thorough bird surveys. The species listed are not meant as an exclusive listing of wildlife using these open space areas (wetlands, wash, ephemeral streambeds, oak woodlands, ecological reserve lands, and foothills) to hunt, find shelter, breed, and conduct other normal behaviors important to their survival, and important within an area adjoining state sovereign land, protected wildlife habitat, and the wildland-urban interface.

C-23 **Issue #1: Fully-Protected Species (FP).** The California Fully Protected (FP) white-tailed kite (*Elanus leucurus*) utilizes this area for nesting and foraging habitat (Fish and Game Code § 3511). Eliminating large expanses of open space is leading to the decline of white-tailed kite in Santa Barbara County. "The symptoms of the progressive decline in the local population of white-tailed kite include the loss of ample foraging areas and loss of connections among open space areas which allow free immigration, emigration, and dispersal of breeding pairs, declining steadily over the last several years" (Homgren, n.d., unpublished). Loss of open space affects white-tailed kite along with all birds of prey, as well as the prey base associated with grasslands and scrublands that are part of the ecological community. These losses are significant and constitute a significant cumulative impact, as defined in CEQA Guidelines §§15065 (a) (3) and 15355. CDFW is concerned the cumulative effects on birds of prey from the projects listed in Table S-1, (see Appendix A) of the DEIR are considerable, as defined in CEQA Guidelines Sections 15065 (a)(3) and 15355, and the proposed Project's incremental effect on birds of prey foraging habitat appear cumulatively considerable.

C-24 **Issue #2: Species of Special Concern (SSC); and California Threatened and Endangered Species (CESA).** The following special status animals likely occur on-site: **Invertebrates:** La Purisima blue butterfly (*Philotiella speciosa purisima*) which has an obligate relationship with the small annual California spineflower (*Mucronea californica*). The pupae are laid in the earth where the flower will emerge. Any ground disturbance decimates the pupae life stage and threatens the continued existence of this rare, unique, endemic butterfly. The open space parcel may support rare, unique, endemic animal species of the rare, unique, endemic gopherous scarab beetle (*Ceratophyus gopherinus*), a locally rare insect. **Amphibians:** western spadefoot toad (*Spea hammondii*). **Reptiles:** silvery legless lizard (*Anniella pulchra pulchra*) SSC; coast horned lizard (*Phrynosoma blainvillii*) SSC; coastal whiptail (*Aspidoscelis tigris stejnegeri*) SSC; and, long-nosed patch snake (*Salvadora hexalepis virgultea*) SSC; **Birds:** Cooper's hawk (*Accipiter cooperii*) (WL); burrowing owl (*Athene cunicularia*) SSC; loggerhead shrike (*Lanius ludovicianus*) SSC; **Mammals:** pallid bat (*Antrozous pallidus*) SSC; Townsend's big-eared bat (*Corynorhinus townsendii*) SSC; western red bat (*Lasiurus blossevillii*) SSC; and, American badger (*Taxidea taxus*) SSC.

C-25 **Issue #3:** CDFW also has information in our records indicating that the federally endangered El Segundo blue butterfly (*Euphilotes battoides allyni*) was confirmed in 2016 and observed on the proposed Project site by contractors working in the general area conducting field assessments for the butterfly. This species is protected under the federal Endangered Species Act. Development of the proposed Project has the potential to result in direct "take" of this species, removal of its food plant, seaside buckwheat, (*Eriogonum parvifolium*) and loss of habitat suitable for the species. Avoidance and minimization of impacts to this species is necessary under CEQA. CDFW recommends the Project Proponent contact the Ventura Office of the United States Fish and Wildlife Service (Service). The Ventura Office may be contacted at Rachel_Henry@fws.gov) for further coordination under the Endangered Species Act.

C-22 (cont.)
in Appendix C of the Biological Resources Assessment. Many of the species identified in this comment are common species tolerant of increased human presence. However, the EIR provides an adequate evaluation of the project's potential impacts to special status species and mitigation for those special status species/habitat associations.

C-23 This comment refers to the California Fully Protected white-tailed kite and the utilization of the area for nesting and/or foraging. Refer to response C-7(c).

C-24 This comment states that the following Species of Special Concern (SSC), and California Threatened and Endangered Species (CESA) likely occur on-site: La Purisima blue butterfly, gopherous scarab beetle, western spadefoot toad, silvery legless lizard, coast horned lizard, coastal whiptail, long-nosed patch snake, Cooper's hawk, burrowing owl, loggerhead shrike, pallid bat, Townsend's big-eared bat, western red bat, and American badger. Each of these species are discussed in further detail below:

Raptor Species:
- White-tailed kite—California Fully Protected (FP)
- Cooper's hawk—California Department of Fish and Wildlife Watch List Species (WL)
- Burrowing owl—California Department of Fish and Wildlife Species of Special Concern (CSC)
- Loggerhead shrike (CSC)

According to the Biological Resources Assessment (EIR Appendix D-1), the white-tailed kite, Cooper's hawk, burrowing owl, and loggerhead shrike were not observed during project surveys nor were these species identified within the CNDDB 9-quadrangle search vicinity. The habitat on-site may be appropriate foraging and nesting habitat for these species. Therefore, there is a low to moderate potential for these species to occur on-site. In order to address CDFW's comment regarding these species, **MM BIO-5.1** (Preconstruction Surveys for Nesting Birds) has been revised to include a focused survey for raptor species, and if necessary the implementation of avoidance measures if these species are observed.

C-24 (cont.)

La Purisima Blue Butterfly

The CDFW Special Animals List defines the animal taxa that are tracked by the CDFW. According to the CDFW's April 2017 Special Animals List this species does not have a Species of Special Concern, California Threatened, California Endangered, or any other listed status. Regardless of the La Purisima blue butterfly's legal protection or status, the CDFW letter states that this butterfly species has an obligate relationship with the California spineflower (which is located within the grading footprint of the proposed development), and that any ground disturbance would disturb the pupae life stage. If this butterfly species occurs on-site, then impacts to the California spineflower would likely impact this butterfly species. The original Draft EIR and Revised Draft EIR do not discuss this species as it not known to have any legal protection or status. The Applicant is not required through any federal, state, or local nexus to mitigate for potential impacts to this species.

Gopherous Scarab Beetle

This species is not listed on the CDFW's April 2017 Special Animals List, but it was stated in the CDFW comment letter to be rare, unique, and endemic to the area. The original Draft EIR and Revised Draft EIR do not discuss this species, as it not known to have any legal protection or status. The Applicant is not required through any federal, state, or local nexus to mitigate for potential impacts to this species.

Western Spadefoot Toad (CSC)

The original Draft EIR proposes western spadefoot toad avoidance and protection measures as implemented through **MM BIO-1.10**. According to the Biological Resources Assessment, this species has a high potential to occur because suitable breeding habitat is present in the spikerush wetland, with suitable sandy upland habitats for estivation.

Silvery Legless Lizard—CSC

The original Draft EIR states that the sandy soil within the shrubland and oak understory on-site is suitable for this species and was observed on-site. The original Draft EIR proposed silvery legless lizard avoidance and protection measures as implemented through **MM BIO-1.7**.

C-24 (cont.)

Coast/Blainville's HornedLizard—CSC

The original Draft EIR states that the sandy soil within the shrubland and oak understory on-site is suitable for this species and was observed on-site. The original Draft EIR proposed coast horned lizard avoidance and protection measures as implemented through **MM BIO-1.8**.

Coastal Whiptail—CSC

This species is typically observed in open coastal sage scrub, chaparral, woodlands, and streamsides habitats. The on-site chaparral and woodland habitat may be appropriate for this species; however, the coastal whiptail was not observed during project surveys, nor is it identified within the CNDDB 9-quadrangle search vicinity. In addition, this species' distributional range is mostly between Ventura and San Diego counties, with a small area located in the easternmost portion of Santa Barbara County. Therefore, this species was determined to have a low potential to occur on-site.

Coast Patch-nosed Snake—CSC

The original Draft EIR states that this species has a high potential to occur on-site because of suitable shrubland habitat and woodrat nests (suitable prey) are located on-site. The original Draft EIR proposed coast patch-nosed snake avoidance and protection measures as implemented through **MM BIO-1.11**.

Pallid Bat—CSC

To address CDFW's comment pallid bat was determined to have no potential to occur based on the following rationale: the Special Status Species Evaluation Table (Appendix D of Draft EIR Appendix D-1) shows that the pallid bat was not observed during project surveys, nor is it identified within the CNDDB 9-quadrangle search vicinity. The habitat on-site is not suitable (this species is typically observed in arid deserts and grasslands, shallow caves, crevices, rock outcrops, buildings, and tree cavities). Therefore, the pallid bat was determined to have no potential for occurrence on the project site.

Townsend Big-eared Bat—CSC

To address CDFW's comment pallid bat was determined to have no potential to occur based on the following rationale: the Special Status

C-24 (cont.)

Species Evaluation Table (Appendix D of Draft EIR Appendix D-1) shows the Townsend big-eared bat was not observed during project surveys, nor is it identified within the CNDDB 9-quadrangle search vicinity. The habitat is not suitable on-site (this species typically is observed caves, mines, buildings, in a variety of arid and mesic habitats). Therefore, the Townsend's big-eared bat was determined to have no potential for occurrence on the project site.

Western Red Bat—CSC

The original Draft EIR proposed western red bat avoidance and protection measures as implemented through **MM BIO-1.9**. According to the Biological Resources Assessment, this species has a high potential to occur because suitable roosting trees are located on-site.

American Badger – CSC

The original Draft EIR states that this species has a high potential to occur because suitable habitat occurs on-site and numerous occurrences have been documented in the adjacent Burton Mesa Ecological Reserve. The original Draft EIR proposed American badger avoidance and protection measures as implemented through MM **BIO-1.6**.

C-25 This comment refers to the confirmed siting of the Federally Endangered El Segundo blue butterfly. To address the CDFW's comment regarding potential take of El Segundo blue butterfly, the impact assessment in Chapter 4.3, Biological Resources, has been revised to disclose impacts to this federally endangered species and its habitat. The Applicant must obtain USFWS approval of an Incidental Take permit and Habitat Conservation Plan pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act. To ensure the appropriate regulatory processes are followed, **MM BIO-1.13** requires that the Applicant obtain these necessary permits/approvals from USFWS prior to the County's issuance of any grading permit. **MM BIO-1.13** also specifies avoidance of the El Segundo blue butterfly host plant and grading avoidance during all life stages of the ESBB (particularly during the adult flight season). Avoidance measures would require that a County-approved biologist conduct

C-25 (cont.)

pre-construction surveys for all life stages of the El Segundo blue butterfly one week prior to grading. With the implementation of **MM BIO-1.13**, requirements of an Incidental Take permit and Habitat Conservation Plan, or any specific USFWS mitigation requirements (USFWS mitigation would supercede species-specific requirements noted in the EIR), Impact BIO-1 would be mitigated to a less than significant level for the El Segundo blue butterfly (Class II impact).

C-26

Evidence impact would be significant: Removal and development of habitat in the proposed Project area supporting a complex suite of sensitive plant and animal species would trigger a Mandatory Finding of Significance under CEQA Section 15065 and is a substantial adverse impact in the view of CDFW, and particularly so when we consider cumulative losses of Burton Mesa chaparral associations. CDFW does not support relocation of animals, except under extreme circumstances, and protocols must be followed to accommodate relocation efforts, in concert with CDFW, and early consultation is recommended. Moving wildlife out-of-harm's way does not constitute effective mitigation for loss of occupied wildlife habitat.

Recommended Potentially Feasible Mitigation Measure(s):

C-27

Mitigation Measure #1: Project implementation should consider the life cycles of all trustee agency species to ensure wildlife are not negligently impacted on site should grubbing and grading occur. Avoidance measures are needed to ensure species are not impacted during vulnerable periods within their lifecycle, e.g. raptor nesting January-August; passerine nesting February-August ; bat habitat during torpor / winter sleep periods Oct 1 – Feb 1 and nursery colonies April 1 – June 1; coast horned lizards begin burrowing underground, where they cannot be located, to torpor/winter sleep in October.

C-28

Mitigation Measure #2: There is the potential for the globally declining Monarch (*Danaus plexippus*) and La Purisima blue (*Philotiella speciosa purisima*), a locally rare butterfly, to occur on the proposed Project site. Both species have a plant obligate relationship; and could be harmed directly by either pesticide or herbicide applications. Pesticide and herbicide restrictions should be required for the project site and the on-site open space to prevent impacts to the Burton Mesa Ecological Reserve. The Project site and HOA should prepare and adhere to a project wide Integrated Pest Management Plan.

C-29

Mitigation Measure #3: To avoid, minimize, or mitigate for Project-related impacts to wildlife resources below a level of significance, CDFW recommends that all wildlife surveys follow CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Animal Species. The protocols and guidelines are available here (https://www.wildlife.ca.gov/ Conservation/Survey-Protocols). CDFW recommends habitat preservation as mitigation for unavoidable impacts that would benefit the species potentially harmed by the Applicant's project activities. A complete, recent assessment of rare, threatened, and endangered, and other sensitive species on site, and within the area of potential effect, should be addressed to include all those SSC species which meet the CEQA definition (see CEQA Guidelines § 15380).

C-30

Issue # 4: The DEIR, Page 3-4, stated, "The environmental setting for water and hydrology resources is based on the Oak Hills Estate Project Drainage Report (RRM Design Group 2015)" (Lead Agency, DEIR, 2017). The Drainage Report, refers to on-site hydrological features as man-made, remnant, created by erosional flows, or altered to prevent flows into areas of habitation and thus not subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). CDFW does not agree with this description and its conclusions.

Recommended Potentially Feasible Mitigation Measure(s):

C-31

Mitigation Measure #1: The Department has regulatory authority with regard to activities occurring in streams and/or lakes that could adversely affect any fish or wildlife resource. For

C-26 This comment states that the removal of habitat (and the cumulative loss of Burton Mesa chaparral) for the proposed project that supports many sensitive plants and animals triggers a Mandatory Finding of Significance under CEQA Section 15065. The comment also suggests that CDFW does not support relocation of animals and it is not an effective mitigation for loss of occupied wildlife habitat. The EIR concurs with this comment that the proposed project would result in significant impacts to biological resources; however, as required by CEQA, mitigation measures have been proposed that would reduce the identified impacts to a less than significant level. Specific language was added to the following mitigation measures to require CDFW consultation prior to any potential relocation of the species: **MM BIO-1.7** (Silvery Legless Lizard Avoidance), **MM BIO-1.8** (Blainville's Horned Lizard Avoidance), and **MM BIO-1.10** (Western Spadefoot Toad Avoidance).

C-27 The comment provides avoidance measures (dates) to be implemented into the mitigation measures (i.e. raptor nesting January-August, passerine nesting February-August; bat habitat during torpor/winter sleep periods October 1–February 1, nursery colonies April 1–June 1; coast horned lizards begin burrowing underground in October). Comment noted. **MM BIO-5.1** requires focused surveys for nesting birds and raptors around the general timeframe of February 1 to September 15. **MM BIO-1.9** requires surveys for roosting western red bats during the months of September to May and avoidance measures if western red bats are found. A condition was added to **MM BIO-1.8**, stating that since horned lizards winter underground starting in October, no surveys should be conducted during the winter months.

C-28 This comment states that the project HOA should prepare and adhere to a project wide Integrated Pest Management Plan that would have pesticide and herbicide restrictions in order to prevent impacts to the Burton Mesa Ecological Reserve, the globally declining Monarch and locally rare La Purisma blue butterflies. Public outreach regarding the sensitivity of the adjacent restoration area/open space, and invasive species control, minimizing the use of pesticides, herbicides and rodenticides, and specific measures to control argentine ants was incorporated into **MM BIO-2.1** and **MM BIO-2.2** in the EIR.

C-29 The comment recommends that all wildlife surveys follow CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Animal Species, providing habitat preservation as mitigation, and to provide a recent assessment of sensitive species (including CSC species). Wildlife surveys were conducted in spring of 2014. An updated botanical survey (and buckwheat mapping) was conducted in April and May of 2017. The EIR revised recommended mitigation measures requiring sensitive species assessments consistent with CDFW's requirements as noted in comments C-23,C-24, and C-25.

C-30 The comment refers to Page 3-4 of the Draft EIR for water and hydrology resources as based on the Drainage Report. The comment continues on to say that the Drainage Report states that the hydrological features are not subject to CDFW's lake and streambed alteration regulatory authority and does not agree with the description or conclusion. A Jurisdictional Waters and Wetlands Delineation Study for the Oak Hills Project was provided as an Appendix to the Biological Resource Assessment (Appendix D-1). Impact BIO-4 in the Draft EIR states that the drainages on-site are isolated, and do not fall under U.S. Army Corps of Engineers federal jurisdiction, but would require compliance with CDFW Streambed Alteration Agreement and (the Regional Water Quality Control Board [RWQCB] Waste Discharge Requirement permit).

C-31 This comment suggests that the project would likely involve impacts to waters of the State and would require permits from the CDFW pursuant to Section 1600 et seq. The Final EIR includes clarification of the information in the Jurisdictional Wetland Delineation Report and technical corrections recommended by theRWQCB. Page 4.3-61 of the Final EIR states that 0.03 acre of CDFW and RWQCB jurisdictional waters and 112 linear feet would be impacted from this project. Impacts to CDFW and RWQCB jurisdictional waters will be mitigated by providing on-site habitat protection, as well as water quality and drainage protection, and water pollution prevention. Project changes added to the Final EIR removed the (previously) proposed trail alignment, and the central drainage would not be impacted. However, the small eastern drainage would be impacted resulting in the above-mentioned impacts. The implementation of a Streambed Alteration Agreement would achieve the objective of replacing the 0.03-acre impact of DCFW jurisdictional

any activity that will divert or obstruct the natural flow, or change the bed, channel, or bank (which may include associated riparian resources) of a river or stream or use material from a streambed, the project applicant (or "entity") must provide written notification to the Department pursuant to Fish and Game Code, Section 1600 et *seq*. Based on this notification and other information, the Department then determines whether a Lake and Streambed Alteration Agreement (LSAA) if one is required. CDFW's issuance of an LSAA is a project subject to CEQA. To facilitate issuance of a LSAA, if necessary, the environmental document should fully identify the potential impacts to the lake, stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for issuance of the LSAA. Early consultation is recommended, since modification of the proposed project may be required to avoid or reduce impacts to fish and wildlife resources. Again, the failure to include this analysis in the Project's environmental document could preclude the Department from relying on the Lead Agency's analysis to issue a LSAA without the Department first conducting its own, separate Lead Agency subsequent or supplemental analysis for the project. Information on submitting a Notification for a LSAA, the current fee schedule, and timelines required in obtaining an LSAA and can be found using the following URL: https://www.wildlife.ca.gov/Conservation/LSA.

Mitigation Measure #2: All wetlands and watercourses, whether ephemeral, intermittent, or perennial, should be retained and provided with substantial setbacks, which preserve the riparian and aquatic values and functions for the benefit to onsite and off-site wildlife and plant populations. CDFW's Responsible Agency regulatory authority over wetlands resources is guided by the Fish and Game Commission's policies (http://www.fgc.ca.gov/policy/p4misc.aspx#WETLANDS) that "seek[s] to provide for the protection, preservation, restoration, enhancement and expansion of wetland habitat in California. Further, it is the policy of the Fish and Game Commission to strongly discourage development in or conversion of wetlands. It opposes, consistent with its legal authority, any development, or conversion, which would result in a reduction of wetland acreage, or wetland habitat values. To that end, the Commission opposes wetland development proposals unless, at a minimum, project mitigation assures there will be "no net loss" of either wetland habitat values or acreage" (Fish and Game Commission, 2016).

C-32

Mitigation Measure #3: The DEIR includes setbacks where it interfaces with the Ecological Reserve and Oak Hills Estates property boundary. This area is intended to provide fuel modifications and recreational activities for onsite residents. CDFW manages the adjoining Ecological Reserve and CDFW has no designated public access in this area, nor will CDFW provide public access into the Ecological Reserve, as it is inconsistent with CDFW's approved Land Management Plan. Should the proposed Project be approved, the perimeter must be entirely fenced to exclude public access into the Ecological Reserve on the north and west sides. The fence must be maintained at the HOA's financial responsibility, and no gates should be built into the fence that would allow access onto Ecological Reserve lands.

C-33

Mitigation Measure # 4: CDFW recommends the Project applicant notify CDFW for restoration of ground disturbing activities created by geotechnical and other activities. Impacts and activities on the Ecological Reserved are prohibited.

C-31 (cont.)
waters and would be consistent with the "no net loss policy".

C-32 This comment states that the fuel modification zone and recreational activities proposed in the on-site open space are adjacent to the Ecological Reserve and that public access onto the Ecological Reserve is inconsistent with CDFW's Land Management Plan. The comment also expresses that a perimeter fence would need to be installed in order to exclude public access from the Ecological Reserve at the cost of the HOA. The project has been redesigned, and the proposed 30-foot intensive fuel management area has been relocated outside of the proposed on-site open space. The private trail crossing the central drainage has also be entirely removed from the project. The adjusted 30-foot fuel management zone and removal of the private trail from the proposed open space will ensure a more compatible use with the adjacent Burton Mesa Ecological Reserve. In addition, MM BIO-2.1 (On-site Habitat and Open Space Protection Plan) requires measures that would depict the type and location of permanent (operational) and temporary (construction) fencing that would protect the reserve from trespass. MM BIO-2.1 also requires specific signage requirements (i.e., to keep out of the area. Project design changes resulting in complete trail removal and requiring open space fencing and signage reduce the potetential for long-term tresspass- and recreation-related impacts to the reserve to a less than significant level.

C-33 This comment states the CDFW should be notified prior to any geotechnical or ground-disturbing activities on the Burton Mesa Ecological Reserve, and areas on the Reserve that have been disturbed by previous geotechnical investigations should be restored.

Mitigation measure BIO-2.1 has been amended to require that the On-Site Habitat and Open Space Protection Plan describe proposed restoration efforts to be implemented on the Burton Mesa Ecological Reserve to repair ground disturbance and plant removal that occurred when project-related geotechnical investigations were conducted. The plan must also provide documentation that CDFW has reviewed and concurs with proposed restoration and maintenance efforts to be conducted on the reserve.

ENVIRONMENTAL DATA

C-34 CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNDDB field survey form can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDB_FieldSurveyForm.pdf. The completed form can be mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov. The types of information reported to CNDDB can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

FILING FEES

C-35 The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required for the underlying project approval to be operative, vested, and final. (Cal Code Regs, tit.14, § 753.5; Fish & G. Code, § 711.4; Pub.Resources Code, § 21089.).

CONCLUSION

C-36 CDFW appreciates the opportunity to comment on the Lead Agency's DEIR to assist identifying avoidance, minimization, and if necessary, mitigating Project-related impacts on biological resources. Questions regarding this letter or further coordination should be directed to Ms. Jamie Jackson, Senior Environmental Scientist (Specialist), at (805) 382-6906 or jamie.jackson@wildlife.ca.gov.

Sincerely,

Betty J. Courtney

Betty J. Courtney
Environmental Program Manager I
South Coast Region

ec: Ms. Christine Found-Jackson, CDFW, Newbury Park
Ms. Mary Meyer, CDFW, Ojai
Ms. Jamie Jackson, CDFW, Oxnard
Ms. Sarah Rains, CDFW, Newbury Park
Mr. Martin Potter, CDFW, Ojai
Office of Planning and Research, State Clearinghouse, Sacramento

Roger Root at FWS (U.S. Fish and Wildlife Service)
Ventura Office
roger_root@fws.gov

C-34 This comment requests that the data on special status species and natural communities be entered into the CNDDB database. Comment noted.

C-35 This comment provides information on necessary filing fees for an Notice of Determination. Comment noted.

C-36 This is the closing comment and provides information regarding questions and comment. It also provides a list of references. Comment noted.

Valerie Carrillo-Zara at RWQCB (Regional Water Quality Control Board)
Los Angeles Office
valerie.carrillozarra@waterboards.ca.gov

Jacqueline Phelps (California Coastal Commission)
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Letter D

STATE OF CALIFORNIA
NATIVE AMERICAN HERITAGE COMMISSION
Edmund G. Brown Jr., Governor

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February 7, 2017

Steve Rodriquez
County of Santa Barbara, Planning and Development Department
624 W. Foster Road
Santa Maria, CA 93455-3623

sent via e-mail:
rodriguez.aicp@aol.com

Re: SCH# 2015111069, Oak Hills Estate Tentative Tract Map, Rezone, and Development Plan Project, Community of Vanderberg Village; Santa Barbara County, California

Dear Mr. Rodriguez:

D-1 The Native American Heritage Commission (NAHC) has reviewed the Draft Environmental Impact Report prepared for the project referenced above. The review included the Introduction and Project Description, the Executive Summary, and the Environmental Impact Analysis, section 4.4 Cultural Resources, prepared by RECON Environmental, Inc. for the County of Santa Barbara. We have the following concerns:

- There is no Tribal Cultural Resources section or subsection in the Executive Summary as per California Natural Resources Agency (2016) "Final Text for tribal cultural resources update to Appendix G: Environmental Checklist Form," http://resources.ca.gov/ceqa/docs/ab52/Clean-final-AB-52-App-G-text-Submitted.pdf

D-2
- There is no documentation of **government-to-government consultation by the lead agency** under AB-52 with Native American tribes traditionally and culturally affiliated to the project area as required by statute, or that mitigation measures were developed in consultation with the tribes. Discussions under AB-52 may include the type of document prepared and proposed mitigation.

D-3
- There are no mitigation measures specifically addressing Tribal Cultural Resources separately. Mitigation measures must take Tribal Cultural Resources into consideration as required under AB-52, **with or without consultation** occurring. Mitigation language for archaeological resources is not always appropriate for or similar to measures specifically for handling Tribal Cultural Resources.

D-4 The California Environmental Quality Act (CEQA)[1], specifically Public Resources Code section 21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment.[2] If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an environmental impact report (EIR) shall be prepared.[3] In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources with the area of project effect (APE).

D-5 CEQA was amended in 2014 by Assembly Bill 52. (AB 52).[4] **AB 52 applies to any project for which a notice of preparation or a notice of negative declaration or mitigated negative declaration is filed on or after July 1, 2015.** AB 52 created a separate category for "tribal cultural resources"[5], that now includes "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment.[6] Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.[7] Your project may also be subject to **Senate Bill 18 (SB 18)** (Burton, Chapter 905, Statutes of 2004), Government Code 65352.3, if it also involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space. **Both SB 18 and AB 52 have tribal consultation requirements.** Additionally, if your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966[8] may also apply.

[1] Pub. Resources Code § 21000 et seq.
[2] Pub. Resources Code § 21084.1, Cal. Code Regs., tit.14, § 15064.5 (b); CEQA Guidelines Section 15064.5 (b)
[3] Pub. Resources Code § 21080 (d); Cal. Code Regs., tit. 14, § 15064 subd.(a)(1); CEQA Guidelines § 15064 (a)(1)
[4] Government Code 65352.3
[5] Pub. Resources Code § 21074
[6] Pub. Resources Code § 21084.2
[7] Pub. Resources Code § 21084.3 (a)
[8] 154 U.S.C. 300101, 36 C.F.R. § 800 et seq.

D-1 This comment requests the addition of a Tribal Cultural Resources (TCR) section or a subsection within the Executive Summary, per the "Final Text for tribal cultural resources update to Appendix G: Environmental Checklist Form" located at http://resources.ca.gov/ceqa/docs/ab52/Clean-final-AB-52-App-G-text-Submitted.pdf. The EIR was revised to include the following text:.

> On March 13, 2017, the Santa Barbara County Planning and Development Department notified the Barbareño/Ventureño Band Mission Indians of the proposed project as required by CEQA Section 21080.3.1. The purpose of the notification was to provide an opportunity to submit comments regarding the potential for the project to result in impacts to tribal cultural resources. No response to the notification has been received.

D-2 This comment concerns documentation of government-to-government consultation by the lead agency under Assembly Bill 52 requirements. A letter from the County of Santa Barbara (dated March 13, 2017) was added as Appendix J, and summarizes the archaeological subsurface exploration that was conducted on-site. No response to the formal notification letter has been received.

D-3 This comment concerns mitigation measures addressing tribal cultural resources. As indicated in the formal notification letter (added in the Final EIR as Appendix J), no mitigation measures were required because an Extended Phase 1 Subsurface Investigation was undertaken after consultation with the Santa Ynez Tribal Elders Council Cultural Preservation Consultant. This Extended Phase I was conducted to conclusively assess the potential for encountering subsurface archaeological resources, including tribal cultural resources, during construction. In addition, no response to the formal notification letter has been received. As a result, the project would not result in significant impacts to tribal cultural resources and no related mitigation measures are required.

D-4 Refer to response D-3. Appendix J was added to the Final EIR summarizing the conclusions made after an Extended Phase 1 Subsurface Investigation was undertaken. In addition, no response to the formal notification letter has been received.

D-5 This comment states that the project is subject to Assembly Bill 52 requirements and possibly Senate Bill 18 requirements. Both Assembly Bill 52 and Senate Bill 18 require tribal consultation. An Extended Phase 1 Subsurface Investigation was undertaken after consultation with the Santa Ynez Tribal Elders Council Cultural Preservation Consultant. This Extended Phase I was conducted to conclusively assess the potential for encountering subsurface archaeological resources, including tribal cultural resources, during construction. As a result, no prehistoric cultural materials were observed during subsurface exploration of seven excavated trenches on the project site. For clarification, the Assembly Bill 52 formal notification letter was added to the Final EIR as Appendix J. In addition, the project is not subject to National Environmental Protection Act (NEPA), as the project is not located on federal land nor is federal funding involved. Thus, the project is not subject to tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966.

D-6

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

Agencies should be aware that AB 52 does not preclude agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52. For that reason, we urge you to continue to request Native American Tribal Consultation Lists and Sacred Lands File searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/. Additional information regarding AB 52 can be found online at http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf, entitled "Tribal Consultation Under AB 52: Requirements and Best Practices".

The NAHC recommends lead agencies consult with all California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources.

A brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments is also attached.

Please contact me at gayle.totton@nahc.ca.gov or call (916) 373-3710 if you have any questions.

Sincerely,

Gayle Totton, B.S., M.A., Ph.D
Associate Governmental Project Analyst

Attachment

cc: State Clearinghouse

2

D-6 This comment recommends consultation with legal counsel regarding Assembly Bill 52 and Senate Bill 18 compliance. It also provides information for online resources and request forms. No changes were made to the analysis of the EIR as a result of this comment. An Assembly Bill 52 letter from the County of Santa Barbara (dated March 13, 2017) was added in the Final EIR as Appendix J.

D-7

Pertinent Statutory Information:

Under AB 52:
AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:
Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a **lead agency** shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice.
A **lead agency** shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.[9] **and prior to the release of a negative declaration, mitigated negative declaration or environmental impact report**. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code § 65352.4 (SB 18).[10]
The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
a. Alternatives to the project.
b. Recommended mitigation measures.
c. Significant effects.[11]
1. The following topics are discretionary topics of consultation:
a. Type of environmental review necessary.
b. Significance of the tribal cultural resources.
c. Significance of the project's impacts on tribal cultural resources.
If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency.[12]
With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process **shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code sections 6254 (r) and 6254.10.** Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public.[13]
If a project may have a significant impact on a tribal cultural resource, **the lead agency's environmental document shall discuss** both of the following:
a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code section 21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource.[14]
Consultation with a tribe shall be considered concluded when either of the following occurs:
a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.[15]
Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code section 21080.3.2 **shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program**, if determined to avoid or lessen the impact pursuant to Public Resources Code section 21082.3, subdivision (b), paragraph 2, and shall be fully enforceable.[16]
If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, **the lead agency shall consider feasible mitigation** pursuant to Public Resources Code section 21084.3 (b).[17]
An environmental impact report **may not be certified**, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code sections 21080.3.1 and 21080.3.2 and concluded pursuant to Public Resources Code section 21080.3.2.
b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

[9] Pub. Resources Code § 21080.3.1, subds. (d) and (e)
[10] Pub. Resources Code § 21080.3.1 (b)
[11] Pub. Resources Code § 21080.3.2 (a)
[12] Pub. Resources Code § 21080.3.2 (a)
[13] Pub. Resources Code § 21082.3 (c)(1)
[14] Pub. Resources Code § 21082.3 (b)
[15] Pub. Resources Code § 21080.3.2 (b)
[16] Pub. Resources Code § 21082.3 (a)
[17] Pub. Resources Code § 21082.3 (e)

3

D-7 Appendix J includes Assembly Bill 52 and Senate Bill 18 statutory information, Native American Heritage Commission recommendations for cultural resources assessments, and examples of mitigation measures. This comment is for reference only and does not suggest an inadequacy in the analysis of the EIR.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code section 21080.3.1 (d) and the tribe failed to request consultation within 30 days.[18]
This process should be documented in the Tribal Cultural Resources section of your environmental document.

Under SB 18:
Government Code § 65352.3 (a) (1) requires consultation with Native Americans on general plan proposals for the purposes of "preserving or mitigating impacts to places, features, and objects described § 5097.9 and § 5091.993 of the Public Resources Code that are located within the city or county's jurisdiction. Government Code § 65560 (a), (b), and (c) provides for consultation with Native American tribes on the open-space element of a county or city general plan for the purposes of protecting places, features, and objects described in Sections 5097.9 and 5097.993 of the Public Resources Code.

- SB 18 applies to **local governments** and requires them to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf
- Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.**[19]
- There is no Statutory Time Limit on Tribal Consultation under the law.
- Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research,[20] the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code sections 5097.9 and 5097.993 that are within the city's or county's jurisdiction.[21]
- Conclusion Tribal Consultation: Consultation should be concluded at the point in which:
  - The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
  - Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation.[22]

NAHC Recommendations for Cultural Resources Assessments:

- Contact the NAHC for:
  - A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
  - A Native American Tribal Contact List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
    - The request form can be found at http://nahc.ca.gov/resources/forms/.
- Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
  - If part or the entire APE has been previously surveyed for cultural resources.
  - If any known cultural resources have been already been recorded on or adjacent to the APE.
  - If the probability is low, moderate, or high that cultural resources are located in the APE.
  - If a survey is required to determine whether previously unrecorded cultural resources are present.
- If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
  - The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

[18] Pub. Resources Code § 21082.3 (d)
[19] (Gov. Code § 65352.3 (a)(2)).
[20] pursuant to Gov. Code section 65040.2,
[21] (Gov. Code § 65352.3 (b)).
[22] (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Examples of Mitigation Measures That May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

- Avoidance and preservation of the resources in place, including, but not limited to:
  - Planning and construction to avoid the resources and protect the cultural and natural context.
  - Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
- Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
  - Protecting the cultural character and integrity of the resource.
  - Protecting the traditional use of the resource.
  - Protecting the confidentiality of the resource.
- Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
- Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed.[23]
- Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated.[24]

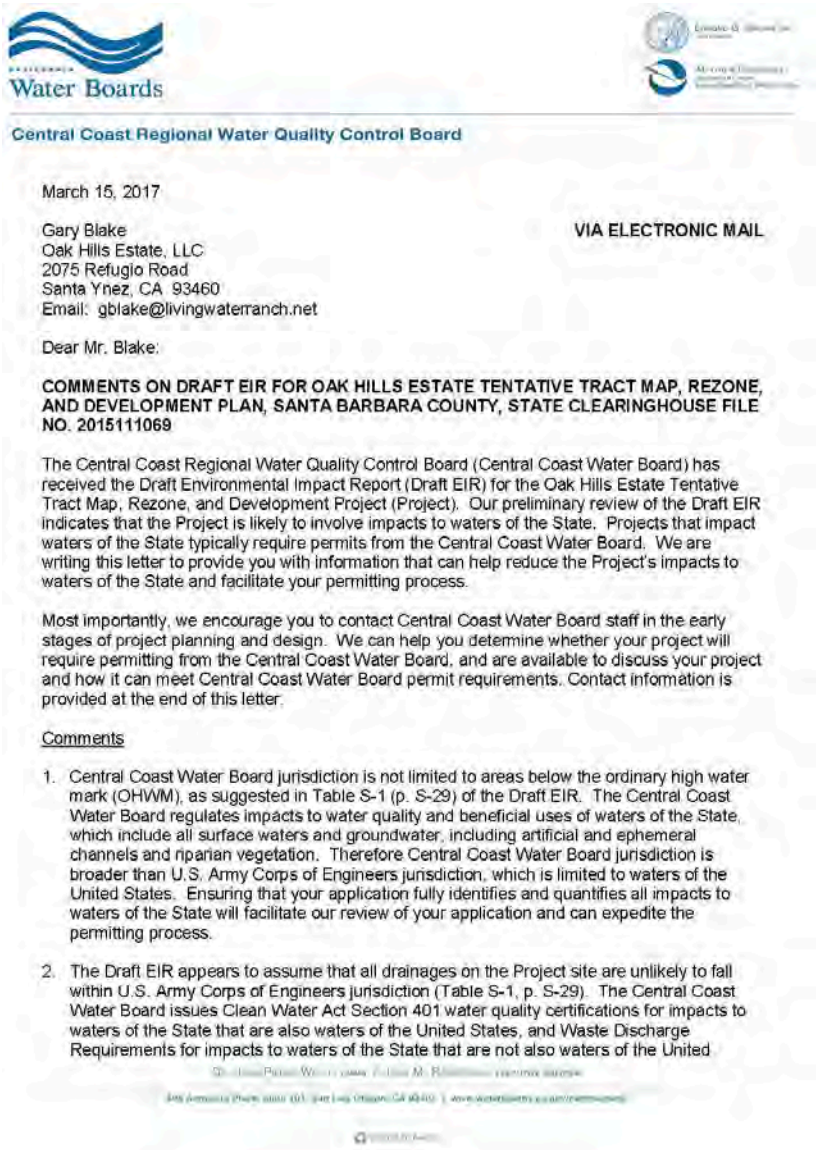
The lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.

- Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources.[25] In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
- Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
- Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code section 7050.5, Public Resources Code section 5097.98, and Cal. Code Regs., tit. 14, section 15064.5, subdivisions (d) and (e) (CEQA Guidelines section 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

[23] (Civ. Code § 815.3 (c)).
[24] (Pub. Resources Code § 5097.991).
[25] per Cal. Code Regs., tit. 14, section 15064.5(f) (CEQA Guidelines section 15064.5(f)).

5

Letter E



Water Boards

Central Coast Regional Water Quality Control Board

March 15, 2017

Gary Blake
Oak Hills Estate, LLC
2075 Refugio Road
Santa Ynez, CA 93460
Email: gblake@livingwaterranch.net

VIA ELECTRONIC MAIL

Dear Mr. Blake:

E-1 **COMMENTS ON DRAFT EIR FOR OAK HILLS ESTATE TENTATIVE TRACT MAP, REZONE, AND DEVELOPMENT PLAN, SANTA BARBARA COUNTY, STATE CLEARINGHOUSE FILE NO. 2015111069**

The Central Coast Regional Water Quality Control Board (Central Coast Water Board) has received the Draft Environmental Impact Report (Draft EIR) for the Oak Hills Estate Tentative Tract Map, Rezone, and Development Project (Project). Our preliminary review of the Draft EIR indicates that the Project is likely to involve impacts to waters of the State. Projects that impact waters of the State typically require permits from the Central Coast Water Board. We are writing this letter to provide you with information that can help reduce the Project's impacts to waters of the State and facilitate your permitting process.

E-2 Most importantly, we encourage you to contact Central Coast Water Board staff in the early stages of project planning and design. We can help you determine whether your project will require permitting from the Central Coast Water Board, and are available to discuss your project and how it can meet Central Coast Water Board permit requirements. Contact information is provided at the end of this letter.

Comments

E-3 1. Central Coast Water Board jurisdiction is not limited to areas below the ordinary high water mark (OHWM), as suggested in Table S-1 (p. S-29) of the Draft EIR. The Central Coast Water Board regulates impacts to water quality and beneficial uses of waters of the State, which include all surface waters and groundwater, including artificial and ephemeral channels and riparian vegetation. Therefore Central Coast Water Board jurisdiction is broader than U.S. Army Corps of Engineers jurisdiction, which is limited to waters of the United States. Ensuring that your application fully identifies and quantifies all impacts to waters of the State will facilitate our review of your application and can expedite the permitting process.

E-4 2. The Draft EIR appears to assume that all drainages on the Project site are unlikely to fall within U.S. Army Corps of Engineers jurisdiction (Table S-1, p. S-29). The Central Coast Water Board issues Clean Water Act Section 401 water quality certifications for impacts to waters of the State that are also waters of the United States, and Waste Discharge Requirements for impacts to waters of the State that are not also waters of the United

E-1 This comment suggests that the project would likely involve impacts to waters of the State and would require permits from the Central Coast Water Board. The Applicant has changed the project design by removing a previously proposed trail from the project and adjusted the fuel management zones so that the first 30 feet of vegetation management are located on the proposed individual residential lots. The impact assessment in Chapter 4.3, Biological Resources for Impact Bio-4 has been revised to state that the eastern ephemeral drainage would be impacted, resulting in the loss of approximately 0.01 acre of RWCQB and 0.03 acre of CDFW and Regional Water Quality Control Board (RWQCB) jurisdictional waters, comprising 112 linear feet. Therefore, a RWQCB Waste Discharge Requirement permit (and CDFW Streambed Alteration Agreement) would be required by the project. Since the drainages on-site are isolated, it was determined to not fall under U.S. Army Corps of Engineers federal jurisdiction, but would require compliance with the state's no net loss of waters rule and other applicable requirements. Therefore, construction would require a Waste Discharge Requirements permit from the RWQCB as well as a Streambed Alteration Agreement from the CDFW.

E-2 This comment is informational and suggests early consultation with Central Coast Water Board staff during the early stages of project design. No revision to the EIR is required.

E-3 The comment states that the language in Table S-1 (page S-29) inaccurately implies that RWQCB jurisdiction is below the ordinary high watermark. As a result of this comment specific language was corrected and "below the ordinary high watermark" was omitted from the statement. This change was also made to the Chapter 4.3 Biological Resources under Impact BIO-4 for Federal Jurisdictional Wetlands and Waters.

E-4 This comment recommends that a jurisdictional delineation be performed for the Project site in order to clarify whether impacted waters are within federal jurisdiction. A Jurisdictional Waters and Wetlands Delineation Study for the Oak Hills Project was provided as an Appendix to the Biological Resource Assessment (Appendix D-1). As stated in response E-1, Impact BIO-4 in the Draft EIR states that

States. Therefore we recommend that a jurisdictional delineation be performed for the Project site to clarify whether the impacted waters are within federal jurisdiction. This will enable you to submit the appropriate permit application to the Central Coast Water Board.

E-5

3. Table S-1 (p. S-10) of the Draft EIR states that implementation of water quality measures will reduce potential impacts on vernal pool wetlands. However, it is not clear in the Draft EIR whether all potential impacts to vernal pool wetlands will be avoided or if some impacts to vernal pool wetlands may still occur. This should be clarified in the final EIR. In addition, the Central Coast Water Board expects projects to avoid and reduce impacts to waters of the State as much as possible. In general, this means that applicants must show that (a) they have taken all practicable steps to reduce the project footprint within waters of the State, beginning in the earliest stages of conceptual and site planning; (b) further avoidance of impacts to waters is not practicable; and (c) they have made all practicable efforts to minimize unavoidable impacts to State waters. Since avoidance and minimization of impacts are difficult to achieve late in the project design process, applications that demonstrate impact avoidance can generally obtain permits much more quickly than those that do not.

E-6

4. Existing elevations and contours shown on Figure 2-7 of the DEIR suggest that the Project may involve impacts to waters of the State in Lot 23. However, it is not clear that the DEIR discusses potential impacts in this area. The final EIR should clearly identify all environmental impacts, and any application for a permit from the Central Coast Water Board must clearly identify and quantify all impacts to waters of the State. In addition, any application for a permit from the Central Coast Water Board must demonstrate efforts to avoid and reduce impacts to waters of the State as much as possible (see comment no. 3).

E-7

5. The project will impact a length of waters of the State on the east side the project. It is unclear how the Project will mitigate for impacts to waters, since the discussion of offsite mitigation in the Draft EIR focuses on mitigation for impacts to plant and animal species only. Projects must provide compensatory mitigation for all impacts to waters of the State that cannot be avoided, in order to prevent loss of State waters and their beneficial uses. Projects must demonstrate adequate compensatory mitigation before receiving permits. As a result, the permitting process can be significantly shorter for applications with mitigation proposals that clearly identify all impacts to waters of the State and their beneficial uses, and show how impacted habitat functions and values will be replaced.

If you have questions or would like to discuss these comments further, please contact **Jon Rohrbough** at (805) 549-3458 or via email at Jon.Rohrbough@waterboards.ca.gov, or Phil Hammer at (805) 549-3882.

Sincerely,

Digitally signed by Phillip Hammer
Date: 2017.03.15 10:59:39 -07'00'

for
John Robertson
Executive Officer

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E-4 (cont.)

the drainages on-site are isolated, and do not fall under U.S. Army Corps of Engineers federal jurisdiction, but would require compliance with the RWQCB Waste Discharge Requirement permit (and CDFW Streambed Alteration Agreement).

E-5 This comment states that it is unclear if implementation of water quality measures would reduce potential impacts to vernal pools. The comment also states that the Draft EIR needs to clarify whether vernal pool wetlands will be avoided or if some impacts to vernal pool wetlands may still occur. The Applicant has changed the project design by removing a previously proposed trail from the project and adjusted the fuel management zones so that the first 30 feet of vegetation management are located on the proposed individual residential lots. As shown in Chapter 4.3 Biological Resources (Table 4.3-6), no direct impacts to spikerush emergent wetland habitat would occur. The spikerush emergent wetland habitat located within the required vegetation management area (FMZ-2) would be avoided by installing protective fencing and signage between the spikerush emergent wetland and the proposed development (specifically located at a lower elevation on the development side of the topographical divide that separates the wetland from the adjoining areas of the project site) and minimal vegetation management for wildfire hazard risk reduction would occur in the vicinity of the wetland. The Santa Barbara County Fire Department has concurred that conducting minimal vegetation management around the wetland would be acceptable (pers. com. Captain Fidler). **MM BIO-2.1** and **MM FP-2** address the protection and avoidance measures through the implementation of fencing and "keep out" signs of the spikerush emergent wetland.

E-6 This comment suggests that according to the contours on Figure 2-7, Lot 23 may impact waters of the State. The area in question is located in coyote brush scrub habitat, an upland habitat type. Vegetation within the drainage area is not distinctly different from vegetation on banks and adjacent terraces and includes mature perennial species growing within bed and banks, indicating that flows are infrequent and low in volume. According to Rincon's August

E-6 (cont.)

2014 Jurisdictional Wetland Delineation Report (located as Appendix E in the Biological Resource Assessment) this area was not identified as jurisdictional waters defined by the State (see Figure 4).

E-7 This comment suggests that the eastern drainage will be impacted (Lot 29 area) without specific mitigation for this impact. Refer to response E-1.

Letter F

VANDENBERG VILLAGE
COMMUNITY SERVICES DISTRICT
3757 Constellation Road • Vandenberg Village • Lompoc, CA 93436
Telephone: (805) 733-2475 • Fax: (805) 733-2109

"Pride in Community Service"

March 7, 2017

Steve Rodriguez, Project Planner
County of Santa Barbara
Planning and Development
624 W. Foster Road, Suite C
Santa Maria, CA 93455-3623

Subject: Draft Environmental Impact Report (DEIR)
Proposed Oak Hills Estate Subdivision Project

Dear Mr. Rodriguez:

F-1 The Vandenberg Village Community Services District (VVCSD) has reviewed the DEIR, primarily from a water and wastewater perspective, and submits the following comments:

Page 4.2-13 **a. Construction Emissions**

Requiring the general contractor to water all active construction areas at least three times a day seems unnecessary, excessive, and a waste of water.

F-2 Page 4.7-22 **4.7.2.3 Cumulative Impacts, Water Supply and Groundwater**

The Lompoc Groundwater Basin has an overdraft of 913 AFY. Water for the proposed subdivision would come specifically from the Lompoc Uplands, one of three hydrologically-connected basins within the overall Lompoc Groundwater Basin. "The Lompoc Uplands Groundwater Basin has been determined to have a long-term overdraft of around 900 AFY." (County of Santa Barbara Groundwater Basins Status Report, October 14, 2014)

http://cosb.countyofsb.org/uploadedFiles/pwd/Water/WaterAgency/Status%20Report%20on%20Groundwater%20Basins_Final2.pdf

F-3 The Heritage II Senior Apartments project was completed in July 2016 so it's no longer a "future" project.

F-1 Comment noted. This comment refers to standard dust control measures and the watering of construction sites as excessive/wasteful. This comment does not identify an inadequacy or error in the EIR.

F-2 This comment identifies an error in Section 4.7, Hydrology and Water Quality. The Draft EIR states that the Lompoc Groundwater Basin has a surplus of 913 acre-feet per year (AFY), and notes that the basin is not in a state of overdraft. This comment is correct and the EIR was in error. The Lompoc Groundwater Basin actually has a deficit of 913 AFY. Section 4.7 has been revised to correct this error. The correction does not substantially change the water supply and groundwater resources impact analysis because the analysis utilized the County's threshold of significance of 12 AFY for Lompoc Groundwater Basin withdrawal. Based on this significance threshold, available service capacity, and VVCSD's success in meeting the mandated 25 percent statewide water conservation target, the project would have a less than significant impact to groundwater resources and available supply has been verified by the VVCSD.

F-3 Page 4.7-22 was changed to state "future or recently completed projects..."

F-4

Page 4.10-3 **4.10.1.2 Water Supply**

Number of water and wastewater connections is approximately 2,600 (not 2,400).

F-5

Page 4.10-3 **4.10.1.3 Wastewater**

Revise this paragraph as follows to correct inaccurate information:

Wastewater from the Vandenberg Village area is collected~~, treated, and disposed of~~ by ~~the~~ VVCSD. Since 1978, wastewater has been ~~connected and~~ treated at the City of Lompoc Regional Wastewater Reclamation Plant (LRWRP) ~~for treatment and disposal,~~ located at 1801 West Central Avenue in Lompoc, California. This plant also serves the Vandenberg Air Force Base (VAFB) area. The LRWRP was constructed in the mid-1970s~~,finished with~~ **and** significant**ly** upgrade**sd** in 2009. ~~The City of Lompoc Wastewater Division completed the LRWRP~~ **VVCSD prepared a** Sewer System Management Plan **(SSMP)** in ~~2014~~ **2010** to comply with the State and Regional Water Quality Control Board regulations.

F-6

Page 5-2 **Table 5-1 Potentially consistent. Water.**

Correct this sentence as follows:

Therefore, the project's water demand would be **below** the Lompoc Groundwater Basin threshold and 2.0 AFY below the VVCSD ~~Will~~ **Intent to** Serve letter allocation.

F-7

Page 4.3-2 **4.3.1.2 Project Site Setting**

VVCSD appreciates the offer to perform off-site mitigation on APN 097-371-067. Seventy-five (75) large Monterey pine trees once lined both sides of Club House Road but about 10 years ago, they started dying. Over time, 43 were cut down and the District removed the remaining 32 trees in January 2016.

There is widespread community interest and support for planting Coast Live Oak trees along Club House Road. At the VVCSD board meeting on June 7, 2016, the Board of Directors approved an offsite mitigation concept plan which conceives a mixture of 5-gallon, 15-gallon, and 24-inch box Coast Live Oak trees at irregular spacing along both sides of Club House Road. VVCSD would like to see a few large (up to 48-inch box) trees in the vicinity of the Club House Road and Burton Mesa Boulevard intersection.

Request the Oak Hills Estate Offsite Mitigation Concept Plan, dated April 6, 2016, prepared by Firma Landscape Architects and approved by the VVCSD Board of Directors on June 7, 2016, be incorporated as an appendix to the DEIR.

F-4 The first sentence on page 4.10-3 of the Draft EIR has been changed to "approximately 2,600".

F-5 This comment identifies corrections to Section 4.10.1.3 Wastewater. These corrections were made directly to the EIR and clarified that the VVCSD collects wastewater and the City of Lompoc wastewater division (at the Lompoc Regional Wastewater Reclamation Plant-LRWRP) treats wastewater. The 2010 VVCSD Sewer System Management Plan was also noted.

F-6 This comment identifies edits to be made to page 5-2, Table 5-1. The following changes were corrected in the EIR: "Therefore, the project's water demand would be below the Lompoc Groundwater Basin threshold and 2.0 AFY below the VVCSD Will Intent to Serve letter allocation."

F-7 This comment requests that the Oak Hills Estates Offsite Mitigation Concept (Firma Landscape Architects – April 6, 2016 – see comment F-9) be added as an Appendix. Suitable off-site areas for mitigation, including oak tree mitigation, were identified for project-related impacts per County of Santa Barbara requirements. No changes were made to the Final EIR as a result of this comment.

F-8

Request this change to the following paragraph:

Off-Site Mitigation Parcel: The project includes proposals to conduct mitigation for impacts to oak trees and maritime chaparral habitat both on the project site and at an off-site location. Off-site mitigation would generally consist of planting oak trees **to include various sizes at irregular spacing along both sides of Club House Road** and the creation/restoration of maritime chaparral habitat in areas of an approximately 28-acre portion of a 123-acre property (APN 097-371-067) owned by the Vandenberg Village Community Services District (VVCSD). The VVCSD has verified the availability of the site for restoration pending approval of an approved final restoration plan. This parcel is located along the east side of Club House Road approximately 1 mile southeast of the project site (see Figure 2-12). This vacant parcel is also located immediately south of the Club House Estates residential subdivision and north of Burton Mesa Road.

The VVCSD Board of Directors reviewed the DEIR and approved these comments at the regular monthly board meeting on March 7, 2017. Please contact me at (805) 733-2475 or jbarget@vvcsd.org with questions or for more information.

Sincerely,

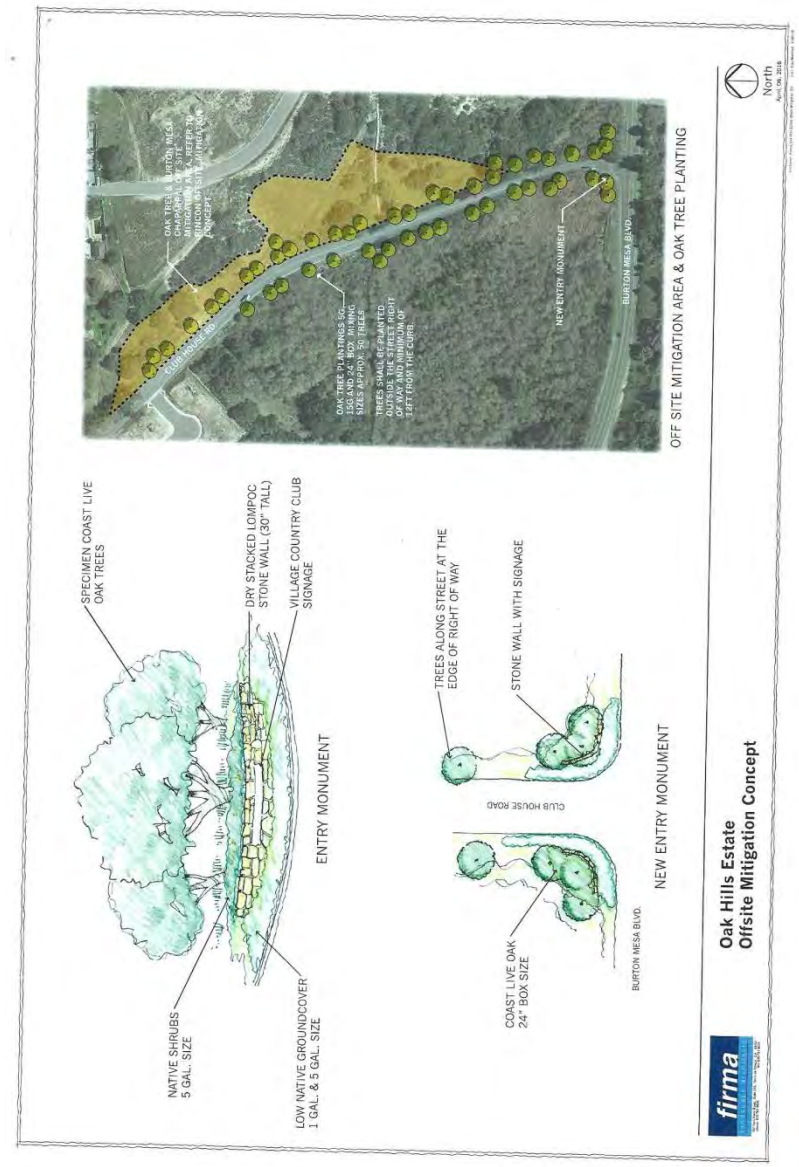
Joe Barget
General Manager

Enclosure
Oak Hills Estate Offsite Mitigation Concept Plan, dated April 6, 2016, prepared by Firma Landscape Architects

c:
Urban Planning Concepts, Inc., Attention: David Swenk

F-8 This comment requests that specific language be added to the offsite mitigation parcel regarding the location of oak tree replacement. Refer to response F-7.

F-9



F-9 This comment is an attachment - Oak Hills Estate Offsite Mitigation Concept (Firma Architects – April 6, 2016) and was provided in reference to comment F-7. This comment does not suggest an inadequacy of the EIR. No change to the EIR is required.

Letter G

URBAN PLANNING CONCEPTS, INC.
URBAN DESIGN • LAND PLANNING • ENVIRONMENTAL ANALYSIS

March 10, 2017

Steve Rodriguez
County of Santa Barbara Planning and Development
624 W. Foster Road
Santa Maria, CA 93455

RE: Applicant Comments to 17EIR-00001
Oak Hills Estate
TM 14,810/15DVP-00001/15RZN-00002

Dear Mr. Rodriguez;

G-1 We are pleased to provide our comments on the draft Environmental Impact Report (17EIR-00001) for the Oak Hills Estate project submitted on February 4, 2015. We have reviewed the draft document and are providing this response. We appreciate your review of our comments and look forward to completion of the document and subsequent decision maker hearings.

Chapter S.0 Executive Summary

G-2 Page S-1 Lead Agency. The correct address for the Lead Agency is:
Planning and Development Department
County of Santa Barbara
624 W. Foster Road
Santa Maria, CA 93455

Page S-1 Property Owner. The correct address for the property owner is:
Oak Hills Estate, LLC
2075 N. Refugio Road
Santa Ynez, CA 93460

These addresses also need to be corrected in other sections of the EIR.

Chapter 2.0 Project Description

G-3 Page 2-2 Surrounding Land Uses. According to the County's zoning maps lands to the north of the project area zoned RMZ and AG-II-100.

G-4 Page 2-18 Fuel Management. It is expected the first 30 feet of fuel management may be within the read yard of the lot. The setback is based on structure not setback line. See comments for Section 4.3 for a full discussion.

G-5 Page 2-20 Public Services and Infrastructure. The project description does not provide the amount of water estimated to be required for the development. In Section 4.7.2.2 it is estimated the project would require 11.6 AFY or 0.46 AFY per residence. The number was based on water

3424 AIRPARK DR. SANTA MARIA, CALIFORNIA 93455 · 805/934-5760 · FAX 805/934-3448
HTTP://WWW.URBANPLANNINGCONCEPTS.COM

G-1 This is an introductory comment. Comment noted.

G-2 This comment provides corrections for the Lead Agency's and Property Owner's addresses. The addresses have been corrected in Chapter S.0 Executive Summary.

G-3 This comment notes that the lands to the north of the project area are zoned as RMZ and AG-II-100. Section 2.4.1., Surrounding Land Uses, of the EIR has been corrected accordingly.

G-4 This comment states that the first 30 feet of fuel management may be entirely within the rear yard of the lot and begins at the structure. The Applicant has changed the project design by removing a previously proposed trail from the project and adjusted the fuel management zones so that the first 30 feet of vegetation management are located on the proposed individual residential lots. This comment was written before the project was revised so the comment is no longer applicable to the design of the project.

G-5 This comment discusses water usage of the project and notes that additional discussion is provided in comments related to Section 4.7, Hydrology and Water Quality. Additional information was added to Chapter 2, Project Description. Also see Response to Comment G-52.

meter readings of an average of residential use in the District's territory. The number, however reflects many residences that were not constructed with water conservation measures in mind. The number calculated using the County's Thresholds Manual and associated Net Consumptive Use Factor (CUF) indicate a per lot use of 0.39 AF. A full discussion is listed in comments associated with Section 4.7.2.2

G-6 Page 2-21 Project Description. The grading volumes do not reflect the project description that was given in the County's Determination of application completeness dated 09/04/2015 and the NOP dated 11/23/2015. Total grading volumes minus lot development is 3,800 cubic yards and 900 cubic yards of fill. Table 2-4 lists 17,400 cubic yards of cut and 17,400 cubic yards of fill which is contrary to the project description. The text states these numbers are based on a phone call from Recon to the applicant's civil engineer. Based on our discussions with the civil engineer the numbers are a conservative estimate of the Civil Engineer for the structural development. It assumes 600 square feet of cut per lot based on "typical grading quantities for similar residential projects". It is impossible to ascertain grading volumes at this time since the development will be per lot as guided by the Design Guidelines. The applicant will also utilize construction techniques to minimize grading such as stem walls, pier and grade beam etc which are not done commonly in the area. The number listed in the environmental document is assuming mass grading of the lots per the environmental consultant's request according to the Civil Engineer. The volumes represent an effort to give an appearance of greater impact than what will occur and could increase mitigation acreage requirements.

The EIR consultant should identify the numbers listed and provide the assumptions in detail of why the number was used and to disclose that it is considered a worst case scenario for environmental evaluation purposes only.

G-7 Page 2-26 Required Approvals. The approval of the Design Guidelines is post discretionary and involves review and approval by the North County BAR as part of the Zoning Clearance process.

Section 4.1 Aesthetics

G-8 Page 4.1-15 ERME, first paragraph. The text describes Category B site conditions onsite, mainly the areas along the road and drainages that exceed 20% slopes. It should be disclosed in the discussion the project maintains a minimum 50 foot setback from the drainages so adequate avoidance is provided in the design in conformance with the ERME.

G-9 Page 4.1-19, Surface Waters 2nd paragraph. Visual impacts are assessed in regards to public view sheds, though no impact is identified, it is incorrect to assess a visual impact for a physical feature (surface waters).

G-10 Page 4.1-19, third paragraph. The project proposes setbacks for development along the drainages. The tree protection plan calls for replacement of native trees (pines are not native) if the root zones are impacted significantly.

G-11 Page 4.1-20 Grading, second paragraph. The EIR incorrectly identifies the prevailing habitat type found on Lots 22 and 23 as chaparral. Figure 3 of the BRA prepared by Rincon Consultants identifies the area as coyote brush scrub. Chaparral is limited to the western portion of the property.

G-6 This comment discusses that the total grading volumes disclosed in the Draft EIR are overestimated, and grading quantities are impossible to determine at this time. The Draft EIR grading volumes are based on input from the project engineer and represents a reasonable estimate of grading that may be required to construct the proposed residences. Because the grading volumes for individual lots cannot be known at this time, it is appropriate to use conservative estimates based on size of the proposed lots. Additional clarifying language that actual grading requirements are subject to change has been added.

G-7 Approval of the Oak Hills Estate Residential Design Guidelines was removed from Section 2.8 of the Project Description. Please note that EIR mitigation measure **MM AES-1** requires that the proposed Oak Hills Estate Design Guidelines be approved by the North County Board of Architectural Review prior to recordation of the Final Tract Map.

G-8 This comment requests that the EIR disclose that the project would maintain a 50-foot setback from drainages where Category B lands are discussed in Section 4.1.1.3, Regulatory Setting. However, this section of the EIR is intended to describe existing regulatory conditions, and not the project. In response to this comment, a note regarding the minimum 50-foot setback has been added to the discussion for Impact AES-1, Visual Aesthetic Character. This clarification does not change the conclusion of the impact discussion (see page 4.1-19).

G-9 This comment provides a correction regarding the discussion on Impact AES-1, Visual Aesthetic Character, for surface waters. The text has been revised to clarify that impacts would be to views of surface waters, and not to surface waters themselves (see page 4.4-19). This clarification does not change the conclusion of the impact discussion.

G-10 This comment provides a correction regarding the discussion on Impact AES-1, Visual Aesthetic Character, for Surface Waters. The text has been revised to state "native trees" are shown in the tree removal and protection plan (see page 4.1-19). This clarification does not change the conclusion of the impact discussion.

G-11 This comment provides a correction regarding the discussion on Impact AES-1, Visual Aesthetic Character, for Grading, Vegetation Removal, and Construction. The text has been revised to state that Lots 22 and 23 would result in the removal of coyote brush scrub (see Page 4.1-20). This clarification does not change the conclusion of the impact discussion.

G-12 Page 4.1-20 last paragraph. The EIR identified and listed as its replacement requirement for oaks an additional 57 oaks over and beyond the Rincon assessment it deemed as impacted (the Rincon OSMP determined 74 trees as impacted). Moreover, with no rationale provided as to (See also Page 4.3-47 in Biological Resources) how that number was determined. It should be determined quantitatively the final OSMP which is required for the final number.

G-13 Page 4.1-21 third paragraph and Mitigation MM AES-1: Design Guidelines and Open Space Management Plan Revisions. It is inappropriate to develop mitigation measures based on a peer review by the EIR Consultant. An EIR consultant can provide recommendations but has no nexus to require their preferences in the documents. Design Guideline review and approval is the sole jurisdiction of the County and the North County Board of Architectural Review. There is the potential that the peer review "requirements" by the consultant will not be looked upon favorably by the NBAR which will require amendments. During NBAR conceptual review, the applicant was given praise for exceptional Design Guidelines by the NBAR when they were reviewed on 02/27/2015.

Likewise, since the discretionary process is not competed, there remains the potential for revision of the project during decision maker hearings. A final BRA/OSMP will be required prior to map recordation which will be based on the final approved project. It is highly likely the EIR Consultant will not be the reviewing entity the County will use to review the final OSMP and there is the potential that consultant will disagree with elements the EIR Consultant desired. We recommend the mitigation be stricken as it is unnecessary. The mitigations AES-2 and associated Biological Resources mitigations are sufficient to adequately mitigate aesthetic impacts to the maximum extent feasible.

G-14 Page 4.1-22, Trails. The original application for the project did not propose a trail within the open space area. It was felt leaving the open space as undisturbed would enable the area to be a buffer for the Preserve. Staff expressed the desire to install one so as to make the open space "useable". On 04/19/2016, the project was conceptually reviewed by the Planning Commission and the Commission agreed with the applicant that a bona fide "use" also includes the biological benefit of undisturbed open space and that a trail need not be required. The applicant still maintains the installation of a trail will be determined based on a post discretionary approval determination and is not a specific requirement at this time.

G-15 Page 4.1-23 Design Guidelines OHEDRB. The OHEDRB role is to provide input and recommendations to the NBAR. They have limited approval authority such as house color, fence type etc., and other minor actions that do not require permitting.

G-16 MM AES-2 NBAR Design Review. Whenever the county has a standardized mitigation language for an impact, it should be used. Also the post discretionary development that occurs on this site requires a Zoning Clearance, not Land Use Permit.

Aest-04 BAR Required: The Owner / Applicant shall obtain Board of Architectural Review (NBAR) approval for the Oak Hills Estate Design Guidelines. All subsequent project elements (e.g., design, scale, character, colors, lighting, materials, landscaping, and irrigation) shall be consistent with the approved Design Guidelines and shall conform to all respects to the approved plans.

TIMING: The Owner / Applicant shall submit Design Guidelines for review and approval by the NBAR prior to issuance of first Zoning Clearance. All subsequent lot structural development shall be submitted to the Department of Planning & Development (P&D)

G-12 This comment suggests that the EIR does not provide rationale for the estimated number of oak tree that may be impacted by the project. However, Impact BIO-3 (Loss of Oak Trees), beginning on Page 4.3-54 of the EIR describes that 74 oak trees would be directly removed, and an additional 53 oak trees could be impacted as a result of damage from grading and construction activities, roadways, and drainage swales within critical root zones. No revision to the EIR is required.

G-13 This comment requests that Mitigation Measure **MM AES-1** be removed. While **MM AES-2** serves to mitigate Impact AES-1, **MM AES-2** alone would not be sufficient to mitigate visual impacts. As this comment states, the discretionary process is not yet completed; therefore, revisions to the Oak Hills Estate Design Guidelines and Open Space Management Plan (OSMP; as required by **MM AES-1**) are appropriate requirements to reduce the visual impacts identified in the EIR. No change to the mitigation is required.

G-14 This comment notes that the inclusion of a trail within the project's open space area would be determined based on discretionary approval. The Applicant has changed the project design by removing the previously proposed trail from the project and adjusted the fuel management zones so that the first 30 feet of vegetation management are located on the proposed individual residential lots. This comment was written before the project was revised so the comment is no longer applicable to the design of the project. The Final EIR was revised to remove the trail from the project.

G-15 This comment notes that the Oak Hills Estate Design Review Board (OHEDRB) would have limited authority; while this does not conflict with the information provided in the EIR, clarification has been added to the discussion on the OHEDRB under the discussion for Impact AES-1 (see page 4.1-23). This clarification does not change the conclusion of the impact discussion.

G-16 This comment states that where the County has standardized mitigation language, the language should be used. This comment does not identify an inadequacy of the EIR or mitigation. The County's standardized mitigation language was utilized in the

and the architectural design's consistency with the approved Design Guidelines shall be reviewed and approved by the NBAR prior to issuance of that lot's Zoning Clearance.
MONITORING: The Owner / Applicant shall demonstrate to P&D compliance monitoring staff that the project has been built consistent with the approved design and landscape plans prior to Final Building Inspection Clearance

G-17 Page 4.1-27 Impact AES-2 last paragraph. The project also includes a buffer from the top of bank of the drainages away from steeper slopes.

G-18 Page 4.1-29 first paragraph. For clarity, 7.312 acres (43%) is undisturbed habitat open space. Using the county's definition of open space, an additional 0.72 acres (4.3 %)is managed open space.

G-19 **Section 4.2 Air Quality**

Page 4.2-14 second paragraph. The assumptions made as to duration are incorrect. According to the applicant's Biologist who will be overseeing the operation (Rincon Consultants), the time period for initial restoration efforts would last approximately three weeks not one year. Such an expectation would make the project infeasible financially and is unrealistic. The schedule for monitoring and maintenance is initially to be once per month for the first year then quarterly until the end of the monitoring period. The schedule will be detailed in the final OSMP to be approved after map approval. This comment is replicated in the Greenhouse Gas emission section.

G-20 **Section 4.3 Biological Resources**

Page 4.3-22. Second paragraph refers to number of acres to be identified off-site for restoration to mitigate for impacts to maritime chaparral and subsequently mesa horkelia. The mitigation requirement does not account for the potentially available acreage on-site for restoration (2.29 acres in accordance with Page 4.3-40 of the Draft EIR and the Open Space Management Plan [OSMP] prepared by Rincon, 2015a) and only presents off-site restoration as a mitigation option. Recommend including the potential for on-site restoration within the 2.29-acre area identified on Page 4.3-40 of the Draft EIR and in the OSMP for consistency with the OSMP.

G-21 Page 4.3-25. Third paragraph; the last sentence of the vernal pool fairy shrimp discussion indicates that erosion and sedimentation resulting from construction activities could affect water quality and thereby degrade aquatic habitat for this species. We recommend clarifying the analysis as the Biological Resources Assessment prepared by Rincon (2015b) clearly indicated that the Project is located downslope from the spikerush wetland, thus avoiding any indirect impacts to hydrology or water quality.

G-22 Page 4.3-28 MM Bio 1.2. Plan Requirements and Timing refers to enhancing existing occurrences of special status plants to the maximum extent feasible. Further clarification is recommended as enhancing all special status plant occurrences within the parcel boundary may not be commensurate to the compensatory mitigation for impacts to special status plants. Especially considering the majority of mitigation will occur off-site.

G-23 Page 4.3-28 MM Bio-1.3. Measure refers to reconnaissance level botanical and wildlife pre-construction surveys. We recommend removing mention of wildlife in the first sentence as the measure is intended for special status plants. Also reconnaissance level surveys are not appropriate and do not serve the same purpose as focused botanical surveys in order to identify special status plant occurrences on-site.

G-16 (cont.)
development of mitigation measures, though the standardized language has been revised in some cases to adapt the standardized MMs to the project and its site-specific impacts. The timing of **MM AES-2** (North County Board of Architectural Review Design Review) has been revised to "prior to zone clearance for each proposed residence". This clarification does not change the intent of the mitigation measure or the conclusion of the impact discussion.

G-17 This comment states that the project also includes a buffer from the top of bank of the drainages away from steeper slopes. As noted in response G-8, the Final EIR recognizes that setbacks from the central drainage to be retained on the project site would be provided. This comment is not applicable to the discussion for Impact AES-2 and does not require revisions to the Final EIR. Comment noted.

G-18 This comment notes an error in the percentage of open space retained. Chapter 4.1 (Aesthetics) in the Final EIR has been revised to state that 7.25 acres of the project site would be natural open space (43 percent) and 0.72 acre of the project would be managed open space (4.3 percent). The cited acreages and percentages are in reference to Table 2-2 of the Project Description. This clarification does not change the conclusion of the impact discussion.

G-19 This comment notes that initial restoration activities are anticipated to last three months, and not one year, as the Draft EIR states. The discussion in Section 4.2, Air Quality, regarding the duration of restoration activities was not revised because it is reasonable to analyze air quality impacts from restoration activities based on a one-year duration.

G-20 This comment notes that the requirement for off-site Mesa horkelia mitigation does not include available acreage for on-site restoration of Mesa horkelia. The language under **MM BIO-1.2** has been revised to clarify that both on-site and off-site mitigation (see Page 4.3-31) may be utilized to fulfill the mitigation ratio requirements for impacts to Mesa horkelia.

G-21 This comment suggests that the EIR overstates indirect impacts to the vernal pool on the project site. However, due to the proximity of the vernal pool to proposed construction activities that would occur on the project site and future residences, the potential indirect impacts and associated mitigation that are disclosed in the EIR are reasonable. See response to comment B-4 for vernal pool fairy shrimp.

G-22 This comment suggests that the **MM BIO-1.2** requirement to protect and enhance special status plants on-site to the maximum extent feasible is not commensurate to the mitigation impacts for special-status plant species. However, it is reasonable to attempt to protect and/or enhance existing special-status plant species occurring in on-site open space areas that are to be retained to the maximum extent feasible prior to relying on off-site mitigation. The mitigation measure is commensurate with the impacts to special status plant species, and no revision is required in response to the comment. However, clarification has been added that off-site mitigation will be required.

G-23 This comment requests that the survey required by **MM BIO-1.3** not include wildlife. This revision has been made in the Final EIR because this comment is correct in that **MM BIO-1.3** is intended to survey for and protect special-status plant species and not wildlife species.

G-24 Page 4.3-28 MM Bio-1.3. First sentence of the second paragraph indicates that the 2014 botanical survey is valid for two years. Considering the measure indicates that additional botanical surveys would be required if ground breaking were to occur after March 18, 2018, the period in which the 2014 botanical survey is valid should be four years, not two.

G-25 Page 4.3-30 MM Bio-1.4. The Plan Requirements and Timing should be clarified further. It is unclear regarding the procedural differences between trail construction and fuel management activities. For example, the measure requires that a report be submitted prior to issuance of grading and /or building permit issuance. The measure seems to be tied to construction of the Project and not the management activities in which the measures is intended for (fuel management).
Page 4.3-30 MM Bio-1.4, Plan Requirements and Timing. The measure indicates special status plant surveys shall be conducted on an annual basis. It should be clarified whether this applies to both trail construction and fuel management or just one of these activities.

G-26 Page 4.3-36 MM Bio-1.12. List item (a) indicates that a protective fencing gate be installed at least 250 feet from the edge of pools or the spikerush emergent wetland prior to construction. It is unclear what the purpose of the gate as there appears to be no demonstrated need for it since construction within the 250-foot buffer is restricted and the fact that the subject seasonal wetland is upslope from the Project.

G-27 Page 4.3-40. Fourth paragraph. The paragraph indicates that 2.9 acres on the project site would be available for habitat restoration. Per the OSMP (Rincon, 2015a), the acreage available for on-site mitigation is 2.29 acres.

G-28 Page 4.3-38 Table 4.3-6 and Figure 4.3-2. The impact acreage calculations (Table 4.3-6) for each habitat type are inconsistent with impact calculations in the Biological Resources Assessment (Rincon, 2015b). In addition, the project's impact footprint depicted in Figure 4.3-2 is inconsistent with the project's impact footprint presented in the Biological Resources Assessment (Rincon, 2015b). Recommend clarifying the reason for the differences.

G-29 Page 4.3-39. First Paragraph. The second sentence indicates that the 0-30' fuel management zone extends 15 feet within the development footprint while the remaining 15 feet occurs outside of the development footprint. It should be clarified that the 0-30' fuel management zone begins at the base of the structure and is not based on the development footprint. Considering the 0-30' fuel management zone begins at the structure, the actual amount of impacts from fuel management will need to be determined upon final lot buildout and included in the final OSMP. Recommend removing the words "help ensure" from the last sentence for clarity.

G-30 Page 4.3-41. MM BIO-2.1. Because the impacts associated with the fuel management zones is tied directly to the footprint of the proposed structure on each lot (See comment 11), the actual amount of impacts from fuel management will need to be determined upon final lot buildout and included in the final OSMP. MM BIO-2.1 should include a provision to revise the OSMP to reflect the actual impacts and subsequent mitigation acreage needed upon final lot buildout.

G-31 Page 4.3-39. The last sentence of the first paragraph reads, "In addition, implementation of MM BIO-1.6 would ensure help ensure workers are properly trained and advised on sensitive vegetation communities and species to minimize impairment." For clarity, recommend removing "help ensure".

G-24 **MM BIO-1.3** has been revised to reflect the most recent botanical surveys conducted in 2017 and are considered valid until March 1, 2019.

G-25 This comment requests clarification on Plan Requirements and Timing for **MM BIO-1.4**. The measure has been revised to add the requested clarifications.

G-26 This comment requests the requirement for fencing in **MM BIO-1.12** be removed and that there is no demonstrated need for the requirement. However, as noted in **MM BIO-1.12**, fencing around the spikerush emergent wetlands would protect these resources from human, vehicle, and pet (e.g., protect against trampling or other related disturbance).

A meeting held on August 17, 2017 with USFWS, the County of Santa Barbara Fire Department, and the Applicant/Applicant's consultant (Rincon) determined that protective fencing and signage (stating to keep out of the area) located between the spikerush emergent wetland and the proposed development would be appropriate measures to avoid impacts to the potentially occurring vernal pool fairy shrimp. Therefore, vernal pool fairy shrimp may be excluded from the HCP process if avoidance of the species is demonstrated. **MM BIO-1.12** has been modified and specific spikerush emergent wetland avoidance criteria are summarized in **MM BIO-2.1** and **MM FP-2**.

G-27 This comment notes a discrepancy between impact acreages. The Applicant has changed the project design by removing a previously proposed trail from the project and adjusted the fuel management zones so that the first 30 feet of vegetation management are located on the proposed individual residential lots. This comment was written before the project was revised so the acreage calculations suggested in this comment are no longer applicable to the project. For clarification, on-site availability of mitigation acreage that can be restored would be limited to the coyote brush scrub habitat located within the open space. This area does not include the FMZ-2, and is limited to 0.61-acre that can be used for mitigation credit.

G-28 This comment notes that the impact acreage calculations in Table 4.3-6 (now Table 4.3-7) of the EIR are inconsistent with the impact calculations in the Biological Resources Assessment impacts calculations cited in Table 4.3-6 (now Table 4.3-7) differ because the assessment assumes that species would be retained within permanent impact areas through avoidance and on-site restoration (see Appendix D-1, Figure 8). However, the EIR's analysis assumes impacts to all the species located in the proposed project's permanent impact area, defined as the residential lots, roads, drainage swale, retention basins, and FMZ-1 (vegetation management zone within 30 feet of proposed structures) (see Figure 4.3-2 of the EIR). Due to the extent of permanent construction disturbance areas, there are potential edge effects attributed to locating new residents onto the site and the uncertainty associated with permanent biological monitoring and restoration in these areas. Therefore, the plants and sensitive habitat located within the development footprint are not guaranteed to be preserved due to indirect impacts, isolation, or edge effects. No changes in the Final EIR impact conclusions were made as a result of this comment

G-29 This comment states that the first 30 feet of fuel management may be entirely within the rear yard of the lot and begins at the structure. The Applicant has changed the project design by adjusting the fuel management zones so that the first 30 feet of vegetation management are located on the proposed individual residential lots. This comment was written before the project was revised so this comment is no longer applicable to the project.

G-30 This comment suggests that impacts associated with the portion of the 30-foot fuel management zones that falls outside of each individual lot will need to be determined upon final lot buildout and included in the final OSMP. The Applicant has changed the project design by adjusting the fuel management zones so that the first 30 feet of vegetation management are located on the proposed individual residential lots. This comment was written before the project was revised so this comment is no longer applicable to the project.

G-31 This comment requests a grammatical edit to remove a redundant phrase. The revision has been made.

G-32 The Biological Resources section has multiple references to an On-Site Habitat and Open Space Protection Plan. It is unclear whether this is meant to be a reference to the OSMP. The OSMP has already been developed and can be revised as necessary or if this is a new document that will need to be prepared in addition to the OSMP. Recommend providing consistency and clarity throughout the document.

G-33 Page 4.3-42 MM Bio-2.1 letter b. The measure should include the option for container stock in addition to seed and cuttings for consistency with the OSMP.

G-34 Page 4.3-42 MM Bio-2.1 letter j. Boxing and transplanting oaks that will be removed may not be feasible due to the extensive root structure and subsequent low survivability. Recommend including that implementation of oak tree relocation can be done if feasible based upon evaluation and approval from a certified arborist.

G-35 Page 4.3-43: Mitigation Measure BIO 2-1 (j) requires existing oak trees that are to be removed be transplanted to the off-site mitigation area. This measure should be, at a minimum, qualified by the statement "if determined feasible with a reasonable likelihood for success by a certified arborist, trees to be removed shall...". The reason for this is that the site soils are very sandy and boxing a root ball is extremely difficult because the soil falls away from the roots. In addition, it is likely that the root pattern and depth of roots in this sandy soil is deeper than that typically found in a more loamy soil. This means fewer roots are captured in the transplant process and survivability is diminished.

G-36 Page 4.3-43 MM Bio-2.1 letter n subsection iii. The language in this measure requires clarification. It is unclear how "2) Tree removal and trimming w/in the habitat." relates as a requirement to subsection iii which refers to requirements for excavation and trenching.

G-37 Page 4.3-44 MM Bio-2.2. The measure indicates that the entirety of the 14.76 acres required for mitigation is to be fulfilled off-site and disregards the potential acreage available for on-site restoration as indicated in the OSMP (Rincon, 2015a). We recommend including the potential on-site mitigation acreage for consistency with the OSMP.

G-38 Page 4.3-47: Under impact BIO-3, the EIR identifies 57 oak trees impacted (but not removed) by development. The EIR may not be giving due consideration to the particular qualities of native oaks in the sandy soil on the Burton Mesa. Although page 4.3-20 acknowledges loose sandy soils on the site, the EIR analysis seems to rely upon a generic conditions scenario rather than an actual analysis of what the probable level of impact to oaks from construction around them in this particular setting. Development in the adjoining Vandenberg Village area 30 years ago successfully retained numerous mature native oak trees in residence yards. A simple drive-by review shows numerous front yards with old oaks next to walks and driveways and in positions below surrounding grade, as well as with cut around the trees. The success in retaining these healthy trees 30 years and beyond could be attributed to the sandy soils that are not prone to over compaction and which result in naturally deeper tree rooting depths. The EIR should acknowledge the presence of these nearby mature oaks in similar soils that were impacted 30 years ago and are thriving in an urbanized setting.

G-39 **Section 4.5 Geology/Soils**

Page 4.5-10 MM GEO-2. This mitigation seems more appropriate in the Water Quality Section similar to other projects. The language is similar to MM WQ-3 and contains redundant measures. In MM GEO-2 there is a requirement for a Storm Water Management Plan (SWMP)

G-32 This comment notes that Section 4.3, Biological Resources, makes it unclear whether the On-Site Habitat and Open Space Protection Plan may be a revised OSMP. **MM BIO-2.1** has been updated to clarify that the OSMP may be revised to incorporate all requirements of the On-Site Habitat and Open Space Protection Plan, fulfilling the requirements of **MM BIO-2.1**. This comment does not change the impact conclusion or change the intent of the mitigation measure.

G-33 This comment states that the measure should allow for container stock to be used in addition to seed and cuttings. While seed is preferred, and sometimes required for annual species, container stock may be utilized for some perennial species. The method depends on individual species and should be determined by a qualified biologist. **MM BIO-2.1** has been updated to reflect this clarification.

G-34 This comment states that boxing and transplanting oak trees to be removed may not be feasible depending on root structure and low survivability of transplants. **MM BIO-2.1** has been revised to require boxing and transplanting of oak trees consistent with an approved Tree Protection Plan required by **MM-BIO-3.2**. This clarification does not change the intent or effect of the mitigation measure.

G-35 This comment requests the same clarification as comment G-34. See response to comment G-34.

G-36 This comment requests clarification on bullet (n. iii.) of **MM BIO-2.1**. The language has been edited for clarity. This clarification does not change the intent or effect of the mitigation measure.

G-37 This comment was written before the project was revised so the acreage suggested in this comment is no longer applicable to the project. The project is required to identify a total of 13.84 acres of mitigation land to address an impact to 6.92 acres of mesa horkelia at a 2:1 mitigation to impact ratio. Approximately 0.61 acre of coyote brush scrub habitat (not included in Fire Maintenance Zone-2) would be available for restoration within the proposed on-site open space parcel.

G-38 This comment suggests that the 57 oak trees that are not slated for removal but which may be impacted by construction activities is an overstatement. The comment also provides an opinion regarding nearby developments which successfully retained mature oak trees. As discussed in Section 4.3, Biological Resources, oak tree loss may occur from long-term changes that occur within the critical root zones of oak trees, such as irrigation, ground compaction, grading, etc. Because these types of activities would occur or have the potential to occur within or adjacent to the critical root zones of (now) 53 oak trees (the EIR oak tree numbers were reduced from 57 to 53 oaks from the relocation of the 30-foot fuel management zone to inside the residential property line) that would not be removed by the project, the potential loss of these trees must be disclosed. No revision to the EIR is required.

G-39 This comment notes that **MM GEO-2** and **MM WQ-3** appear to have similar requirements and asks what the differences between the two required plans are. In response, MM GEO-2 is intended to improve water quality of runoff originating from or traveling through the project site during grading and construction of the project through the implementation of a Storm Water Pollution Prevention Plan (SWPPP), Storm Water Management Plan (SWMP), and/or an Erosion and Sediment Control Plan (ESCP). **MM WQ-3** requires a Storm Water Quality Management Plan, which is intended to prevent the entry of pollutants from the project site into the storm drain system after development and during operation of the project. **MM WQ-1** is similar to **MM GEO-2** in that it includes requirements associated with a SWPPP. While preparation of a SWPPP may satisfy the requirements of both **MM GEO-2** and **MM WQ-2**, each measure includes different requirements. For example, **MM GEO-2** includes requirements for the content of the SWPPP (which could also be fulfilled through preparation of a separate SWMP and/or ESCP) while **MM WQ-2** requires fulfillment of NPDES Construction General Permit requirements, which include submitting a copy of the project's SWPPP. Therefore, each of these MMs are not redundant, though one SWPPP may be used for partial compliance with both **MM GEO-2** and **MM WQ-2**. No revisions to the EIR are necessary.

and in MM WQ-3 there is a requirement for a Stormwater Quality Management Plan (SWQMP). Is there a difference between the two? These two mitigations appear redundant and there is a requirement for an Erosion Control Plan and a SWPPP, conditions usually call for one or the other as the Erosion Control Plan is within the SWPPP. MM GEO-2 should be for an Erosion and Sediment Control Plan bulleting the recommendations of the geotech reports to be incorporated into the SWPPP and MM WQ-3 is the SWQMP. It allows for greater efficiency for the applicant to respond to the mitigation measures.

G-40 **Section 4.6 Greenhouse Gas**

Page 4.6-3 Table 4.6.1. Please verify if the State had published 2016 numbers in anticipation of this year's CAP update, if they have it should be annotated in the table. The emissions have been declining since the 1990 values. Any updated numbers would be beneficial for background data.

G-41 Page 4.6-3 & 4 Tables 4.6.1 and 4.6-2. The tables utilize different scales of value; Table 4.6-1 uses MMT CO_2E and Table 4.6-2 uses MT CO_2E. Santa Barbara County generates approximately 1% of the state emissions. By using values in metric tons vs million metric tons the numbers appear inflated. It would be beneficial to utilize the same scale in order to truly reflect Santa Barbara County emissions.

G-42 Page 4.6-7 third paragraph. Update to the Energy code *became* effective January 1, 2017. 2016 standards became effective, 2013 is no longer relevant.

G-43 Page 4.6.10 first paragraph. The County adopted a 1,000 MT threshold for industrial development. No threshold was adopted for residential or commercial development but the 1,000 MT remains a goal for developers of those two uses.

G-44 Page 4.6-10, second paragraph and Tables 4.6-3 and 4.6-4. It is inappropriate to utilize any assessment based on another jurisdiction's significance thresholds, in this case San Luis Obispo County. The County has an approved ECAP and updated significance thresholds for greenhouse gas emissions. Santa Barbara County documents, Santa Barbara County APCD and CARB need only be referenced and analysis based on any agency with no jurisdiction on the project needs to be stricken.

G-45 Page 4.6-12 first paragraph. Grading volumes do not match the numbers in the Project Description. An assumption was made by the Civil Engineer as to grading per lot to be cumulatively 17,400 cubic yards of cut and 17,400 cubic yards.

G-46 Page 4.6-13 Off Site Oak and Chaparral Restoration. The assumptions made as to duration are incorrect. According to the applicant's Biologist who will be overseeing the operation (Rincon Consultants), the time period for initial restoration efforts would last approximately three weeks not one year. Such an expectation would make the project infeasible financially and is unrealistic. The schedule for monitoring and maintenance is initially to be once per month for the first year then quarterly until the end of the monitoring period. The schedule will be detailed in the final OSMP to be approved after map approval.

G-47 Page 4.6-14 last paragraph. The EIR again assesses the project using San Luis Obispo thresholds, is inappropriate, and needs to be removed. The EIR needs to quantify based on Santa Barbara County ECAP and the county thresholds adopted May 2015. There is no

G-40 This comment requests that California greenhouse gas emissions by sector for the year 2016 for background purposes. However, the California Air Resources Board's 2016 Edition of the GHG Emission Inventory, released in June 2016, only contained emissions up to 2014 and California Air Resources Board has not released 2016 emissions data. Therefore, no revision to the EIR will be made in response to this comment.

G-41 This requested revision for Table 4.6-2 to include emissions in million metric tons (rather than metric tons) to utilize the same metric as Table 4.6-1 has been made.

G-42 This comment does not suggest an inadequacy in the EIR. However, the revision to change "will become" to "became" has been made.

G-43 This comment states that the County's threshold of 1,000 MT CO2E for industrial development is utilized as a goal for developers for residential and commercial development. However, lack of a County threshold for residential and commercial development does not allow an analysis of GHG impacts for residential development to be based on the threshold for industrial development. The use of a threshold for industrial development would not be appropriate for an analysis of residential development due to the vast differences in operation and emissions associated with the two development types. No revision to the EIR is required.

G-44 This comment suggests that it is inappropriate to utilize a neighboring jurisdiction's thresholds for an analysis of a project's GHG emissions. Please refer to the EIR's analysis of Impact GHG-2, which provides a detailed description of the step-by-step analysis procedure established by the County's Energy and Climate Action Plan, and why it was appropriate to use a numerical threshold to evaluate the proposed project. No revisions to the EIR are necessary.

G-45 This comment notes discrepancies between the grading quantities on Page 4.6-12. The correction was made to the Final EIR and is consistent with the cubic yards noted in Chapter 2 (see Table 2-4). This clarification does not change the conclusions.

G-46 This comment notes that initial restoration activities are anticipated to last three months, and not one year, as the EIR states. Please see the response to comment G-19. The analysis of greenhouse gas emissions for a one year initial restoration effort represents a reasonable estimate and would not result in significant impacts.

G-47 This comment reasserts a suggested inadequacy in the use of the County of San Luis Obispo's thresholds for residential GHG emissions and that the County of Santa Barbara's thresholds for industrial development should be utilized. Please see responses to comments G-43 and G-44.

threshold for residential development but it is appropriate to state even though the 1,000 MT threshold for industrial development is not applicable the project is even under that.

G-48 Page 4.6-15 second paragraph. This section again references San Luis Obispo County standards. All references to that jurisdiction need to be removed as it is not applicable to this project. There is no provision in CEQA to utilize another agency's adopted thresholds, only the lead agency's thresholds are to be used.

G-49 **Section 4.7 Hydrology and Water Quality**

Page 4.7-3, Groundwater last paragraph. The EIR incorrectly identifies the Lompoc Groundwater Basin as having a 913 AFY surplus, Table 1 of the County of Santa Barbara Groundwater Basins Status Report identifies it in overdraft. That is why there is a threshold of significance (12 AFY). Basins not in overdraft do not have thresholds. This error is repeated on Page 4.7-22.

G-50 Page 4.7-10 Project Clean Water. Based on county mapping it appears the project site is outside the Project Clean Water permit area, the link can be found at:
http://www.sbprojectcleanwater.org/permit.aspx

Before finalizing any required SWQMP mitigations, consultation with Project Clean Water should be documented.

G-51 Page 4.7-6 Regulatory Setting. The EIR should identify whether the various regulatory acts and agencies would be applicable for the project and what would be the nexus. It is highly unlikely Sections 401 and 404 (Clean Water Act) would be required.

G-52 4.7-13 Impact WQ-1 second paragraph. As described in the Project Description, it is estimated the project would require 11.6 AFY or 0.46 AFY per residence. The number was based on water meter readings of an average of residential use in the District's territory. The number, however reflects many residences that were not constructed with water conservation measures in mind. The number calculated using the County's Thresholds Manual and associated Net Consumptive Use Factor (CUF) which will be applicable to new development, indicate a per lot use of 0.39 AF for a total use of 11.3 AFY.

G-53 Page 4.7-16, MM WQ-1. The County has standard language consistent with other approved projects for requiring a SWPPP. For consistency of application it is recommended to use that language

> *Storm Water Pollution Prevention Plan (SWPPP). The applicant shall submit proof of exemption or a copy of the Notice of Intent to obtain coverage under the Construction General Permit of the National Pollutant Discharge Elimination System (NPDES) issued by the California Regional Water Quality Control Board (RWQCB).*
>
> *Plan Requirements and Timing: Prior to approval of a Zoning Clearance the applicant shall submit proof of exemption or a copy of the Notice of Intent and shall provide a copy of the required SWPPP to P&D's Building and Safety Division. The applicant shall keep a copy of the SWPPP on the project site during grading and construction activities. The SWPPP shall contain site-appropriate BMPs consistent with the NPDES Construction General Permit, including maintenance and monitoring of the BMPs. BMPs selection and design will be based upon County-approved guidance manuals including but not limited to Caltrans Construction Site BMP Manual and the California Storm Water BMP*

G-48 This comment reasserts a suggested inadequacy in the use of the County of San Luis Obispo's thresholds. Please see responses to comments G-43 and G-44.

G-49 This comment identifies an error in Section 4.7, Hydrology and Water Quality, which states that the Lompoc Groundwater Basin has a surplus of 913 AFY, and notes that the basin is actually in overdraft. This comment is correct and Section 4.7 of the EIR has been revised accordingly. This clarification does not change the conclusion of the impact discussion.

G-50 This comment states that the project is not within the boundaries of the County of Santa Barbara Project Clean Water permit area and that consultation with Project Clean Water should be documented prior to finalizing SWQMP mitigation. Comment noted. While the project is not within the Project Clean Water permit boundaries, projects outside of the Project Clean Water permit area that include development of one acre or more are still required to provide treatment of stormwater runoff (see http://www.sbprojectcleanwater.org/development.aspx?id=76). Additionally, the mitigation identified in Section 4.7, Hydrology and Water Quality, are included to reduce impacts to less than significant levels.

G-51 This comment requests the EIR identify various regulatory acts and agencies applicable to the project and associated permits. This information can be found in Section 4.7.1.3, Regulatory Setting.

G-52 This comment states that the estimated water usage of the project did not consider water conservation measures of newer residences and that using the County of Santa Barbara Environmental Threshold and Guidelines Manual 2015 net consumptive use factor (instead of 11.6 AFY reported in the EIR) the project would use a total of 11.3 AFY. This was confirmed and the comment is correct. The (.75) net consumptive use factor applicable to projects in the Lompoc groundwater basin has been applied to the project. The project's projected water use has been revised in Chapter4.7 Hydrology to 11.3 AFY. The EIR concluded that a less than significant impact to water supply would occur and the change in the project's water consumption calculation from 11.6 AFY to 11.3 AFY

Handbook (CASQA). SWPPP-approved structural and non-structural BMPs shall be noted on all grading and building plans and verified by P&D.

MONITORING: P&D permit processing planner shall review the documentation prior to approval of Land Use Clearance. P&D compliance monitoring staff shall site inspect during construction for compliance with the SWPPP.

G-54 Page 4.7-18 MM WQ-2. It is requested by the applicant to change the permit timing language for all grading oriented conditions to "land use clearance" instead of zoning clearance. Land use clearance can be interpreted either with a land use permit or zoning clearance. It is the intent of the applicant, due to substantial delays in processing of this project and the costs involved to request rough grading prior to recordation of the map. Making that change in wording can help avoid interpretation miscues.

G-55 **Section 4.8 Land Use**

Page 4.8-7 RR Zone District Land Use. The EIR incorrectly states development in the RR District requires a Development Plan. Section 35.23.050.C.1 states a Development Plan is required in the RR Designation if the total square feet in gross floor area exceeds 20,000 square feet.

G-56 Page 4.8-8 Mitigation Measures. As discussed in the Aesthetics comments, MM AES-1 is inappropriate and should be stricken. MM AES-2, MM BIO-2.1 and 2.2 sufficiently ensure all consistency with county land use requirements.

G-57 **Section 4.9 Noise**

Page 4.9-4, Section 4.9.1.23 Overview. According to the test the sound measurements were taken during the mid-morning time. Since traffic noise is the primary noise generator, it would have been more beneficial to take the readings either during AM or PM peak hours; 7:30AM to 8:30AM/4:30 to 5:30PM to capture the commuter volumes. A more accurate reading of baseline conditions would have been done during those time periods.

G-58 Page 4.9-6 Santa Barbara County Municipal Code. The County is not a City, the proper verbiage is Santa Barbara County Code in the Noise Element.

G-59 **Section 4.10 Public Services**

Page 4.10-1 Intro. Need to add Police to list of areas of analysis.

G-60 Page 4.10-5, last paragraph and Page 4.10-19 last paragraph. Not sure what relevance this paragraph is towards public services. No structural development of habitation that would require services is relevant to the offsite mitigation.

G-61 **Section 4.11 Traffic**

Page 4.11-16 second paragraph. The EIR determined a Class II impact based on potential traffic hazards associated with sight distance. This is a standard condition required in the Roads Division Condition Letter that will be generated. It is not based on density and vehicle generation but by topographic and vegetative constraints to line of sight.

G-52 (cont.)

would not affect the impact conclusions of the analysis.

G-53 This comment states that where the County has standardized mitigation language, the language shall be used. See response to comment G-16 regarding appropriate modifications to standard mitigation to address project-specific impacts.

G-54 This comment requests that "Zoning Clearance" be changed to "Land Use Clearance" for the timing requirements of **MM WQ-2**. This change has been made as it does not affect the intent of the mitigation measure.

G-55 This comment references the Land Development Code and states that development within the RR zone requires a Development Plan when the gross floor area of all structures is 20,000 square feet or more. This clarification has been added to Section 4.8, Land Use.

G-56 This comment reasserts that **MM AES-1** is inappropriate but does not identify justification. See response to comment G-13 regarding appropriateness of **MM AES-1**.

G-57 This comment notes that the noise monitoring would have been more accurate if completed during the peak AM and PM hours. As stated in Section 4.9, Noise, the noise measurements were conducted to assess ambient daytime noise conditions. Due to the residential character of the project area and low traffic volumes on Oak Hill Drive, it is not expected that peak hour traffic noise would be substantially higher than the noise measurements reported in the EIR.

G-58 This comment notes that the County is not a City and the Santa Barbara County Code should be referred to as such. The EIR has been revised accordingly.

G-59 This comment requests to add "police" to the introduction of Section 4.10, Public Services. The EIR has been revised accordingly. This comment does not identify an inadequacy in the analysis of the EIR.

G-60 This comment suggests that a discussion on the off-site mitigation in the cumulative impacts to public services and utilities sections are not relevant. Because the off-site mitigation is part of the project, it is necessary to analyze potential impacts, even if only to disclose that less than significant impacts would result.

G-61 This comment notes that a sight distance study is a standard condition required in the Roads Division Condition Letter. Please note that project-related site distance study information has been submitted to the Santa Barbara County Transportation Division.

G-62 Page 4.11-6 Parking. Each lot will be designed so as to park up to four vehicles in the *garage and driveway.*

Section 4.12 Fire Protection

G-63 Page 4.12-6 2013 California Building Code. This section needs to be updated to reflect the 2016 building code that went into effect January 1, 2017.

G-64 Page 4.12-7 2013 California Fire Code. CFC Title 21 CCR Pt. 9 was updated in 2016, the section needs to be updated to reflect the current code.

G-65 Page 4.12-14 third paragraph. The structures are subject to the new 2016 CBC which went into effect January 1, 2017, not the 2013 CBC. This annotation is made throughout the document and the EIR needs to be checked in its entirety to ensure the current building code is referenced.

G-66 Page 4.12-6 MM FP-2 Fuel Management Plan. The proper timing for a Fuel Management Plan should be prior to Zoning Clearance. Monitoring should be Permit Compliance as done in previous Fuel Management Plans not the Fire Department as Permit compliance monitors all landscaping issues.

G-67 Page 4.12-19 Figure 4.12-2. The figure is slightly misleading. Zone 1 will go from edge of structure not setback. What the figure show is the maximum extent the fuel zones may go into the open space. Actual extent will be determined based on placement of the structure. It is the intent of the applicant to use minimal front yard setbacks on perimeter lots so as to focus as much of the fuel zones within the lot as possible.

G-68 Page 4.12-20 second paragraph. As identified above, the zones are illustrated showing maximum potential of full management into the open space. Figure 4.12-3 is for illustrative purposes only to show the function of the fuel zones. Actual buildout may have the structure much closer to the street allowing for more fuel management on the lot vs. the open space area.

G-69 **Section 5.0 Policy Consistency**

Hillside and Watershed Policy 1. As described in the Project Description discussion, the grading volumes are listed as assumptions based on a worst case scenario and should be identified as that. It is entirely possible the volumes will be substantially less when calculated.

G-70 Visual Resource Policy 1. MM AES-1 is inappropriate and needs to be removed. Consistency with policy is based on MM AES-2.

G-71 **Section 6.0 CEQA Mandated Sections**

Section 6.5 Energy. It should be noted that any development needs to conform to the 2016 CBC which stipulates enhanced energy consideration measures consistent with Appendix F.

G-72 **Section 7.0 Alternatives**

7.3.2 Reduced Unit Alternative. According to the text all levels of impact between the proposed project and the reduced alternative are the same with the exception of Air Quality (construction) and Traffic.

G-62 This comment notes that each lot would be designed to park up to four vehicles in the garage and driveway. This statement does not contradict the statements made in the EIR and does not identify an inadequacy in the analysis of the EIR. Comment noted, but no revision is required.

G-63 This comment requests that Section 4.12, Fire Protection, be updated to reflect the 2016 California Building Code that went into effect January 1, 2017. However, it is sufficient to maintain the discussion of the Building Code that was in effect at the time the Notice of Preparation was issued in November 2015. Regardless, the chapter was revised to address 2016 California Building Code.

G-64 This comment requests that Section 4.12, Fire Protection, be updated to reflect the 2016 California Fire Code. However, it is sufficient to maintain the discussion of the Fire Code that was in effect at the time the Notice of Preparation was issued in November 2015. Regardless, the chapter was revised to address 2016 California Fire Code.

G-65 This comment reasserts the request included in comment F-63. See response to comment F-63.

G-66 This comment requests the timing of **MM FP-2** be revised to prior to Zoning Clearance and that monitoring shall be completed by Permit Compliance staff. These changes are appropriate and have been made to **MM FP-2**. The revisions do not change the intent of the MM.

G-67 This comment suggests that Figure 4.12-2 is misleading and that the Applicant intends to use minimal font yard setbacks. The Applicant has changed the project design by adjusting the fuel management zones so that the first 30 feet of vegetation management are located on the proposed individual residential lots. This comment was written before the project was revised so this comment is no longer applicable to the project. Figure 4.12-2 has been revised to reflect the currently proposed project design.

G-68 Comment notes the same concern noted in comment G-67 regarding fuel zone setbacks which may not extend as far into the open space, depending on the location of individual structures. See response to comment G-67. The discussion under Impact FP-1 has been revised. In addition, Figure 4.12-3 has been omitted from the EIR.

G-69 The comment note concerns with the grading estimates. See response to comment G-6.

G-70 This comment notes concern with **MM AES-1**. See response to comment G-13.

G-71 This comment requests that Section 6.5, Energy note that any development needs shall conform to the 2016 California Building Code. See response to comment G-63. Development will conform to the regulatory requirements in effect at the time of construction.

G-72 This comment is regarding the Reduced Unit Alternative and discusses air quality, traffic, and other areas of the analysis. In response to concerns with the air quality analysis for this alternative, no mitigation is required for the project's impacts to air quality, as this comment states. Additionally, it is appropriate to conclude that a Reduced Unit Alternative, which would involve less construction and less residential units, would result in reduced air quality impacts, though both the project and the alternative would result in Class III impacts.

In response to the correction that the Reduced Project Alternative would also likely require **MM TRAF-1** for a Sight Distance Study, the analysis has been updated. This results in a similar impact as the project for traffic hazards. The Reduced Unit Alternative's impacts associated with transportation and circulation, however, would remain reduced from the project's impacts due to reduction in traffic volumes.

This comment also requests that the analysis of the Reduced Project Alternative should include language that clarifies impacts are slightly reduced, but do not change the level of impact. However, the analyses already appropriately state whether impacts would be reduced and what levels of significance would be anticipated.

Air Quality: No analysis, however, was provided to quantify the determination air quality would lower to a Class III hence removal of the mitigation. Construction related impacts are regulated by the APCD which is requiring the mitigation regardless. Removal of the mitigation in the EIR does not abrogate their requirements. The condition regarding construction related air quality mitigation remains applicable and a Class II for both scenarios.

Traffic: The alternatives analysis stated the reduction of units would lower impacts associated with traffic to a Class III assuming the need for sight distance analysis must not be necessary. The conclusion is inaccurate as the issue of sigh distance is topographically based. The issue and concern of the roadway shoulder slope exists regardless of density. Traffic impacts, assuming a sight distance study is warranted, would remain at a Class II for the reduced density alternative. The conclusion should be the levels of significance and impact levels are the same between the proposed project and the reduced alternative.

Other areas such as Greenhouse Gas, Noise, Public Services, and Fire Protection al maintain the same levels of impact class caning the reduced alternative and the proposed project but maintain a subjective determination stating impacts would be less. The text should mimic the language found in the other sections simply stating the impact may be slightly reduced but will not change the level of impact (either Class II or III).

G-73

Section 7.4 Environmentally Superior Alternative

The reduced density alternative does not lower any Class I or Class II impacts to lower levels so it should be argued the option does not reduce impacts. The proposed project identifies the following as mitigable impacts:

Class I Impacts
- Aesthetics.

Class II Impacts
- Air Quality (Construction)
- Biological Resources
- Cultural Resources
- Geology/Soils
- Hydrology/Water Quality
- Noise (Construction)
- Traffic/Circulation
- Fire Protection

The environmentally superior alternative (reduced until alternative) identifies the removal of 9 units but will not reduce the Class I impact to a Class II or reduce any of the Class II impacts to Class III.

G-74

Air Quality: There is a subjective statement determining the Class II would be removed for air quality but there is no justification of that claim. The level of grading volumes, roads, basins etc will not diminish significantly with the removal of 9 units as they comprise the bulk of construction activities. It appears to be an arbitrary number with no evidence that is does lower any impacts in accordance with the County's Implementation Guidelines for CEQA.

G-73 This comment notes a concern with the Environmentally Superior Alternative specifically that the alternative does not lower the significance levels identified for the project. However, it is appropriate to choose an environmentally superior alternative that reduces impacts of the project, even if those impacts would remain at the same significance levels.

G-74 This comment suggests that the Environmentally Superior Alternative would lower a Class II impact to air quality to a Class III impact. However, the EIR does not support this claim. The project would result in Class III impacts to air quality and does not require mitigation. The Environmentally Superior Alternative (Reduced Unit Alternative) would reduce air quality emissions and thereby reduce impacts, but the significance level would remain at Class III.

G-75 *Traffic*: It should be noted the proposed traffic levels predicted for the project do not exceed any County Threshold of Significance. The EIR incorrectly determined the reduction of nine units would no longer require the need for the sigh distance study since it stated the impacts associated for the reduced alternative would be Class III. The issue of sight distance is not traffic oriented but by topography and sight clearance. The issue exists regardless of levels of traffic and density. The removal of nine units does not bate this impact. The Roads Division already requires the development of a sight distance study in their Departmental conditions. The

G-76 The economic impact of this reduction, however, would be significant and make the project, given the amount of mitigation required, financially infeasible. It is obvious there would be less impact but is that degree of impact substantial and balanced against the need for housing and economic feasibility? The draft document does not address the balance and the need for housing in the area.

G-77 Thank you for considering our comments and suggested revisions. Should you have any further questions please do not hesitate to call.

Sincerely,

David Swenk, Principal Planner

G-75 This comment reasserts the concern with the traffic analysis of the Reduced Unit Alternative, which is the Environmentally Superior Alternative that was stated in comment G-72. See the last paragraph of response to comment G-72.

G-76 This comment requests that the EIR address financial/economic feasibility associated with alternatives. While financial/economic feasibility may be considered by the decision makers and disclosed in a Findings of Fact and Statement of Overriding Considerations, an EIR need not discuss financial feasibility of projects or alternatives.

G-77 This is a closing comment that does not address the EIR analysis or conclusions and does not require a response.

Letter H

445 Oak Hill Terrace, Lompoc, CA 93436

Steve Rodriguez

624 W. Foster Road, Santa Maria, CA 93455

February 4, 2017

Subj: Comments on Draft EIR for the Proposed Oak Hills Estate Project in Vandenberg Village

Dear Mr. Rodriguez,

Thank you for the opportunity to comment on the draft EIR for the proposed Oak Hills Estate project in Vandenberg Village. At this time I have two comments:

H-1

1) The cumulative impact section of the draft EIR appears to have omitted the Summit View Homes project. This City of Lompoc project has been in planning for a considerable period of time; 44 homes will be built at the northeast corner of the intersection of Purisima and Harris Grade Roads, directly across Harris Grade road from the approximately 450-home Burton Ranch project. Summit View will get its water from Mission Hills CSD, as will Burton Ranch.

H-2

2) There is no mention in the draft EIR of Oak Hills Estate's proximity to Freeport-McMoRan's sour gas pipeline which contains hydrogen sulfide gas under high pressure. As I understand it, the Injury Hazard Zone associated with this pipeline is only a few hundred feet north of the proposed project. The county's Energy Division is a good source of information about this pipeline and its hazards. The proximity of this pipeline might constitute an environmental risk to the occupants of the Oak Hills Estate homes, and should be mentioned in the EIR.

Sincerely,

Jon Picciuolo

(805) 733-1217

H-1 This comment requests that the Summit View Homes project (44 single-family residences) be added into the cumulative impact section. As a result of this comment Summit View Homes was added to Table 3-1 under the Cumulative Project Setting (Chapter 3, Section 3.3).

H-2 This comment requests that discussion of the Injury Hazard Zone for the Freeport McMoRan's sour gas pipeline be added into the content of the EIR. The following text was added to Section 6.1.3 of the Revised Draft EIR and has been incorporated into the Final EIR:

> A Freeport–McMoRan sour (H2S) gas pipeline is located approximately 1,800 feet north of the project site. The EIR prepared for the pipeline determined that a potential pipeline operation hazard zone extends 350 feet from the pipeline. The Oak Hills Estate project site is approximately 1,450 feet south of the predicted pipeline hazard zone (pers. comm. from Errin Briggs, Santa Barbara County Energy Division, June 27, 2017). Therefore, the pipeline would not result in significant hazard-related impacts to the proposed project.

Letter I

URBAN PLANNING CONCEPTS, INC.
URBAN DESIGN + LAND PLANNING + ENVIRONMENTAL ANALYSIS

August 25, 2017

Steve Rodriguez
County of Santa Barbara Planning and Development
624 W. Foster Road
Santa Maria, CA 93455

RE: Applicant Comments to Revised 17EIR-00001
Oak Hills Estate
TM 14,810/15DVP-00001/15RZN-00002

Dear Mr. Rodriguez;

I-1 We have reviewed the revised EIR For Oak Hills Estate and are providing these comments . when the original draft EIR went out to public comment we provided a comment later dated March 10, 2017. The comments below include original elements of the March 10 letter that were not addressed along with additional comments based on the revisions to the EIR. This letter has a companion letter prepared by Rincon Consultants dated August 24, 2017 that focuses on the Biological Resources section. We appreciate your review of our comments and look forward to completion of the document and subsequent decision maker hearings.

I-2 **Chapter S.0 Executive Summary**

Page S-1 Lead Agency. The correct address for the Lead Agency is:
Planning and Development Department
County of Santa Barbara
624 W. Foster Road
Santa Maria, CA 93455

Page S-1 Property Owner. Address of applicant is incorrect. The correct address for the property owner is:
Oak Hills Estate, LLC
2075 N. Refugio Road
Santa Ynez, CA 93460

These addresses also need to be corrected in other sections of the EIR.

I-3 **Chapter 2.0 Project Description**

Surrounding Land Uses. According to the County's zoning maps lands to the north of the project area zoned RMZ and AG-II-100.

I-4 Page 2-20 Public Services and Infrastructure. The project description does not provide the amount of water estimated to be required for the development. In Section 4.7.2.2 it is estimated the project would require 11.6 AFY or 0.46 AFY per residence. The number was based on water

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I-1 This is an introductory comment that does not address the EIR.

I-2 See Response to Comment (RTC) G-2.

I-3 See RTC G-3.

I-4 See RTC G-5.

meter readings of an average of residential use in the District's territory. The number, however reflects many residences that were not constructed with water conservation measures in mind. The number calculated using the County's Thresholds Manual and associated Net Consumptive Use Factor (CUF) indicate a per lot use of 0.39 AF. A full discussion is listed in comments associated with Section 4.7.2.2

I-5 Page 2-26 Required Approvals. The approval of the Design Guidelines is post discretionary and involves review and approval by the North County BAR as part of the Zoning Clearance process. Decision Makers are not approving the Design Guidelines as part of the discretionary process.

I-6 **Section 4.1 Aesthetics**

Page 4.1-15 ERME, first paragraph. The text describes Category B site conditions onsite, mainly the areas along the road and drainages that exceed 20% slopes. It should be disclosed in the discussion the project maintains a minimum 50 foot setback from the drainages so adequate avoidance is provided in the design in conformance with the ERME. Only access drives will be located on the slopes along the access drives, the lots are on relatively flat terrain.

I-7 Page 4.1-20 last paragraph. The EIR identified and listed as its replacement requirement for oaks an additional 53 oaks over and beyond the Rincon assessment it deemed as impacted (the Rincon OSMP determined 74 trees as impacted). Moreover, with no rationale provided as to (See also Page 4.3-47 in Biological Resources) how that number was determined. It should be determined quantitatively in the final OSMP which is required for the final number.

I-8 Page 4.1-21 third paragraph and Mitigation MM AES-1: Design Guidelines Revisions. It is inappropriate to develop design oriented mitigation measures based on a peer review by the EIR Consultant. An EIR consultant can provide recommendations but has no nexus to require their preferences in the documents. Design Guideline review and approval is the sole jurisdiction of the County and the North County Board of Architectural Review. There is the potential that the peer review "requirements" by the consultant will not be looked upon favorably by the NBAR which will require amendments. During NBAR conceptual review, the applicant was given praise for exceptional Design Guidelines by the NBAR when they were reviewed on 02/27/2015. It is satisfactory to utilize the revisions as recommendations for the NBAR to consider but the NBAR should be making the decision on their adequacy.

Mitigation AES-1 times adherence to the mitigation of the final OSMP and Design Guidelines at time of tract map approval, Since the discretionary process is not competed, there remains the potential for revision of the project during decision maker hearings. These documents will be required prior to map recordation which will be based on the final approved project. It is highly likely the EIR Consultant will not be the reviewing entity the County will use to review the final OSMP and there is the potential that consultant will disagree with elements the EIR Consultant desired. We recommend the mitigation be stricken as it is unnecessary. The mitigations AES-2 and associated Biological Resources mitigations are sufficient to adequately mitigate aesthetic impacts to the maximum extent feasible.

I-9 MM AES-2 NBAR Design Review. Whenever the county has a standardized mitigation language for an impact, it should be used. Also the post discretionary development that occurs on this site requires a Zoning Clearance, not Land Use Permit. Timing for approval of architectural design by the NBAR should be at time of Zoning Clearance approval not approval of the map.

I-5 See RTC G-7.

I-6 See RTC G-8.

I-7 See RTC G-12.

I-8 See RTC G-13. Proposed **MM AES-1** is directly related to the mitigation of potential project-related aesthetic impacts identified by the EIR. Specifically, the requirements of **MM AES-1** address potential impacts related to tree protection during grading (Impact AES-1: Visual Aesthetic Character): the preparation of on-site and off-site restoration plans (Impact AES-3: Scenic Quality Impacts to the Burton Mesa Ecological Reserve and Other Off-Site Locations); landscape design, native plant list and invasive species control (Impact BIO-2: Sensitive Natural Communities); the location and design of fuel management zones (Impact FP-1: Wildland Fire Hazards); and overall site design (Impact AES-1: Visual Aesthetic Character).

I-9 See RTC G-16.

Aest-04 BAR Required: The Owner / Applicant shall obtain Board of Architectural Review (NBAR) approval for the Oak Hills Estate Design Guidelines. All subsequent project elements (e.g., design, scale, character, colors, lighting, materials, landscaping, and irrigation) shall be consistent with the approved Design Guidelines and shall conform to all respects to the approved plans.

TIMING: The Owner / Applicant shall submit Design Guidelines for review and approval by the NBAR prior to issuance of first Zoning Clearance. All subsequent lot structural development shall be submitted to the Department of Planning & Development (P&D) and the architectural design's consistency with the approved Design Guidelines shall be reviewed and approved by the NBAR prior to issuance of that lot's Zoning Clearance.
MONITORING: The Owner / Applicant shall demonstrate to P&D compliance monitoring staff that the project has been built consistent with the approved design and landscape plans prior to Final Building Inspection Clearance

I-10 Page 4.1-27 Impact AES-2 last paragraph. The project also includes a buffer from the top of bank of the drainages away from steeper slopes.

I-11 Page 4.1-29 first paragraph. For clarity, 7.312 acres (43%) is undisturbed habitat open space. Using the county's definition of open space, an additional 0.72 acres (4.3 %) is managed open space.

I-12 **Section 4.2 Air Quality**

Page 4.2-14 second paragraph. The assumptions made as to duration are incorrect. According to the applicant's Biologist who will be overseeing the operation (Rincon Consultants), the time period for initial restoration efforts would last approximately three weeks not one year. Such an expectation would make the project infeasible financially and is unrealistic. The schedule for monitoring and maintenance is initially to be once per month for the first year then quarterly until the end of the monitoring period. The schedule will be detailed in the final OSMP to be approved after map approval. This comment is replicated in the Greenhouse Gas emission section,

I-13 **Section 4.3 Biological Resources**

General Comment: Impact calculations are based on a worst case scenario assuming total removal within lots and elements of the fuel management zones. The number of acres and individual plant specimens that are impacted are elevated substantially from the analysis provided in the Biological Resource Assessment prepared by Rincon Consultants. For evaluation of environmental impacts fundamentally that approach is acceptable but the document should disclose these are the maximum potential levels of impact, actual impact through design could result in less impacts than evaluated. Mitigations should state the final OSMP that is approved by the County will reflect the final impacts levels and appropriate level of restoration that will be required.

I-14 Page 4.3-21 third paragraph. The text states the applicant is required to obtain a USFWS Incidental Take Permit and approved HCP. As of the date of this letter, the applicant has initiated consultation with the USFWS but the determination requiring an ITP and associated HCP has not been determined at this time. Shod the need arise the applicant will adhere to federal law under their process. The document should not assume actions by federal agencies, it is adequate to state the applicant needs to conform to applicable law as required.

I-10 See RTC G-17.

I-11 See RTC G-18.

I-12 See RTC G-19.

I-13 See RTC G-28 and G-38.

I-14 The comment requests specific language in the EIR to be changed from "the Applicant must obtain USFWS approval of an Incidental Take permit and Habitat Conservation Plan" to "the Applicant must conform to applicable laws as required" for the Vandenberg monkeyflower, vernal pool fairy shrimp, and California red-legged frog. The comment further states that USFWS consultation has been initiated, but the requirement to receive an Incidental Take Permit and associated Habitat Conservation Plan for these species have not been determined. Please note that the USFWS has determined that an Incidental Take Permit and Habitat Conservation Plan will be required for project-related take of El Segundo blue butterfly, California red-legged frog, and Vandenberg monkeyflower. The USFWS has also determined that take of vernal pool fairy shrimp can be avoided by implementing required fencing, signage, and vegetation management measures. Editorial clarification has been made to the analysis and mitigation measures for the Vandenberg monkeyflower, El Segundo blue butterfly, and California red-legged frog stating that federal mitigation requirements would supersede mitigation included in the EIR.

Page 4.3-28 third paragraph. Same comment.

Page 4.3-29 second paragraph. Same comment.

I-15 MM BIO 1.2. Implementation of the measure is unclear as to when it needs to be undertaken. It is appropriate to provide the replacement ratios as well as locations of where the restoration is to be done as part of zoning clearance. It says the requirements need to be addressed prior to grading permits. Any restoration efforts on site needs to be done after the rough grading is complete. The timing to undertake on-site restoration should be after grading and tied to occupancy clearance of the first SFD in each phase to minimize construction oriented impacts to the newly installed specimens.

I-16 MM BIO 1.3 The mitigation is worded like it involves construction. There is no grading associated with the off-site restoration area.

I-17 MM BIO-1.12 Vernal Pool Fairy Shrimp. The avoidance and minimization efforts listed as a mitigation in the EIR are inappropriate as all protection measures and associated mitigation falls under federal jurisdiction. The HCP that will be developed and approved by the USFWS maintains all required protection and recovery measures that are warranted, some of which may or may not be in the list of protection requirements provided in this mitigation. The county need only require demonstration of federal concurrence in order to meet the legal requirements.

The USFWS also assists in accommodating applicants on a case by case basis to develop a Memorandum of Understanding (MOU) in order to allow for commencement of grading activities while the HCP elements are being implemented.

> **MM BIO-1.12** Prior to issuance of any grading permit the project applicant shall obtain all necessary approvals from the USFWS, including an Incidental Take Permit and Habitat Conservation Plan for the vernal pool fairy shrimp on the project site consistent with the federal Endangered Species Act of 1973, prior to issuance of any grading permit. Construction timing, avoidance, and monitoring shall be consistent with USFWS requirements.
>
> **Plan Requirements and Timing:** The Owner/Applicant shall provide to P&D copies of Incidental Take Permit and Habitat Conservation Plan approvals or other USFWS acceptable concurrence obtained from the USFWS prior to issuance of any grading permit for the project site.
>
> **Monitoring:** Permittee shall provide to P&D copies of confirmation of implementation of mitigation measures in the vernal pool fairy shrimp Incidental Take Permit and Habitat Conservation Plan from USFWS. P&D staff shall confirm receipt of any necessary approvals prior to issuance of any grading permit for the project site.

I-18 MM BIO-1.13 El Segundo Blue Butterfly. The avoidance and minimization efforts listed as a mitigation in the EIR are inappropriate as all protection measures and associated mitigation falls under federal jurisdiction. The HCP that will be developed and approved by the USFWS maintains all required protection and recovery measures that are warranted, some of which may or may not be in the list of protection requirements provided in this mitigation. The county need only require demonstration of federal concurrence in order to meet the legal requirements

I-15 The comment states that **MM BIO-1.2** (Special Status Plant Species Protection and Restoration) should be implemented after rough grading is complete, rather than prior to grading permits, in order to minimize construction-related impacts to newly installed plant species. For clarification, **MM BIO-1.2**'s Plan Requirements and Timing to submit specified replacement ratios and numbers has been changed from "prior to first land use clearance" to "prior to first zoning clearance issuance for the first residential structure".

I-16 The comment requests that construction-related wording for **MM BIO-1.3** be changed since it is for off-site restoration. For clarification, **MM BIO-1.3** is for special status species surveys to be conducted prior to (1) construction of the project site and (2) prior to site preparation for the off-site restoration areas. The language in **MM BIO-1.3** has been modified for clarification.

I-17 This comment states that **MM BIO-1.12** (vernal pool fairy shrimp) is an inappropriate measure because this species is under USFWS jurisdiction and USFWS assists in accommodating applicants on a case by case basis. The comment further provides additional language to add flexibility to the mitigation measure. **MM BIO-1.12** has been modified to state the following:

> Prior to issuance of any grading permit the project Applicant shall obtain all necessary approvals from the USFWS. Approvals include concurrence by the USFWS that the project would avoid impacts to fairy shrimp; or obtain an Incidental Take Permit and Habitat Conservation Plan for the vernal pool fairy shrimp on the project site consistent with the federal Endangered Species Act of 1973. All required mitigation measures, including but not limited to the location of mitigation site(s), construction timing, avoidance measures monitoring, and mitigation success criteria shall be consistent with USFWS requirements and would consist of measures such as those listed below or other measures identified by the USFWS or the CDFW.

I-18 This comment states that MM BIO-1.13 (El Segundo blue butterfly) is an inappropriate measure because this species is under USFWS jurisdiction, and USFWS assists in accommodating applicants on a

I-18 cont.

case-by-case basis. The comment further provides additional language to add flexibility to the mitigation measure. USFWS will not allow grading prior to approval of the HCP. **MM BIO-1.13** has been modified to state the following:

> Prior to issuance of any grading permit the project Applicant shall obtain all necessary approvals from the USFWS. Approvals include concurrence from the USFWS that the project would avoid impacts to the El Segundo blue butterfly; or obtain an Incidental Take Permit and Habitat Conservation Plan for the El Segundo blue butterfly on the project site and off-site mitigation parcel consistent with the federal Endangered Species Act of 1973. All required mitigation measures, including but not limited to the location of mitigation site(s), construction timing, monitoring, and mitigation success criteria shall be consistent with USFWS requirements and would consist of measures such as those listed below or other measures identified by the USFWS or the CDFW.

The USFWS also assists in accommodating applicants on a case by case basis to develop a Memorandum of Understanding (MOU) in order to allow for commencement of grading activities while the HCP elements are being implemented.

> **MM BIO-1.13**. Prior to issuance of any grading permit the project applicant shall obtain all necessary approvals from the USFWS, including an Incidental Take Permit and Habitat Conservation Plan for the El Segundo blue butterfly on the project site and off-site mitigation parcel consistent with the federal Endangered Species Act of 1973, prior to issuance of any grading permit. Construction timing, avoidance, and monitoring shall be consistent with USFWS requirements. **Plan Requirements and Timing:** The Owner/Applicant shall provide to P&D copies of Incidental Take Permit and Habitat Conservation Plan approvals or other USFWS acceptable concurrence obtained from USFWS prior to issuance of any grading permit for the project site and restoration of the off-site mitigation parcel.
>
> **Monitoring:** Permittee shall provide to P&D copies of confirmation of implementation of mitigation measures in the El Segundo blue butterfly Incidental Take Permit and Habitat Conservation Plan from USFWS. P&D staff shall confirm receipt of any necessary approvals prior to issuance of any grading permit for the project site and restoration of the off-site mitigation parcel.

I-19 MM BIO-1.14 Red Legged Frog. The avoidance and minimization efforts listed as a mitigation in the EIR are inappropriate as all protection measures and associated mitigation falls under federal jurisdiction. The HCP that will be developed and approved by the USFWS maintains all required protection and recovery measures that are warranted, some of which may or may not be in the list of protection requirements provided in this mitigation. The county need only require demonstration of federal concurrence in order to meet the legal requirements

The USFWS also assists in accommodating applicants on a case by case basis to develop a Memorandum of Understanding (MOU) in order to allow for commencement of grading activities while the HCP elements are being implemented.

> **MM BIO 1.14.** Prior to issuance of any grading permit the project applicant shall obtain all necessary approvals from the USFWS, including an Incidental Take Permit and Habitat Conservation Plan for the California red-legged frog on the project site and restoration of the off-site mitigation parcel consistent with the federal Endangered Species Act of 1973, prior to issuance of any grading permit. Construction timing, avoidance, and monitoring shall be consistent with USFWS requirements. **Plan Requirements and Timing:** The Owner/Applicant shall provide to P&D copies of Incidental Take Permit and Habitat Conservation Plan approvals or other USFWS acceptable concurrence obtained from the USFWS prior to issuance of any grading permit for the project site and restoration of the off-site mitigation parcel.
>
> **Monitoring:** Permittee shall provide to P&D copies of confirmation of implementation of mitigation measures in the California red-legged frog Incidental Take Permit and Habitat Conservation Plan or other USFWS acceptable concurrence from USFWS. P&D staff shall confirm receipt of any necessary approvals prior to issuance of any grading permit for the project site and restoration of the off-site mitigation parcel.

I-19 This comment states the **MM BIO-1.14** (California red-legged frog) is an inappropriate measure because this species is under USFWS jurisdiction, and USFWS assists in accommodating applicants on a case by case basis. The comment further provides additional language to add flexibility to the mitigation measure. USFWS will not allow grading prior to approval of the HCP. **MM BIO-1.14** has been modified to state the following:

> Prior to issuance of any grading permit the project Applicant shall obtain all necessary approvals from the USFWS. Approvals include concurrence by the USFWS that the project would avoid impacts to fairy shrimp; or obtain an Incidental Take Permit and Habitat Conservation Plan for the California red-legged frog on the project site and restoration of the off-site mitigation parcel consistent with the federal Endangered Species Act of 1973. All required mitigation measures, including but not limited to the location of mitigation sites(s), construction timing, monitoring, and mitigation success criteria shall be consistent with USFWS requirements and would consist of measures such as those listed below or other measures identified by the USFWS of the CDFW.

I-20 MM BIO-1.15 Vandenberg Monkeyflower. The avoidance and minimization efforts listed as a mitigation in the EIR are inappropriate as all protection measures and associated mitigation falls under federal jurisdiction. The HCP that will be developed and approved by the USFWS maintains all required protection and recovery measures that are warranted, some of which may or may not be in the list of protection requirements provided in this mitigation. The county need only require demonstration of federal concurrence in order to meet the legal requirements

The USFWS also assists in accommodating applicants on a case by case basis to develop a Memorandum of Understanding (MOU) in order to allow for commencement of grading activities while the HCP elements are being implemented.

> **MM BIO-1.15**. Prior to issuance of any grading permit the project applicant shall obtain all necessary approvals from the USFWS, including an Incidental Take Permit and Habitat Conservation Plan for the Vandenberg monkeyflower on the project site and restoration of the off-site mitigation parcel consistent with the federal Endangered Species Act of 1973, prior to issuance of any grading permit. Construction timing, avoidance, and monitoring shall be consistent with USFWS requirements. **Plan Requirements and Timing:** The Owner/Applicant shall provide to P&D copies of Incidental Take Permit and Habitat Conservation Plan approvals or other USFWS acceptable concurrence obtained from USFWS prior to issuance of any grading permit for the project site and restoration of the off-site mitigation parcel.
>
> **Monitoring:** Permittee shall provide to P&D copies of confirmation of implementation of mitigation measures in the Vandenberg monkeyflower Incidental Take Permit and Habitat Conservation Plan from USFWS. P&D staff shall confirm receipt of any necessary approvals prior to issuance of any grading permit for the project site and restoration of the off-site mitigation parcel.

I-21 MM-BIO-2.1 On Site Habitat and Protection Plan. The mitigation has conflicting timing requirements. In the plan requirements the timing to submit the plan for review is prior to approval of zoning clearance. In monitoring it states the restoration to be in place prior to grading. The time between zoning clearance processing and grading is not very long so the mitigation is infeasible on a timing basis since it will take significant time to complete the restoration due to weather planting windows etc. Also it makes no sense to require the restoration to be in place prior to construction equipment working on the site. Just as in landscaping, you do not install vegetative material until grading is complete. The proper timing should be with zoning clearance of the first SFD. Most of the grading that will occur on site will be the rough grading to install, rods, basins, and utilities. Restoration needs to be accomplished after those operations are complete in order to ensure its viability.

I-22 MM BIO-2.3 Landscaping Plan. The timing is incorrect, it states prior to approval of tract map and issuance of construction permits. Since landscaping is approved by NBAR for development plans proper timing is prior to first Zoning Clearance.

I-23 MM BIO-2.4 Invasive Weeds. It would seem logical to ensure the measures necessary for weed minimization would be put in place after grading not prior to.

I-20 This comment states the **MM BIO-1.15** (Vandenberg monkeyflower) is an inappropriate measure because this species is under USFWS jurisdiction, and USFWS assists in accommodating applicants on a case by case basis. The comment further provides additional language to add flexibility to the mitigation measure. USFWS will not allow grading prior to approval of an HCP. **MM BIO-1.15** has been modified to state the following:

> Prior to issuance of any grading permit the project Applicant shall obtain all necessary approvals from the USFWS. Approvals include concurrence by the USFWS that the project would avoid impacts to the Vandenberg monkeyflower or obtain an Incidental Take Permit and Habitat Conservation Plan for the Vandenberg monkeyflower on the project site and restoration of the off-site mitigation parcel consistent with the federal Endangered Species Act of 1973. Construction timing, monitoring, and mitigation success criteria shall be consistent with USFWS requirements and would consist of measures such as those listed below or other measures identified by the USFWS or the CDFW.

I-21 This comment states that **MM BIO-2.1** (On-Site Habitat and Open Space Protection Plan) has conflicting timing requirements. As a result of this comment "Plan Requirements and Timing" has been modified to reflect the following changes: "The Owner/Applicant shall submit a revised final On-Site Habitat and Open Space Protection Plan that has been approved by P&D prior to issuance of grading permits."

I-22 This comment suggests that the timing is incorrect for **MM BIO-2.3** (Landscaping Plan). As a result of this comment "Plan Requirements and Timing" has been modified to reflect the following changes: "Final landscape and irrigation plans shall be submitted by the Permittee to the County for review and approval prior to the first zoning clearance zoning clearance."

I-23 This comment suggests that the timing is incorrect for **MM BIO-2.4** (Invasive Weed Prevention and Management Program). For clarification, **MM BIO-2.4** does not require weed eradication prior to the issuance of zoning clearance. Rather, **MM BIO-2.4** requires that an Invasive Weed Prevention and Management Program consisting of a list of target weed species to be printed on the construction plans prior to zoning clearance and that the Applicant would demonstrate to P&D compliance staff that the appropriate plans (and a list of target weed species are shown on the map) prior to grading activities. No changes were made as a result of this comment.

I-24 **Section 4.5 Geology/Soils**

Page 4.5-10 MM GEO-2. This mitigation seems more appropriate in the Water Quality Section similar to other projects. The language is similar to MM WQ-3 and contains redundant measures. In MM GEO-2 there is a requirement for a Storm Water Management Plan (SWMP) and in MM WQ-3 there is a requirement for a Stormwater Quality Management Plan (SWQMP). Is there a difference between the two? These two mitigations appear redundant and there is a requirement for an Erosion Control Plan and a SWPPP, conditions usually call for one or the other as the Erosion Control Plan is within the SWPPP. MM GEO-2 should be for an Erosion and Sediment Control Plan bulleting the recommendations of the geotech reports to be incorporated into the SWPPP and MM WQ-3 is the SWQMP. It allows for greater efficiency for the applicant to respond to the mitigation measures. In addition the SWMP is approved by Department of Public Works, a courtesy copy is given the grading inspector but they defer to FCD for approval.

I-24 See RTC G-39.

I-25 **Section 4.6 Greenhouse Gas**

Page 4.6-3 Table 4.6.1. Please verify if the State had published 2016 numbers in anticipation of this year's CAP update, if they have it should be annotated in the table. The emissions have been declining since the 1990 values. Any updated numbers would be beneficial for background data.

I-25 See RTC G-40.

I-26 Page 4.6-3 & 4 Tables 4.6.1 and 4.6-2. The tables utilize different scales of value; Table 4.6-1 uses MMT CO_2E and Table 4.6-2 uses MT CO_2E. Santa Barbara County generates approximately 1% of the state emissions. By using values in metric tons vs million metric tons the numbers appear inflated. It would be beneficial to utilize the same scale in order to truly reflect Santa Barbara County emissions.

I-26 See RTC G-41.

I-27 Page 4.6-7 third paragraph. Update to the Energy code *became* effective January 1, 2017; 2013 is no longer relevant.

I-27 See RTC G-42.

I-28 Page 4.6.10 first paragraph. The County adopted a 1,000 MT threshold for industrial development. No threshold was adopted for residential or commercial development but the 1,000 MT remains a goal for developers of those two uses.

I-28 See RTC G-43.

I-29 Page 4.6-10, second paragraph and Tables 4.6-3 and 4.6-4. It is inappropriate to utilize any assessment based on another jurisdiction's significance thresholds, in this case San Luis Obispo County. The County has an approved ECAP and updated significance thresholds for greenhouse gas emissions. Santa Barbara County documents, Santa Barbara County APCD and CARB need only be referenced and analysis based on any agency with no jurisdiction on the project needs to be stricken.

I-29 See RTC G-44.

I-30 Page 4.6-12 first paragraph. Grading volumes do not match the numbers in the Project Description. An assumption was made by the Civil Engineer as to grading per lot to be cumulatively 17,400 cubic yards of cut and 17,400 cubic yards.

I-30 See RTC G-45.

I-31 Page 4.6-13 Off Site Oak and Chaparral Restoration. The assumptions made as to duration are incorrect. According to the applicant's Biologist who will be overseeing the operation (Rincon Consultants), the time period for initial restoration efforts would last approximately three weeks not one year. Such an expectation would make the project infeasible financially and is unrealistic. The schedule for monitoring and maintenance is initially to be once per month for the

I-31 See RTC G-46.

first year then quarterly until the end of the monitoring period. The schedule will be detailed in the final OSMP to be approved after map approval.

I-32 Page 4.6-14 last paragraph. The EIR again assesses the project using San Luis Obispo thresholds, is inappropriate, and needs to be removed. The EIR needs to quantify based on Santa Barbara County ECAP and the county thresholds adopted May 2015. There is no threshold for residential development but it is appropriate to state even though the 1,000 MT threshold for industrial development is not applicable the project is even under that.

I-33 Page 4.6-15 second paragraph. This section again references San Luis Obispo County standards. All references to that jurisdiction need to be removed as it is not applicable to this project. There is no provision in CEQA to utilize another agency's adopted thresholds, only the lead agency's thresholds are to be used.

I-34 **Section 4.7 Hydrology and Water Quality**

Page 4.7-6 Regulatory Setting. The EIR should identify whether the various regulatory acts and agencies would be applicable for the project and what would be the nexus. It is highly unlikely Sections 401 and 404 (Clean Water Act) would be required.

I-35 4.7-13 Impact WQ-1 second paragraph. As described in the Project Description, it is estimated the project would require 11.6 AFY or 0.46 AFY per residence. The number was based on water meter readings of an average of residential use in the District's territory. The number, however reflects many residences that were not constructed with water conservation measures in mind. The number calculated using the County's Thresholds Manual and associated Net Consumptive Use Factor (CUF) which will be applicable to new development, indicate a per lot use of 0.39 AF for a total use of 11.3 AFY.

I-36 4.7-14 Impact WQ-1 third paragraph. The paragraph needs to be updated to disclose the Governors Executive Order B29-15 has been rescinded by resolution from the State Water Resources Control Board Resolution No. 2017-004 dated February 27, 2017.

I-37 Page 4.7-16, MM WQ-1. The County has standard language consistent with other approved projects for requiring a SWPPP. For consistency of application it is recommended to use that language.

> *Storm Water Pollution Prevention Plan (SWPPP). The applicant shall submit proof of exemption or a copy of the Notice of Intent to obtain coverage under the Construction General Permit of the National Pollutant Discharge Elimination System (NPDES) issued by the California Regional Water Quality Control Board (RWQCB).*
>
> *Plan Requirements and Timing: Prior to approval of a Zoning Clearance the applicant shall submit proof of exemption or a copy of the Notice of Intent and shall provide a copy of the required SWPPP to P&D's Building and Safety Division. The applicant shall keep a copy of the SWPPP on the project site during grading and construction activities. The SWPPP shall contain site-appropriate BMPs consistent with the NPDES Construction General Permit, including maintenance and monitoring of the BMPs. BMPs selection and design will be based upon County-approved guidance manuals including but not limited to Caltrans Construction Site BMP Manual and the California Storm Water BMP Handbook (CASQA). SWPPP-approved structural and non-structural BMPs shall be noted on all grading and building plans and verified by P&D.*

I-32 See RTC G-47.

I-33 See RTC G-48.

I-34 See RTC G-51.

I-35 See RTC G-52.

I-36 This comment states that Page 4.7-14, Impact WQ-1, third paragraph should be updated to reflect the State Water Resources Control Board Resolution No. 2017-004 dated February 27, 2017 in place of the rescinded Governors Executive Order B29-15. The Final EIR has been revised to as a result of this comment.

I-37 See RTC G-53.

MONITORING: P&D permit processing planner shall review the documentation prior to approval of Land Use Clearance. P&D compliance monitoring staff shall site inspect during construction for compliance with the SWPPP.

I-38 MM WQ-3 SWQMP. The mitigation is redundant as it is already required by Project Clean Water. The submittal requirement should be for Project Clean Water to review and approve, Planning and Development receives a copy.

I-39 **Section 4.8 Land Use**

Page 4.8-8 Mitigation Measures. As discussed in the Aesthetics comments, MM AES-1 is inappropriate and should be stricken. MM AES-2, MM BIO-2.1 and 2.2 sufficiently ensure all consistency with county land use requirements.

I-40 **Section 4.9 Noise**

Page 4.9-4. Section 4.9.1.3 Overview. According to the test the sound measurements were taken during the mid-morning time. Since traffic noise is the primary noise generator, it would have been more beneficial to take the readings either during AM or PM peak hours; 7:30AM to 8:30AM/4:30 to 5:30PM to capture the commuter volumes. A more accurate reading of baseline conditions would have been done during those time periods.

I-41 **Section 4.10 Public Services**

Page 4.10-5, last paragraph and Page 4.10-19 last paragraph. Not sure what relevance this paragraph is towards public services. No structural development of habitation that would require services is relevant to the offsite mitigation.

I-42 **Section 4.12 Fire Protection**

Page 4.12-6 2013 California Building Code. This section needs to be updated to reflect the 2016 building code that went into effect January 1, 2017. EIR text should b checked to ensure any other references to the Building Code are corrected.

I-43 **Section 5.0 Policy Consistency**

Hillside and Watershed Policy 1. As described in the Project Description discussion, the grading volumes are listed as assumptions based on a worst case scenario and should be identified as that. It is entirely possible the volumes will be substantially less when calculated.

I-44 Visual Resource Policy 1. MM AES-1 is inappropriate and needs to be removed. Consistency with policy is based on MM AES-2.

I-45 **Section 7.0 Alternatives**

7.3.2 Reduced Unit Alternative. According to the text all levels of impact between the proposed project and the reduced alternative are the same with the exception of Air Quality (construction) and Traffic.

Air Quality: No analysis, however, was provided to quantify the determination air quality would lower to a Class III hence removal of the mitigation. Construction related impacts are regulated

I-38 This comment provides clarification regarding semantics for the monitoring paragraph for **MM WQ-3 SWQMP**. For clarification, the last sentence of the second paragraph on page 4.7-21 was changed to state the following: Public Works' Project Clean Water staff will review the required maintenance records and, once approved, provide a copy to the Santa Barbara County Planning and Development Department compliance monitor.

I-39 See RTC G-56.

I-40 See RTC G-57.

I-41 See RTC G-60.

I-42 See RTC G-63. This comment suggests an update, referencing the California Building Code from 2016. See page 4.12-6 for change.

I-43 See RTC G-6.

I-44 See RTC G-13.

I-45 See RTC G-72.

by the APCD which is requiring the mitigation regardless. Removal of the mitigation in the EIR does not abrogate their requirements. The condition regarding construction related air quality mitigation remains applicable and a Class II for both scenarios.

Traffic: The alternatives analysis stated the reduction of units would lower impacts associated with traffic to a Class III assuming the need for sight distance analysis must not be necessary. The conclusion is inaccurate as the issue of sigh distance is topographically based. The issue and concern of the roadway shoulder slope exists regardless of density. Traffic impacts, assuming a sight distance study is warranted, would remain at a Class II for the reduced density alternative. The conclusion should be the levels of significance and impact levels are the same between the proposed project and the reduced alternative.

Other areas such as Greenhouse Gas, Noise, Public Services, and Fire Protection all maintain the same levels of impact class caning the reduced alternative and the proposed project but maintain a subjective determination stating impacts would be less. The text should mimic the language found in the other sections simply stating the impact may be slightly reduced but will not change the level of impact (either Class II or III).

I-46

Section 7.4 Environmentally Superior Alternative

The reduced density alternative does not lower any Class I or Class II impacts to lower levels so it should be argued the option does not reduce impacts. The proposed project identifies the following as mitigable impacts:

Class I Impacts
- Aesthetics.

Class II Impacts
- Air Quality (Construction)
- Biological Resources
- Cultural Resources
- Geology/Soils
- Hydrology/Water Quality
- Noise (Construction)
- Traffic/Circulation
- Fire Protection

The environmentally superior alternative (reduced until alternative) identifies the removal of 9 units but will not reduce the Class I impact to a Class II or reduce any of the Class II impacts to Class III.

I-47

Air Quality: There is a subjective statement determining the Class II would be removed for air quality but there is no justification of that claim. The level of grading volumes, roads, basins etc will not diminish significantly with the removal of 9 units as they comprise the bulk of construction activities. It appears to be an arbitrary number with no evidence that is does lower any impacts in accordance with the County's Implementation Guidelines for CEQA.

I-48

Traffic: It should be noted the proposed traffic levels predicted for the project do not exceed any County Threshold of Significance. The EIR incorrectly determined the reduction of nine units would no longer require the need for the sigh distance study since it stated the impacts associated for the reduced alternative would be Class III. The issue of sight distance is not

I-46 See RTC G-73.

I-47 See RTC G-74.

I-48 See RTC G-75.

traffic oriented but by topography and sight clearance. The issue exists regardless of levels of traffic and density. The removal of nine units does not bate this impact. The Roads Division already requires the development of a sight distance study in their Departmental conditions. The

I-49

The economic impact of this reduction, however, would be significant and make the project, given the amount of mitigation required, financially infeasible. It is obvious there would be less impact but is that degree of impact substantial and balanced against the need for housing and economic feasibility? The draft document does not address the balance and the need for housing in the area.

I-50

Thank you for considering our comments and suggested revisions. Should you have any further questions please do not hesitate to call.

Sincerely,

David Swenk, Principal Planner

I-49 See RTC G-76.

I-50 This is a closing comment that does not identify an inadequacy in the EIR that requires a response.

Letter J

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August 25, 2017
Rincon Project No. 14-00061

Mr. Steve Rodriguez
County of Santa Barbara -Planning and Development
624 W. Foster Road
Santa Maria, CA 93455

Via email: rodriguezaicp@aol.com

Subject: Comments regarding the Biological Resources Section for the Oak Hills Estate Revised Draft EIR, Santa Barbara County, California

Dear Mr. Rodriguez:

J-1 Rincon Consultants, Inc. (Rincon) reviewed the biological resources section of the Revised Draft EIR for the Oak Hills Estate Project (Project). On behalf of the applicant, Rincon has recently conferred with the U.S. Fish and Wildlife Service and Santa Barbara County Fire Department regarding certain elements of biological resources management at the site in the context of the Revised Draft EIR, and the Habitat Conservation Plan currently in preparation. The purpose of this letter is to provide our comments where applicable for consideration by the County of Santa Barbara (County) and the County's EIR consultant regarding the Revised Draft EIR. The following summarizes our comments regarding the Revised Draft EIR.

J-2 **Vernal Pool Fairy Shrimp**
Pages 4.3-27 through 4.3-28 and 4.3-40 - 4.3-41 of the EIR:

The EIR correctly states that direct impacts to the spikerush emergent wetland which provides potential habitat for vernal pool fairy shrimp would not occur. However, the EIR then indicates that indirect impacts as a result of erosion and sedimentation may affect water quality, thereby resulting in potential degradation of aquatic habitat. This statement should be corrected to clarify that all construction activities, including all grading, are downslope of the wetland, separated by a topographic divide, and thus erosion and sedimentation would not occur.

The EIR goes on to state that because 0.01 acre of the wetland is located in a standard 30- to 100-foot fuel management zone, indirect impacts may occur. It is unclear from the statement in the EIR how pruning out dead branches and shrubs from the fuel management zone using handheld tools would result in erosion and sedimentation. Additionally, in an email dated August 4, 2017, Heather Tipton and Kendra Chan, Staff Biologists with the U.S. Fish

J-1 This is an introductory comment that does not address the EIR.

J-2 Vernal Pool Fairy Shrimp (pages 4.3-27 through 4.3-28 and 4.3-40 through 4.3-41 of the Revised EIR: This comment indicates that a meeting was held between USFWS, the County of Santa Barbara Fire Department, and the Applicant/Applicant's consultant (Rincon) regarding measures that would avoid impacts to the spikerush emergent wetland that is located in the 30- to 100-foot fire management zone (FMZ-2). During this meeting on August 17, 2017 it was agreed that protective fencing and signage (stating to keep out of the area) located between the spikerush emergent wetland and the proposed development (specifically located at a lower elevation on the development side of the topographical divide). Therefore, vernal pool fairy shrimp may be excluded from the HCP process if avoidance of the species is demonstrated. **MM BIO-1.12** has been modified and specific spikerush emergent wetland avoidance criteria are summarized in **MM BIO-2.1** and **MM FP-2**.

and Wildlife Service (USFWS), indicated that the USFWS prefers an approach that simply avoids activities within the depression, including avoidance of activities that could result in indirect impacts, by refining the fuel management approach to the extent feasible. Ms. Tipton requested that the applicant coordinate a meeting onsite with Santa Barbara County Fire Department to confer regarding options to avoid impacts to the wetland depression from fuel management.

The applicant coordinated this meeting on August 17, 2017, during which time the area in question was reviewed with Ms. Tipton, Ms. Chan, and Mr. Glenn Fidler, Captain – Fire Prevention, Santa Barbara County Fire Department. The topographic divide separating the pool from downslope development and fuel management zone areas is close to the edge of the standard fuel management zone, and Mr. Fidler agreed that a variance at this location would be feasible, provided some form of barrier fence and habitat reserve area signage are placed at the edge of the adjusted fuel management zone. Ms. Tipton and Ms. Chan agreed that this approach would avoid potential indirect impacts to vernal pool fairy shrimp.

During this meeting, we also requested clarification from the USFWS staff regarding 250-foot buffers versus avoidance of watersheds and topographic divides. Ms. Tipton indicated that the 250-foot buffer guidance would apply in a situation in which the wetland is not separated from activities by a topographic divide, and that site-specific topography can and should be considered. Measure MM Bio 1.12 requires a 250 foot buffer around the pool, which extends well past the topographic divide separating the pool from the proposed project area and would cover the majority of the property. The USFWS and County Fire staff agreed that protective fencing placed at or slightly lower than the topographic divide on the development side of the berm would be sufficient to allow for appropriate fuel management while avoiding potential impacts to vernal pool fairy shrimp (Tipton pers. comm. August 2017; Fidler pers. comm. August 2017).

We respectfully request that the measures listed be revised to reflect the outcome of this meeting with the USFWS and Santa Barbara County Fire Department. We further recommend that all measures related to federally listed species be revised to clarify that in the event of conflicts between these measures and HCP measures developed in consultation with USFWS, the HCP measures shall prevail in the event of conflicting direction.

J-3

El Segundo Blue Butterfly
Pages 4.3-41 through 4.3-42 and 4.12-17 through 4.12-17 of the EIR:

During the aforementioned site meeting with USFWS, Ms. Tipton and Ms. Chan commented on the avoidance and minimization measures for El Segundo blue butterfly. They indicated that the measure to salvage and relocate plants, litter and soil should be phrased as contingent upon USFWS guidance and the final HCP measures, because although this measure has been proposed on other projects, the data is not yet available regarding its effectiveness in the Vandenberg Village area, and the resources expended on such salvage efforts may be better used for other conservation actions such as habitat enhancement. This element is reiterated in measure MM FP 2 and should also be revised in that section.

J-3 El Segundo Blue Butterfly (pages 4.3-41 through 4.3-42 and 4.3-17) of the Revised EIR: This comment provides details from the above-mentioned meeting with USFWS regarding the El Segundo blue butterfly and the details pertaining to salvage, relocation of plants, leaf litter, and soil. Editorial clarification has been made to the analysis and mitigation measures for the El Segundo blue butterfly, and federal mitigation requirements would supersede mitigation included in the EIR.

We respectfully request that the measures be revised to reflect an option for input from USFWS based on what is known about the effectiveness of salvage at the time the HCP is implemented.

J-4 **Special Status Plants**
Pages 4.3-19 4.3-24 and 4.3-31 through 4.3-32

The Revised Draft EIR specifies a worst-case scenario approach to analysis of impacts on special status plants that assumes no individuals are preserved or restored within the development footprint. The associated mitigation measure relies on specific numeric targets based on this approach. We respectfully request that the wording of the mitigation measure be revised to indicate that the impact values are approximate values, and require mitigation based on ratio of restored or conserved individuals or acre to actual number of impacted plants/occupied area, with these specific targets identified in the final Mitigation Plan.

J-5 **Off-site Restoration**
Pages 2-23; 4.3-1, 4.3-2, 4.3-23 through 4.3-24, 4.3-47 through 4.3-53 of the EIR:

On multiple occasions, we have expressed the importance of retaining flexibility regarding offsite restoration sites to mitigate for impacts to sensitive habitat and species. In previous correspondence, we have identified that multiple parcels with degraded habitats near the Burton Mesa Ecological Reserve exist and would be suitable for mitigation in the form of restoration of maritime chaparral, planting of oak trees, and restoration of other native habitat. We have also corresponded and met with CDFW's Mary Meyer regarding such options. Our offsite baseline report and clarification letters regarding offsite have consistently indicated the need to allow for flexibility in the final selection of the offsite mitigation location.

The August 4 email from Ms. Tipton and Ms. Chan reiterates the need for such flexibility, as USFWS has expressed a desire that alternative sites contiguous with the Burton Mesa Ecological Reserve be considered as options. During our site meeting on August 17, Ms. Tipton reiterated the potential conservation benefits that may be achieved by allowing other sites to be used for mitigation and strongly urged that this measure be revised to provide greater flexibility (pers. comm. August 2017). During the August 2017 onsite meeting, Ms. Tipton also reiterated that the currently proposed offsite mitigation site would not be accepted by the USFWS as a suitable mitigation site.

We previously recommended that allowing additional restoration options such as permanent protection of an alternative site within the Burton Mesa, funding of needed long term restoration, enhancement, and management on another Burton Mesa site, or a combination of all three approaches as stated in the offsite mitigation baseline report and conceptual plan could have superior conservation value over locking in a specific site during the draft EIR phase. We suggest that revising the mitigation measure to allow a combination approach that allows permanent protection, restoration, and enhancement of alternative sites, which is consistent with agency feedback, rather than restoration and enhancement onsite and at Lot 54 alone.

J-4 This comment maintains that the Biological Resources Assessment (Rincon 2017) relies on numeric targets, with individual special status plants to be preserved and/or restored within the development footprint. However, the revised EIR assumes that all species located within the proposed project development footprint would be permanently impacted, and all areas located inside the onsite open space would be considered avoided (and/or restored). This is because the project does not include home design plans and it is likely that over time, structural or yard improvements would result in the removal of resources or changes to the existing condition through typical homeowner activities of watering, pruning, grade changes, or pets. Therefore, the plants and sensitive habitat located within the development footprint are not guaranteed to be preserved. No changes to the Final EIR were made as a result of this comment.

J-5 This comment suggests revising the mitigation measures to allow flexibility to the mitigation site locations and not limiting the restoration sites to on-site enhancement and Lot 54 alone. The comment also suggests allowing in the mitigation measure permanent protection, restoration, and enhancement of alternative sites. In response to this comment and per communication with USFWS, mitigation language for **MM BIO-2.2** (Off-site Habitat Restoration Plan) was not revised as a result of this comment. The off-site habitat restoration site is for mitigation of impacts to southern maritime chaparral habitat and oak trees. Identifying other potentially suitable off-site restoration locations during CEQA review is necessary to ensure that the project's significant impacts to southern maritime chaparral and oak trees are disclosed and mitigated to less than significant levels. No changes were made to **MM BIO-2.2** as a result of this comment.

We suggest that this measure could be written to be sufficiently restrictive to avoid deferral by setting specific requirements on the mitigation site(s) to contain or be restored to contain Burton Mesa chaparral, to meet required acreage, to be subject to a baseline report, and to meet a specified timeline of activities. We note that regionally occurring species within Burton Mesa chaparral, coastal scrub, and other locally occurring habitat types are well known, and qualified, experienced restoration biologists are skilled at controlling invasive species and enhancing habitat while conserving existing resources.

J-6

We again respectfully request that all discussion of offsite restoration be revised to include other local options on or adjacent to the Burton Mesa Ecological Reserve.

Thank you for the continued opportunity to provide biological consulting services for this project. Please contact us if you have any questions or need any additional information.

Sincerely,
RINCON CONSULTANTS, INC.

Colby J. Boggs, MS
Principal/Senior Ecologist

Meg Perry
Program Manager/Senior Biologist

J-6 This is a closing comment with contact information and does not address the EIR analysis or conclusions

Letter K

Dear Sir:

K-1 This project needs to get fenced off, and fast. With about 10,000 acres of preserve directly behind this project, the deer are creating major problems to property owners at the Village Country Club. These deer are destroying landscape vegetation on a daily basis to the detriment of hundreds and hundreds of homeowners.

This constitutes a private nuisance within the meaning of the statute embraced in the California Civil Code and needs to be abated poste haste..

These deer have essentially no natural predators. As long as the deer can descend upon the ornamental vegetation for food, each doe will have two faun per year. Right now they are ravaging neighborhoods in herds.

Homeowners have no way to defend themselves to prevent such destruction to their landscape vegetation. Electric fences are outlawed by the County in this community. Depredation permits are impossible to get from the local game wardens. Guns, including pellet guns, cannot be discharged within 500 feet of an occupied residence pursuant to County regulations. It's either fences or litigation. And the damages are absolutely huge.

In summary, please endure that appropriate fences are installed around the perimeter of this project to keep the deer from marauding from the State preserve into adjoining private property.

Respectfully submitted,

Charles Littlejohn
301 Oakhill Drive
Lompoc, CA 93436
805.541.2818

K-1 This comment states that deer from the nearby State reserve have become a problem to the adjacent homeowner's yard and are inadvertently destroying landscaping and ornamental vegetation. This comment does not identify an inadequacy or error in the EIR; no changes are required pursuant to CEQA.